

METEOROLOGICAL OFFICE,  
**LONDON.**

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DAILY WEATHER REPORTS.

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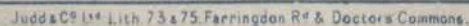
1<sup>ST</sup> JULY — 31<sup>ST</sup> DECEMBER,  
1889.

*See Reg. Lond.*



*July to December 1889.*

*July to December 1889.*





# DAILY WEATHER REPORT.

for *Friday, 1<sup>st</sup> November, 1889.*  
*Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.*

STATIONS.		YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
		Barometer at 32° F. and Sea Level.	Temp. in Shade.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Weather.	Sea (0 to 9.)	SHADE TEMP.			
				Dir.	Force (0 to 12.)		Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Dir.	Force (0 to 12.)			Max.	Min.	Amount of Rainfall.	
SCANDINAVIA.	Haparanda ...	30.16	33	SW	2	0	30.19	+ .21	86	35	+ 6	S	2	0	5	36	28	0.04	
	Hernösand ...	30.03	40	SW	0	0	30.10	+ .17	42	42	+ 7	SW	0	0	5	43	32	-	
	Stockholm ...	30.05	44	SE	2	0	30.07	+ .10	40	45	+ 1	SE	2	0	5	50	45	-	
	Wisby ...	30.01	46	S	4	0	30.01	+ .03	48	48	+ 2	SE	2	7	5	50	45	0.04	
	Bodö ...	29.48	42	E	4	0	29.87	+ .22	42	39	- 1	E	6	6	3	43	37	-	
	Christiansund	29.73	48	SE	1	0	29.71	+ .19	49	45	- 3	SE	3	6	4	54	46	-	
	Skudesnaes ...	29.80	51	SE	0	0	29.70	+ .08	51	47	0	SE	4	0	5	52	50	-	
	Christiania Fjord (Færd)	29.95	47	SE	3	0	29.88	+ .02	48	47	0	SE	3	0	2	48	46	-	
	Skagen (The Scaw)	29.91	47	S	2	0	29.82	- .06	47	47	0	S	4	0	2	48	45	0.04	
	Fanö ...	29.79	47	SE	4	0	29.68	- .16	46	?	0	SW	5	0	2	52	43	0.12	
BRITISH ISLANDS.	Sumburgh Head	29.55	48	S	3	0	29.37	- .07	48	47	+ 2	S	5	0	6	49	43	-	
	Stornoway ...	29.38	51	SW	7	0	29.08	- .33	46	46	- 1	NW	2	7	8	52	44	0.85	
	Wick ...	29.57	50	S	3	0	29.17	- .35	49	46	+ 6	SE	5	0	6	52	42	-	
	Nairn ...	29.55	50	SW	3	0	29.13	- .41	48	44	+ 6	SE	5	0	3	54	40	-	
	Aberdeen ...	29.67	46	SW	2	0	29.24	- .38	46	44	+ 11	SE	7	0	6	50	36	-	
	Leith ...	29.71	45	W	2	0	29.13	- .58	45	44	- 1	SE	3	0	5	53	43	-	
	Shields ...	29.80	49	SW	2	0	29.31	- .42	45	44	+ 3	S	6	0	2	53	41	0.03	
	Spurn Head ...	29.88	46	SW	4	0	29.51	- .26	46	45	0	S	7	0	5	56	39	0.04	
	York ...	29.87	49	W	1	0	29.40	- .39	45	45	+ 2	S	8	0	5	55	40	0.06	
	Loughborough	29.95	49	SW	2	0	29.48	- .39	48	47	+ 7	S	6	0	5	56	39	0.06	
GERMANY.	Ardrossan ...	29.69	51	SW	3	0	28.86	- .80	49	47	0	SE	5	0	5	51	46	0.13	
	Malin Head ...	29.56	50	S	6	0	28.89	- .71	40	40	- 7	NW	10	0	7	51	40	0.51	
	Mullaghmore ...	29.59	50	SW	6	0	29.24	- .44	46	44	0	NW	8	0	6	54	43	0.42	
	Belmullet ...	29.53	51	SW	6	0	29.36	- .31	48	45	- 3	NW	8	0	5	53	46	1.15	
	Donaghadee ...	29.73	50	NW	3	0	28.87	- .86	43	43	+ 2	NW	7	0	5	54	38	0.31	
	Barrow-in-Furness	29.80	50	NW	3	0	29.24	- .53	47	45	0	SW	9	0	5	52	43	0.23	
	Liverpool (Bidston)	29.88	48	SW	3	0	29.40	- .44	47	43	+ 2	NW	6	0	4	53	44	0.04	
	Holyhead ...	29.83	51	SW	5	0	29.36	- .49	48	44	+ 1	NW	8	0	7	54	45	0.16	
	Parsonstown ...	29.72	49	SW	1	0	29.40	- .43	45	43	+ 3	SW	2	0	5	54	42	0.07	
	Valencia ...	29.65	52	SE	7	0	29.66	- .23	50	48	- 2	W	5	0	6	54	44	0.47	
FRANCE AND NETHERLANDS.	Roche's Point...	29.82	51	SW	3	0	29.56	- .36	45	43	- 1	W	4	0	5	55	42	0.55	
	Pembroke (St. Ann's Hd.)	29.90	53	SW	3	0	29.58	- .35	50	47	0	NW	8	0	7	54	46	0.26	
	Scilly ...	29.95	51	SW	3	0	29.73	- .29	52	47	0	W	7	0	6	56	50	0.19	
	Prawle Point ...	30.04	50	SW	4	0	29.78	- .25	50	46	+ 3	NW	6	0	5	54	45	0.10	
	Jersey (St. Aubin's)	30.10	50	W	2	0	29.78	- .27	53	51	+ 2	SE	5	0	4	57	47	0.04	
	Hurst Castle ...	30.04	52	W	4	0	29.74	- .25	54	54	+ 8	W	8	0	5	56	45	0.17	
	Dungeness ...	30.02	50	NW	4	0	29.76	- .15	51	48	+ 4	NW	7	0	5	56	45	-	
	London ...	30.03	46	SW	1	0	29.63	- .31	49	47	+ 6	S	5	0	5	54	42	0.05	
	Oxford ...	29.97	48	SW	3	0	29.57	- .37	50	49	+ 10	S	4	0	5	54	40	0.04	
	Cambridge ...	29.98	42	W	0	0	29.58	- .32	48	47	+ 4	S	3	0	5	54	37	0.04	
PENINSULA.	Yarmouth ...	29.94	45	NW	2	0	29.69	- .12	49	46	+ 3	SW	5	0	4	50	41	-	
	Cuxhaven ...	29.86	46	SW	2	0	29.90	0.00	51	50	+ 5	SW	4	0	5	53	41	-	
	Berlin ...	30.00	48	SE	2	0	30.06	+ .04	42	41	+ 2	W	2	0	5	52	?	-	
	Wiesbaden ...	*	*	*	*	*	30.08	+ .08	36	35	- 9	W	1	0	5	48	32	-	
	Munich ...	30.09	45	NW	4	0	30.10	+ .09	44	43	0	NW	3	0	5	48	43	0.28	
	The Helder ...	29.92	49	NW	3	0	29.84	?	41	40	- 8	S	2	0	2	50	41	0.28	
	Brussels (9 a.m.)	*	*	*	*	*	29.95	+ .08	42	40	- 6	S	2	0	5	53	41	0.04	
	Cape Gris Nez	?	50	W	4	0	?	?	46	44	- 3	SW	5	0	5	54	45	-	
	Paris ...	30.14	43	SE	1	0	30.02	+ .03	35	34	- 12	SE	1	0	5	55	32	-	
	Brest ...	?	54	SW	3	0	?	?	55	53	+ 3	SW	4	0	7	59	49	0.32	
FRANCE AND NETHERLANDS.	Lorient ...	30.13	50	SW	2	0	29.83	- .27	56	55	+ 6	SW	4	0	5	57	48	0.04	
	Rochefort ...	30.21	52	NW	3	0	30.04	- .06	47	46	- 8	SE	4	0	2	63	41	-	
	Belfort ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	-	
	Lyons ...	30.06	50	N	1	0	30.10	+ .04	42	41	- 7	SE	1	0	5	57	42	-	
	Nice ...	29.94	58	E	2	0	29.93	- .03	54	53	- 2	SW	3	0	0	64	52	-	
	Perpignan ...	30.10	60	NW	2	0	30.07	+ .01	44	43	- 14	W	1	0	5	66	?	-	
	Biarritz ...	30.17	58	NW	3	0	29.98	- .16	52	48	- 6	S	3	0	5	59	48	0.16	
	Corunna ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	-	
	Lisbon ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	-	

For Explanation of Columns, see bottom of p 4.

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



# WEATHER CHARTS

for 8 a.m. on

Friday, 1<sup>st</sup> November

1889.

## BAROMETER, WIND AND SEA.

### EXPLANATION OF MAP.

**BAROMETER**—Isobars are drawn for each tenth of an inch.

Changes since previous morning are stated in words.

**WIND**—Arrows shew the prevalent winds. They fly with the wind and

their barbs and feathers refer to force thus—

→ = forces above 10; → = forces 8 to 10;

→ = forces 5 to 7; → = forces 1 to 4.

☉ = dead calm.

**SEA DISTURBANCE**—Where considerable, is shown thus:

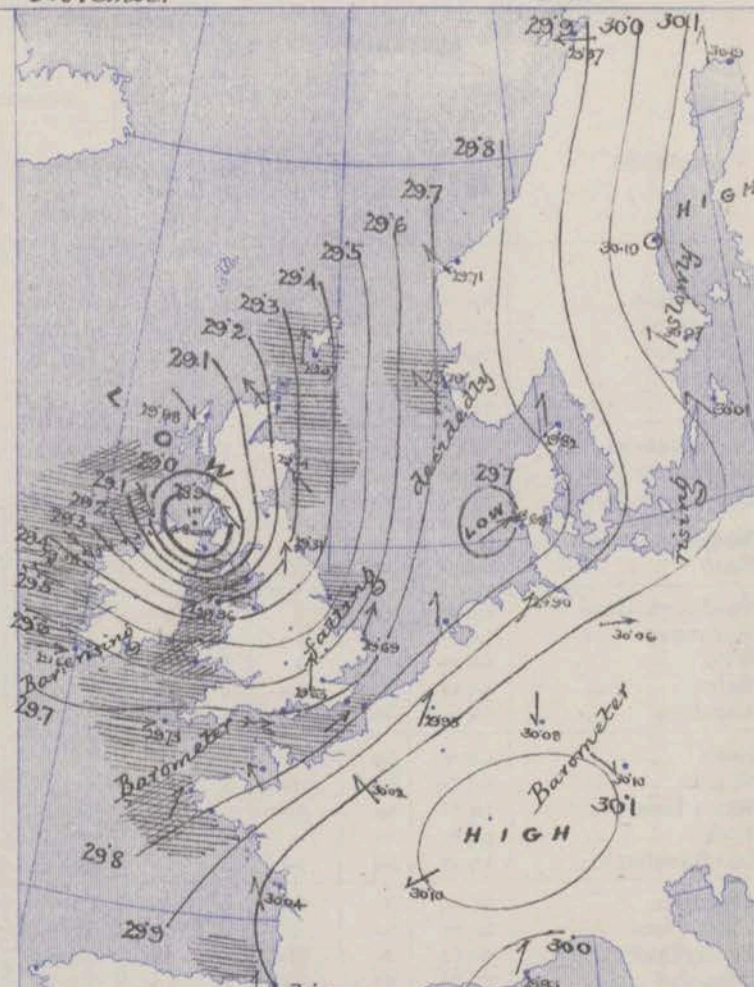
— = Rough. — = High.

## MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of November.

During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS.
Sumburgh Head .....	29.687
Stornoway .....	29.707
Wick .....	29.726
Nairn .....	29.743
Aberdeen .....	29.756
Leith .....	29.793
Shields .....	29.815
York .....	29.844
Loughborough .....	29.876
Ardrossan .....	29.796
Donaghadee .....	29.811
Holyhead .....	29.835
Liverpool .....	29.852
Parsonstown .....	29.848
Valencia .....	29.864
Roche's Point .....	29.864
Pembroke .....	29.862
Scilly .....	29.898
Jersey .....	29.923
Hurst Castle .....	29.898
Dover .....	29.893
LONDON .....	29.897
Oxford .....	29.893
Cambridge .....	29.885
Yarmouth .....	29.863



## 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.

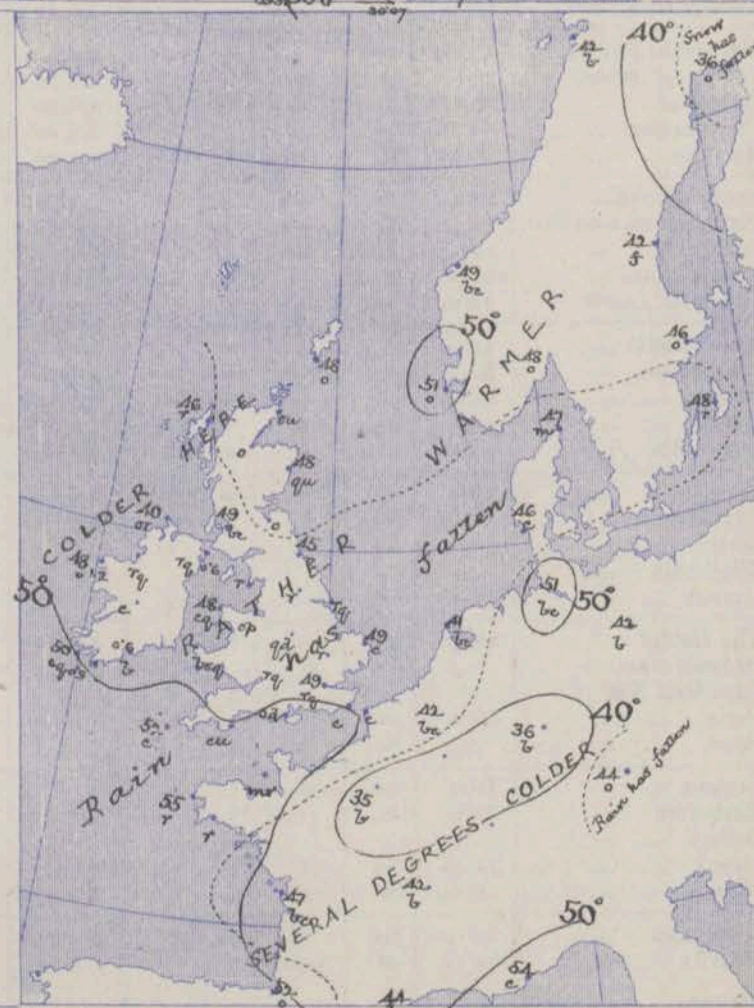
**RAINFALL**—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

### MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of November.)

STATIONS.	TEMPERATURE.				RAINFALL. (Inches.)
	Daily Max.	Daily Min.	at 8 a.m.		
			Dry.	Wet.	
Sumburgh Head.....	45.3	37.4	41.5	39.8	4.24
Stornoway .....	45.7	36.7	41.0	39.9	4.60
Wick .....	45.7	35.7	40.9	39.3	2.97
Nairn .....	44.7	35.5	39.1	37.5	2.32
Aberdeen .....	46.1	36.3	40.3	38.5	3.16
Leith .....	48.2	36.7	41.2	39.6	2.11
Shields .....	47.1	38.1	41.8	40.2	2.63
York .....	47.7	36.1	40.3	39.0	2.21
Loughborough .....	48.0	36.4	40.2	38.9	2.30
Ardrossan .....	47.7	38.9	42.6	40.8	3.92
Donaghadee .....	48.2	39.2	42.9	41.7	3.13
Holyhead .....	49.7	42.8	45.5	43.8	3.71
Liverpool .....	47.7	39.6	42.1	40.4	2.87
Parsonstown .....	49.1	36.9	41.7	40.0	2.84
Valencia .....	52.4	42.7	47.2	45.2	5.50
Roche's Point .....	51.1	41.8	45.9	44.3	4.56
Pembroke .....	50.2	43.7	46.7	44.7	3.96
Scilly .....	52.5	46.7	50.0	48.0	3.76
Jersey .....	51.9	44.2	47.5	45.6	4.24
Hurst Castle .....	50.5	40.3	44.6	43.6	2.98
Dover .....	49.1	40.7	44.0	42.4	3.56
LONDON .....	49.6	37.9	42.0	40.5	2.14
Oxford .....	48.6	37.6	41.0	39.7	2.30
Cambridge .....	48.8	35.7	40.3	39.5	2.02
Yarmouth .....	47.5	39.1	42.9	41.8	3.15

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





# GENERAL SITUATION AT 8 A.M.

## PRESSURE

Highest, 30.7 ins. and upwards, over the Gulf of Bothnia, and also in a separate area lying over South Germany and the east of France.  
 Lowest, 28.9 ins. and less, in a deep depression, the centre of which lies near the Mull of Cantire.  
 Gradients very steep over the Irish Sea, the north of Ireland and the southwest of Scotland, steep, but rather irregular over the remaining parts of our Island and also over the Continent.  
 Barometer falling quickly in the N. of our Islands, and less decidedly in the east of England and east of France, but rising again in the south of Ireland.

## TEMPERATURE

Highest, 56° at Llandudno, 55° at Brest, 54° at Hunt Castle and Nice, 53° at Jersey, and 52° at Seilly and Biarritz.  
 Lowest, 35° at Paris, 36° at Haparanda and Nilsbadon, 40° at Malin, 41° at Hilder, and 42° at Bodo, Heringsand, Rouen, Berlin and Lyons.

## WIND

Strong to gales in nearly all parts of our Islands, - from W. in the east and south, from S. in the east, and from S.E. in the north.  
 Light or moderate from the S.E. in Scandinavia, and from S. over the Netherlands and west and north of France.  
 A strong gale from the S.E. or S. was experienced last night in the west of Ireland.

## WEATHER

Rainy over the Hebrides, the north of Ireland, the north and east of England, and the northwest of France.  
 Fine at some of our southwestern stations, and also over the Netherlands, Germany, the east of France and the west of Norway.  
 The largest amounts of rain measured this morning, are 1.2 in. at Belmullet, 0.6 in. at Douglashead and Hookpoint, and 0.5 in. at Malin, and Valencia.

## SEA

High at Malin, Holyhead, Lamlash, and Brest, and rough or rather so in nearly all other localities.

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The deep depression over our north-west coast is likely to be influenced shortly by the high pressure system, which prevails over Northern Europe, and its centre will therefore in all probability travel away in a northerly direction.

The decided fall of the barometer and the backing winds which are reported in the west of France seem to point to the advance of another disturbance over the Bay of Biscay, and an early renewal of bad weather is therefore likely over our southern districts.

## FORECASTS

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

### DISTRICTS.

### FORECASTS.

0	SCOTLAND NORTH	SE <sup>ly</sup> gales, subsiding later, and wind shifting to the W <sup>ly</sup> ; squally and rainy to fair.
1	SCOTLAND EAST	
2	ENGLAND N.E.	S <sup>ly</sup> to W <sup>ly</sup> strong winds or gales; squally and rainy to fair.
3	ENGLAND EAST	
4	MIDLAND COUNTIES	SW <sup>ly</sup> to S <sup>ly</sup> winds, fresh or strong; squally, showery.
5	ENGLAND SOUTH	

### DISTRICTS.

### FORECASTS

6	SCOTLAND WEST	W <sup>ly</sup> gales, moderating later; squally and rainy to fair.
7	ENGLAND N.W.	
8	ENGLAND S.W.	W <sup>ly</sup> to SW <sup>ly</sup> or S <sup>ly</sup> winds, strong; squally, showery.
9	IRELAND NORTH	
10	IRELAND SOUTH	Same as N <sup>os</sup> 6 and 7.

### WARNINGS

The SOUTH CONE was hoisted yesterday in districts 0 to 2, 6 to 10 and part of 5.

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

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



# YESTERDAY'S 2 P.M. REPORTS.

	Bar:	Ther:		Wind		Wea:	Sea		Bar:		Ther:		Wind		Wea:	Sea
		D	W	D	F						D	W	D	F		
Skudesnaes ...	29.75	51	49	SSC	8	r	5		Holyhead ...	29.87	58	49	SW	5	b	4
Sumburgh Head ...	29.53	49	45	S	3	b	4		Valencia ...	29.81	51	51	S	6	p	6
Stornoway ...	29.40	51	51	SW	3	r	6		Scilly ...	30.03	55	50	SW	5	c	6
Aberdeen ...	29.67	50	46	S	3	b	3		Jersey ...	30.11	56	48	NW	3	bc	3
Shields ...	29.80	53	47	NW	3	c	2		Dungeness ...	30.00	55	49	NW	4	bc	4
Ardrossan ...	29.72	51	49	SW	4	c	3		London ...	30.01	54	48	W	3	b	4
Malin Head ...	29.61	51	48	S	6	o	1		Yarmouth ...	29.90	50	46	NW	4	bc	3
Mullaghmore ...	29.67	53	49	SW	5	cp	5		Rochefort ...	30.21	58	54	NW	4	b	2
Belmullet ...	29.64	53	50	NW	5	bc	*									

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

The reports for yesterday morning showed that pressure varied from between 30.1 ins. and 30.3 ins. over the Black Sea and southeastern Europe, and from between 30.1 ins. and 30.2 ins. over the Bay of Biscay and Spain to 29.5 ins. and less, in a large low pressure area lying to the northward of Scotland and apparently moving northwards. Gradients were moderate over the British Islands and Norway, very slight elsewhere. The wind was S<sup>3</sup> over North Germany and the eastern shores of the North Sea, W<sup>3</sup> to SW<sup>3</sup> over the United Kingdom, (where it blew freshly in places) NW<sup>3</sup> over the Bay of Biscay; over the Mediterranean there was a cyclonic circulation of moderate breezes round a depression near Corsica, while over central and eastern Europe the wind was light and very variable. The weather was fine over the greater part of the United Kingdom, the Channel, North Sea and Norway, cloudy or overcast in most other regions, with fog in several parts of Germany, and rain at some of the German, Austrian, and Russian stations; the fall during the preceding 24 hours had been very heavy over the south and southeast of France and northern Italy. Thunder and lightning had occurred at some of the Mediterranean stations. Temperature had decreased in our Islands and over the Mediterranean, but changed little and irregularly elsewhere, and frost had disappeared except from the extreme north of Europe. The highest morning readings were 73° at Tunis, 70° at Brindisi, 68° at Anghiari, 66° at Naples and La Caille, 64° at Sanguinaires, 63° at Trieste, 58° at Biarritz, 52° at Brest and Scilly; the lowest were 29° at Archangel, 30° at Kapananda, 32° at Uleaborg, 33° at Moscow, Nemtsland and Riga, 39° at Memel and St. Petersburg. Throughout our Islands it was above 40°.

Later in the day the barometer began to fall fast in the west of the British Islands, as a deep depression advanced northward towards Ireland, causing rough weather and a rise of temperature.

## 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, 2<sup>nd</sup> November, 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 34° F. and Sea Level.	Temp. in Shade.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Weather.	Sea. (0 to 3.)	SHADE TEMP.		Amount of Rainfall.	
				Dir.	Force. (0 to 12.)		Reading at 34° 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 ...	30.29	36	S	2	0	30.35	+1.6	33	33	-3	S	2	S	*	37	32	0.04	
	Hernösand ...	30.16	45	SSE	4	1	30.21	+1.1	41	40	-1	SSE	4	O	*	46	37	-	
	Stockholm ...	30.08	46	SSE	2	0	30.12	+0.5	43	41	-3	E	2	O	*	46	37	-	
	Wisby ...	30.02	45	S	4	0	29.99	-0.7	44	42	-4	SSE	6	C	*	48	37	0.04	
	Bodö ...	29.89	46	E	2	0	29.91	+0.4	48	42	+6	E	2	C	1	48	37	-	
	Christiansund	29.56	52	SE	7	bc	29.65	-0.6	51	44	+2	SE	6	bc	4	54	48	-	
	Skudesnaes ...	29.47	49	SE	3	0	29.60	-1.0	48	44	-3	SE	8	C	7	46	46	0.12	
	Christiania Fjord (Færder)	29.80	47	SSE	7	1	29.87	-0.1	44	42	-4	SE	5	C	4	48	43	0.04	
	Skagen (The Seaw)	29.80	47	S	6	0	29.90	+0.8	46	46	-1	S	7	O	5	48	45	0.04	
	Fanö ...	29.72	45	SSE	6	1	29.74	+0.6	44	44	-2	SSE	4	O	*	50	37	0.32	
BRITISH ISLANDS.	Sumburgh Head	29.12	47	SE	6	1	29.14	-2.3	46	45	-2	ENE	3	O	6	50	44	0.12	
	Stornoway ...	29.09	42	N	6	1	29.42	+3.4	46	46	0	NW	6	O	6	46	40	0.75	
	Wick ...	28.92	46	ESE	5	1	29.26	+0.9	47	45	-2	NW	3	C	3	49	42	0.75	
	Nairn ...	28.92	44	W	4	0	29.35	+2.2	43	43	-5	W	4	1	3	50	40	0.26	
	Aberdeen ...	28.87	42	SW	5	0	29.36	+1.2	42	39	-6	SW	4	bc	4	50	41	0.16	
	Leith ...	29.12	45	WSW	7	0	29.48	+3.5	45	41	0	WSW	5	O	*	50	42	0.04	
	Shields ...	29.35	44	SW	6	0	29.59	+2.8	45	44	0	WSW	3	C	2	53	41	-	
	Spurn Head ...	29.54	47	SSW	4	0	29.73	+2.2	43	42	-3	SSW	4	bc	3	52	41	-	
	York ...	29.49	46	SW	5	C	29.70	+3.0	43	41	-2	WSW	3	bc	*	52	41	0.03	
	Loughborough	29.63	45	SW	4	0	29.81	+3.3	41	40	-7	WSW	3	bc	*	53	40	0.01	
GERMANY.	Ardrossan ...	29.29	47	W	7	C	29.62	+7.6	47	44	-2	W	7	C	5	53	42	0.34	
	Malin Head ...	29.37	48	NW	8	cqhp	29.68	+7.9	46	43	+6	NW	6	bcq	4	51	40	0.10	
	Mullaghmore ...	29.59	47	WNW	7	cqhp	29.81	+5.7	47	44	+1	WNW	6	bcq	5	50	44	0.18	
	Belmullet ...	29.67	48	WNW	6	bc	29.87	+5.1	46	44	-2	WNW	1	bc	*	49	44	0.10	
	Donaghadee ...	29.47	44	W	4	bc	29.75	+8.8	41	40	-2	W	4	bc	2	48	40	0.50	
	Barrow-in-Furness	29.44	48	SW	7	0	29.69	+4.5	47	43	0	NW	6	bc	*	50	46	0.04	
	Liverpool (Bidston)	29.57	46	WSW	6	C	29.76	+3.6	48	43	-2	W	6	C	5	51	43	0.12	
	Holyhead ...	29.60	47	W	7	Cq	29.82	+4.6	46	44	-2	W	6	bcq	5	51	45	-	
	Parsonstown ...	29.71	43	Z	0	0	29.91	+5.1	39	38	-6	Z	0	bc	*	49	37	0.05	
	Valencia ...	29.87	48	WNW	4	bc	30.00	+3.4	48	47	-2	WNW	1	C	2	54	45	0.05	
FRANCE AND NETHERLANDS.	Roche's Point...	29.81	48	WNW	4	bc	29.98	+4.2	47	45	+2	WNW	3	bc	4	53	43	0.05	
	Pembroke (St. Ann's Hd.)	29.76	50	W	6	bc	29.92	+3.4	49	47	-1	W	5	bc	5	52	45	0.03	
	Scilly ...	29.87	51	WNW	6	Cq	30.01	+2.8	51	48	-1	NW	5	C	6	54	48	0.01	
	Prawle Point ...	29.86	50	W	6	bc	30.00	+2.2	47	45	-3	WNW	3	Cq	3	53	44	0.02	
	Jersey (St. Aubin's)	29.89	52	WNW	4	bc	30.03	+2.5	50	46	-3	W	3	bc	3	56	48	0.29	
	Hurst Castle ...	29.81	51	WNW	5	bc	29.97	+2.3	48	47	-6	WNW	4	bc	3	55	45	0.01	
	Dungeness ...	29.74	52	W	6	bcq	29.87	+1.1	45	43	-6	WNW	5	bc	3	55	42	0.08	
	London ...	29.70	47	WSW	3	bc	29.90	+2.7	42	40	-7	W	2	bc	*	55	38	0.06	
	Oxford ...	29.76	45	WSW	3	C	29.89	+3.2	41	39	-9	SW	3	bc	*	54	40	0.03	
	Cambridge ...	29.69	44	WSW	2	bc	29.85	+2.7	41	40	-7	SW	2	bc	*	55	36	-	
PENINSULA.	Yarmouth ...	29.66	47	SW	3	bc	29.79	+1.0	42	40	-7	WSW	3	bc	2	52	38	0.04	
	Cuxhaven ...	29.83	43	S	3	0	29.82	-0.8	44	43	-7	SSW	1	O	*	51	43	0.18	
	Berlin ...	29.99	43	SE	2	bc	29.93	-1.3	35	34	-7	SE	2	bc	*	50	34	-	
	Wiesbaden ...	*	*	*	*	*	29.98	-1.0	43	42	+7	NE	1	O	*	43	37	0.08	
	Munich ...	30.01	42	Z	0	C	30.03	-0.7	38	38	-6	SW	2	bc	*	48	34	-	
	The Helder ...	29.71	44	SW	2	m	29.78	-0.6	47	44	+6	WSW	2	bc	3	50	41	0.04	
	Brussels (9 a.m.)	*	*	*	*	*	29.93	-0.2	41	40	-1	SW	3	bc	*	51	37	0.08	
	Cape Gris Nez	?	52	W	5	0	?	?	45	44	-1	WNW	5	bc	5	54	45	0.08	
	Paris ...	29.91	48	S	1	0	30.04	+0.2	37	36	+2	SW	1	bc	*	54	37	0.20	
	Brest ...	?	57	WNW	5	bc	?	?	52	48	-3	N	5	bc	5	57	46	0.08	
PENINSULA.	Lorient ...	29.99	52	WNW	3	bc	30.09	+2.6	52	48	-4	WNW	3	C	5	57	48	0.08	
	Rochefort ...	29.99	58	SW	5	1	30.20	+1.6	50	49	+3	E	3	1	2	59	43	0.20	
	Belfort ...	30.09	47	NW	1	bc	30.02	-0.1	43	39	-4	NW	1	1	*	62	39	0.12	
	Lyons ...	30.01	47	ENE	1	bc	30.09	-0.1	44	44	+2	W	1	1	*	53	41	0.04	
	Nice ...	29.88	55	WSW	3	bc	29.96	+0.3	52	49	-2	E	4	bc	1	63	48	-	
	Perpignan ...	29.99	53	Z	0	0	30.09	+0.2	57	51	+13	W	2	O	*	66	?	-	
	Biarritz ...	30.01	55	SW	4	1	30.18	+2.0	57	50	+5	WNW	4	O	6	63	?	0.12	
	Corunna ...	*	*	*	*	*	?	?	?	?	?	?	?	?	?	?	?	-	
	Lisbon ...	30.15	60	WNW	3	0	30.21	+0.5	56	56	-3	NE	3	1	?	64	55	-	

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

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



# WEATHER CHARTS

for 8 a.m. on *Saturday, 2<sup>nd</sup> November* 1889.

## BAROMETER, WIND AND SEA.

### EXPLANATION OF MAP.

**BAROMETER**—Isobars are drawn for each tenth of an inch.

Changes since previous morning are stated in words.

**WIND**—Arrows shew the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—

→ = forces above 10; → = forces 8 to 10;

→ = forces 5 to 7; → = forces 1 to 4.

○ = dead calm.

**SEA DISTURBANCE**—Where considerable, is shewn thus:

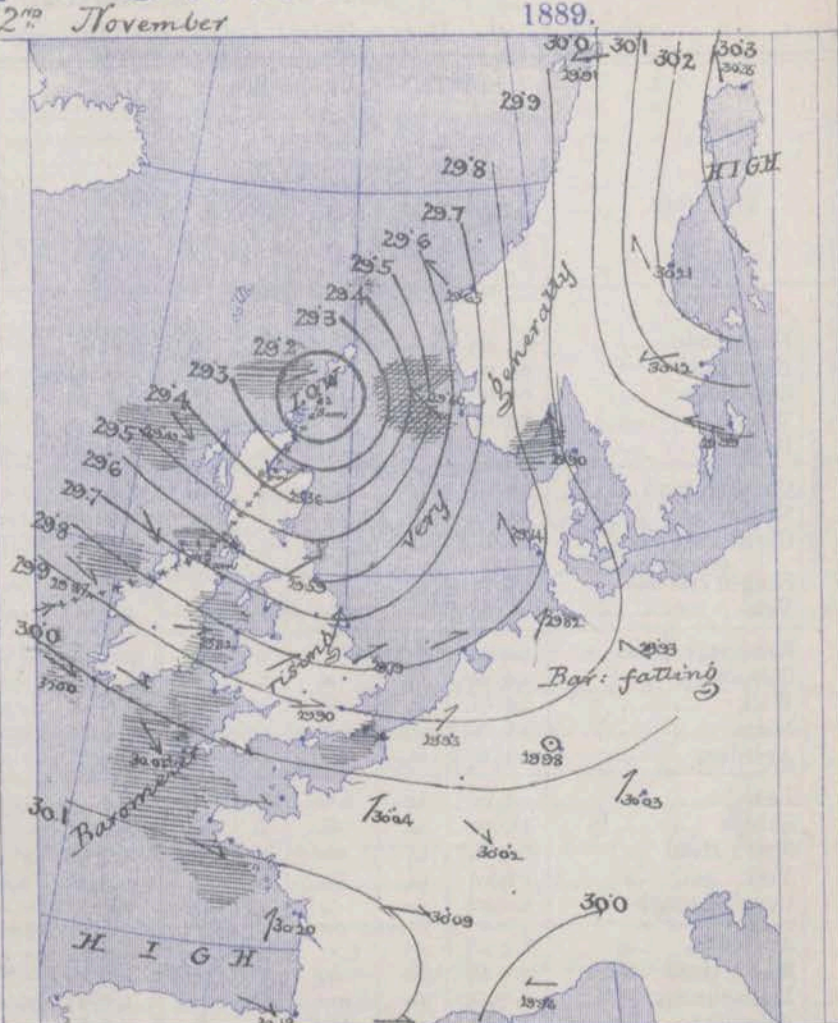
▨ = Rough. ▨ = High.

## MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of November.

During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS.
Sumburgh Head .....	29.687
Stornoway .....	29.707
Wick .....	29.726
Nairn .....	29.743
Aberdeen .....	29.756
Leith .....	29.793
Shields .....	29.815
York .....	29.844
Loughborough .....	29.876
Ardrossan .....	29.795
Donaghadee .....	29.811
Holyhead .....	29.835
Liverpool .....	29.852
Parsonstown .....	29.848
Valencia .....	29.864
Roche's Point .....	29.864
Pembroke .....	29.862
Scilly .....	29.898
Jersey .....	29.923
Hurst Castle .....	29.898
Dover .....	29.893
LONDON .....	29.897
Oxford .....	29.893
Cambridge .....	29.885
Yarmouth .....	29.863



## 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.

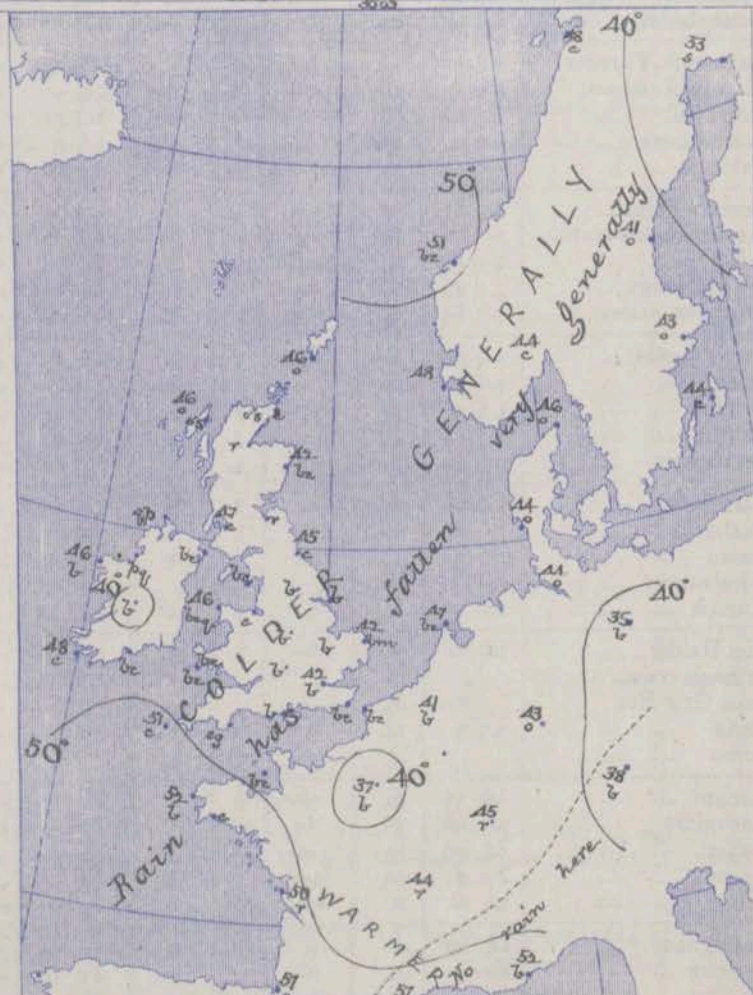
**RAINFALL**—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

### MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of November.)

STATIONS.	TEMPERATURE.				RAINFALL (Inches.)
	Daily Max.	Daily Min.	at 8 a.m.		
			Dry.	Wet.	
Sumburgh Head.....	45.3	37.4	41.5	39.8	4.24
Stornoway .....	45.7	36.7	41.0	39.9	4.60
Wick .....	45.7	35.7	40.9	39.3	2.97
Nairn .....	44.7	35.5	39.1	37.5	2.32
Aberdeen .....	46.1	36.3	40.3	38.5	3.16
Leith .....	48.2	36.7	41.2	39.6	2.11
Shields .....	47.1	38.1	41.8	40.2	2.63
York .....	47.7	36.1	40.3	39.0	2.21
Loughborough .....	48.0	36.4	40.2	38.9	2.30
Ardrossan .....	47.7	38.9	42.6	40.8	3.92
Donaghadee.....	48.2	39.2	42.9	41.7	3.13
Holyhead.....	49.7	42.8	45.5	43.8	3.71
Liverpool.....	47.7	39.5	42.1	40.4	2.87
Parsonstown .....	49.1	36.9	41.7	40.0	2.84
Valencia .....	52.4	42.7	47.2	45.2	5.50
Roche's Point .....	51.1	41.8	45.9	44.3	4.56
Pembroke.....	50.2	43.7	46.7	44.7	3.96
Scilly .....	52.5	46.7	50.0	48.0	3.76
Jersey .....	51.9	44.2	47.5	45.6	4.24
Hurst Castle .....	50.5	40.3	44.6	43.6	2.98
Dover .....	49.1	40.7	44.0	42.4	3.66
LONDON .....	49.6	37.9	42.0	40.5	2.14
Oxford .....	48.6	37.6	41.0	39.7	2.30
Cambridge .....	48.8	35.7	40.3	39.5	2.02
Yarmouth .....	47.5	39.1	42.9	41.8	3.15

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





## GENERAL SITUATION AT 8 A.M.

### PRESSURE

Highest 30.3 ins. and upwards in the north of Sweden; 30.1 ins. to 30.2 ins. over the Iberian Peninsula and the southwest of France.  
 Lowest 29.2 ins. and less in a depression, the centre of which lies a little to the southward of the Shetlands.  
 Gradients rather steep over the northern parts of our Islands and the North Sea, moderate in Scandinavia, slight in France.  
 Barometer rising at all but the German stations, - most on our north coasts.

### TEMPERATURE

Highest 54° at Biarritz and Perpignan, 56° at Lisbon, 52° at Brest, Lorient and Nice, & 51° at Christianmunde & Seilly.  
 Lowest 33° at Haparanda, 35° at Berlin, 37° at Paris, 38° at Munich, 39° at Parsonstown, and 41° at Hernösand.  
 Donaghadee, Loughborough, Oxford, Cambridge and Brussels.

### WIND

Strong from the W or NW on our northwest coasts, moderate from the same quarters on the southwest & south.  
 Moderate from SW in the east of Great Britain, strong from the S or SE on the eastern shores of the North Sea.  
 A strong gale from the W<sup>nd</sup> was experienced yesterday in many parts of Scotland.

### WEATHER

Fine over the greater part of Ireland and England, as well as in the Netherlands and north of France.  
 Cloudy elsewhere with rain at some of the Scotch stations, and also over central France. Snow is falling at Haparanda.  
 Rain fell yesterday over nearly the whole of western Europe, and lightning was seen at Androsson & Liverpool at night.

### SEA

High at Shetland, rough off the north of Scotland, and rather rough on many parts of our W. and S.W. coasts.

### PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The depression in the north is filling up quickly and is also moving slowly northwards.

There are at present no distinct indications of the approach of any new disturbance, but as the barometric rise in the far west is slackening, and the W<sup>nd</sup> wind in that region is falling light, it is highly probable that in the course of the ensuing 24 hours another low pressure system will advance from the Atlas Sea.

The present type of pressure distribution is very unsettled, area of high reading, being found both to the S<sup>wd</sup> and NE<sup>wd</sup> of our Islands.

## FORECASTS

For the 24 hours ending at NOON on 3<sup>rd</sup> NOVEMBER 1889.

### DISTRICTS.

### FORECASTS.

- |   |                  |  |
|---|------------------|--|
| 0 | SCOTLAND NORTH   | NW <sup>2</sup> and W <sup>2</sup> winds, backing later, showery to fair.              |
| 1 | SCOTLAND EAST    | W <sup>2</sup> and SW <sup>2</sup> winds, moderate; fair generally, but local showers. |
| 2 | ENGLAND N.E.     |  |
| 3 | ENGLAND EAST     | SW <sup>2</sup> winds, moderate; fine at first, doubtful later.                        |
| 4 | MIDLAND COUNTIES |  |
| 5 | ENGLAND SOUTH    | W <sup>2</sup> winds moderate to SW <sup>2</sup> fresh, fine to cloudy and showery.    |

### DISTRICTS.

### FORECASTS

- |    |               |  |
|----|---------------|--|
| 6  | SCOTLAND WEST | W <sup>2</sup> winds strong, to SW <sup>2</sup> moderate; unsettled, some showers. |
| 7  | ENGLAND N.W.  |  |
| 8  | ENGLAND S.W.  | Wind backing to the SW <sup>wd</sup> or S <sup>wd</sup> ;                          |
| 9  | IRELAND NORTH | fine to unsettled and some rain.   |
| 10 | IRELAND SOUTH |  |

### WARNINGS

The warning signals have now been lowered on all coasts.

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

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



# YESTERDAY'S 2 P.M. REPORTS.

	Bar.	Ther:		Wind		Wea:	Sea		Bar.	Ther:		Wind.		Wea:	Sea.
		D	W	D	F					D	W	D	F		
Skudesnaes ...	29.58	51	45	SE	8	c	5	Holyhead ...	29.51	50	45	W	7	bcmq	6
Sumburgh Head ...	29.20	49	46	SE	6	o	7	Valencia ...	29.79	51	48	W	5	bq	5
Stornoway ...	29.02	45	44	N	6	o	5	Scilly ...	29.84	54	49	WNW	6	cq	6
Aberdeen ...	28.91	45	42	SEE	8	oqpu	7	Jersey ...	29.83	56	49	WNW	5	bc	4
Shields ...	29.24	53	47	WNW	7	bc	2	Dungeness ...	29.69	53	49	WNW	7	c	5
Ardrossan ...	29.05	43	43	W	9	r	6	London ...	29.69	55	52	W	4	bc	5
Malta Head ...	29.24	40	39	NW	8	o	5	Yarmouth ...	29.61	52	48	W	5	bc	4
Mallaghmore ...	29.47	42	45	WNW	8	cqhr	7	Rochefort ...	30.01	53	52	S	4	o	2
Belmullet ...	29.58	46	43	NW	6	bcqyp	2								

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

*The continental information not received.*

### 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 3<sup>RD</sup> NOVEMBER

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.	
SCANDINAVIA.	Haparanda ...	29.96	32	SW	2	0	29.25	-10	30	29	-3	S	4	0	*	36	30	0.04	
	Hernösand ...	30.21	37	Z	0	0	30.08	-13	36	34	-5	E	6	7	*	48	36	0.08	
	Stockholm ...	30.05	39	SE	2	0	29.98	-14	39	37	-4	E	2	5	*	52	37	0.04	
	Wisby ...	30.00	42	SE	4	C	29.92	-07	44	41	0	S	4	0	*	45	41	—	
	Bodö ...	30.02	46	SE	2	C	29.96	+05	38	36	-10	E	7	6	2	48	37	—	
	Christiansund	29.77	50	SE	4	C	29.66	+01	46	41	-5	SE	7	C	4	52	45	—	
	Skudesnaes ...	29.68	46	SE	6	bc	29.59	-01	47	43	-1	SE	6	0	5	50	46	0.04	
	Christiania Fjord (Færder)	29.83	46	SE	5	0	29.78	-09	44	43	0	SE	5	0	4	46	43	0.08	
	Skagen (The Scaw)	29.79	45	SW	2	bc	29.76	-14	45	44	-1	SW	3	bc	2	48	45	0.04	
	Fanö ...	29.78	40	S	2	C	29.73	-01	45	44	+1	SW	3	C	*	48	39	0.12	
BRITISH ISLANDS.	Sumburgh Head	29.38	46	NE	1	C	29.41	+29	46	45	0	Z	0	0	4	49	43	0.13	
	Stornoway ...	29.61	43	NW	3	C	29.49	+07	46	45	0	Z	0	0	2	47	34	0.30	
	Wick ...	29.50	46	NW	3	bc	29.51	+25	38	37	-9	NW	2	bc	2	50	35	0.05	
	Nairn ...	29.59	45	W	4	0	29.53	+18	37	36	-6	SE	1	C	2	47	35	0.28	
	Aberdeen ...	29.58	45	WSW	3	cp	29.57	+21	37	35	-5	SW	1	cpm	3	48	34	0.03	
	Leith ...	29.69	45	W	5	bc	29.56	+08	43	43	-2	SE	1	pm	*	51	39	0.10	
	Shields ...	29.70	47	W	4	C	29.59	0.0	44	43	-1	SW	3	T	2	50	40	0.06	
	Spurn Head ...	29.81	46	W	4	C	29.69	-04	44	43	+1	S	4	T	3	50	40	0.01	
	York ...	29.75	45	W	2	C	29.66	-04	44	44	+1	SE	2	T	*	52	38	0.09	
	Loughborough	29.89	44	WSW	3	C	29.73	-08	45	45	+4	SE	2	od	*	52	40	0.03	
GERMANY.	Ardrossan ...	29.74	48	W	4	C	29.50	-12	46	46	-1	NE	3	d	2	52	44	0.19	
	Malin Head ...	29.76	45	WNW	3	cp	29.42	-26	48	48	+2	S	3	op	1	48	44	0.19	
	Mullaghmore ...	29.80	47	SW	4	Cm	29.50	-31	51	50	+4	WSW	5	opm	4	51	46	0.15	
	Belmullet ...	29.79	49	SW	3	0	29.53	-34	51	51	+5	WNW	2	op	*	52	48	0.20	
	Donaghadee ...	29.83	43	SW	2	bc	29.49	-26	48	48	+7	SW	3	C	1	49	40	0.07	
	Barrow-in-Furness	29.81	48	NNW	5	C	29.53	-16	47	46	0	SE	6	T	*	51	46	0.25	
	Liverpool (Bidston)	29.87	46	W	3	0	29.59	-17	46	45	+1	SE	4	0	4	50	44	0.18	
	Holyhead ...	29.89	48	W	3	C	29.53	-29	51	51	+5	S	4	long	4	51	46	0.46	
	Parsonstown ...	29.87	47	Z	0	0	29.56	-35	50	49	+11	Z	0	0	*	51	38	0.10	
	Valencia ...	29.87	52	S	6	og	29.66	-34	52	51	+4	WSW	4	og	3	54	44	0.30	
FRANCE AND NETHERLANDS.	Roche's Point...	29.93	49	WSW	3	T	29.61	-37	52	51	+5	NNW	3	C	4	52	45	0.24	
	Pembroke (St. Ann's Hd.)	29.96	51	SW	4	C	29.56	-36	53	53	+4	SW	6	pm	5	53	48	0.59	
	Scilly ...	30.02	52	WSW	5	0	29.61	-40	54	54	+3	SW	6	T	6	54	49	0.31	
	Prawle Point ...	30.04	49	NNW	3	bc	29.71	-29	52	52	+5	SW	7	Tu	5	54	46	0.24	
	Jersey (St. Aubin's)	30.07	52	W	5	C	29.87	-16	52	51	+2	S	5	opm	4	56	48	0.13	
	Hurst Castle ...	30.01	49	NNW	3	cp	29.80	-17	52	51	+4	SW	6	To	2	54	46	0.19	
	Dungeness ...	29.95	49	NNW	5	bc	29.85	-02	50	50	+5	WSW	5	T	3	56	41	0.08	
	London ...	29.96	46	WSW	1	C	29.79	-11	47	46	+5	S	3	op	*	53	39	0.05	
	Oxford ...	29.98	42	WSW	2	C	29.76	-13	47	46	+6	S	2	Tg	*	52	40	0.07	
	Cambridge ...	29.94	42	W	1	C	29.77	-08	45	45	+4	S	1	T	*	54	34	0.06	
PENINSULA.	Yarmouth ...	29.89	44	W	2	C	29.88	+04	45	44	+3	SW	3	Cg	3	49	36	0.01	
	Cuxhaven ...	29.87	43	SW	1	T	29.88	+06	42	41	-2	SW	3	m	*	48	41	0.06	
	Berlin ...	30.00	41	SW	3	C	30.06	+13	36	36	+1	SW	2	C	*	48	34	—	
	Wiesbaden ...	*	*	*	*	*	30.11	+13	39	38	-4	W	1	C	*	52	37	0.04	
	Munich ...	30.12	43	Z	0	0	30.19	+16	40	39	+2	SW	4	bc	*	48	37	0.04	
	The Helder ...	29.86	48	W	2	C	29.87	+09	48	44	+1	SW	2	C	3	50	46	0.08	
	Brussels (9 a.m.)	?	*	*	*	*	30.00	+07	43	43	+2	SW	2	0	*	48	40	—	
	Cape Gris Nez	?	52	W	4	C	?	?	50	49	+5	SW	4	T	4	54	31	—	
	Paris ...	30.10	45	SW	1	0	30.07	+03	43	42	+6	S	2	bc	*	52	?	0.04	
	Brest ...	?	53	NW	2	0	?	?	54	51	+2	SW	7	T	7	59	46	0.08	



# WEATHER CHARTS

for 8 a.m. on

Sunday, 3<sup>rd</sup> November,

1889.

## BAROMETER, WIND AND SEA.

### EXPLANATION OF MAP.

**BAROMETER**—Isobars are drawn for each tenth of an inch.

Changes since previous morning are stated in words.

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

→ = forces above 10; → = forces 8 to 10;

→ = forces 5 to 7; → = forces 1 to 4.

○ = dead calm.

**SEA DISTURBANCE**—Where considerable, is shown thus:

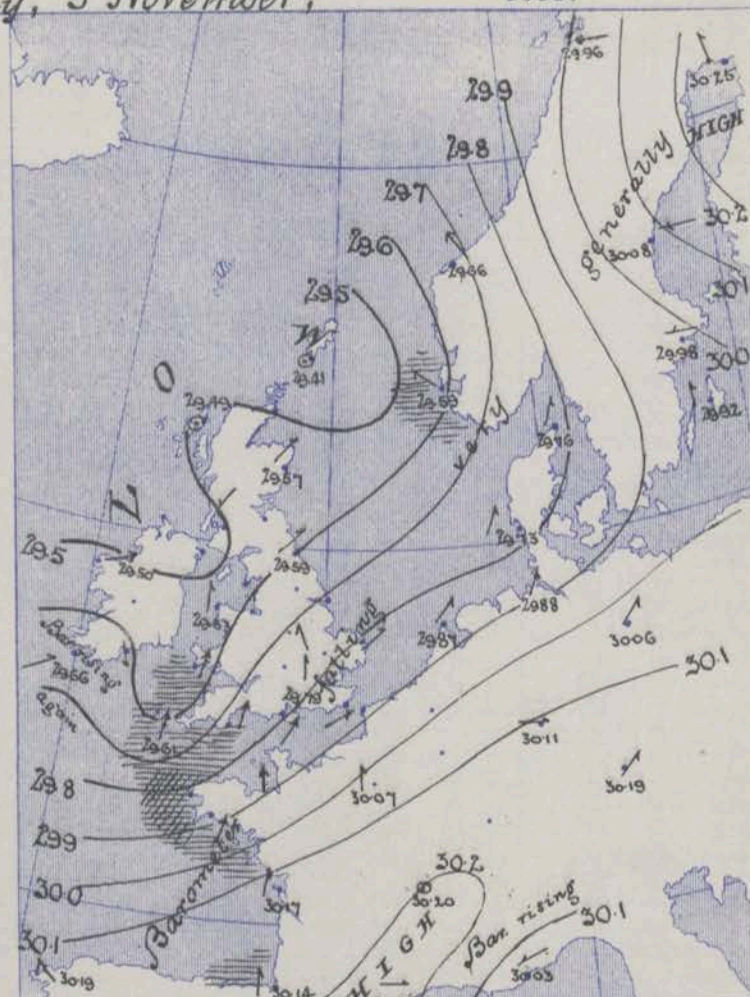
▨ = Rough. ▨ = High.

### MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of November.

During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS.
Sumburgh Head .....	29.687
Stornoway .....	29.707
Wick .....	29.726
Nairn .....	29.743
Aberdeen .....	29.756
Leith .....	29.793
Shields .....	29.815
York .....	29.844
Loughborough .....	29.876
Ardrossan .....	29.795
Donaghadee .....	29.811
Holyhead .....	29.835
Liverpool .....	29.852
Parsonstown .....	29.848
Valencia .....	29.864
Roche's Point .....	29.864
Pembroke .....	29.862
Scilly .....	29.898
Jersey .....	29.923
Hurst Castle .....	29.898
Dover .....	29.893
LONDON .....	29.897
Oxford .....	29.893
Cambridge .....	29.885
Yarmouth .....	29.863



## 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.

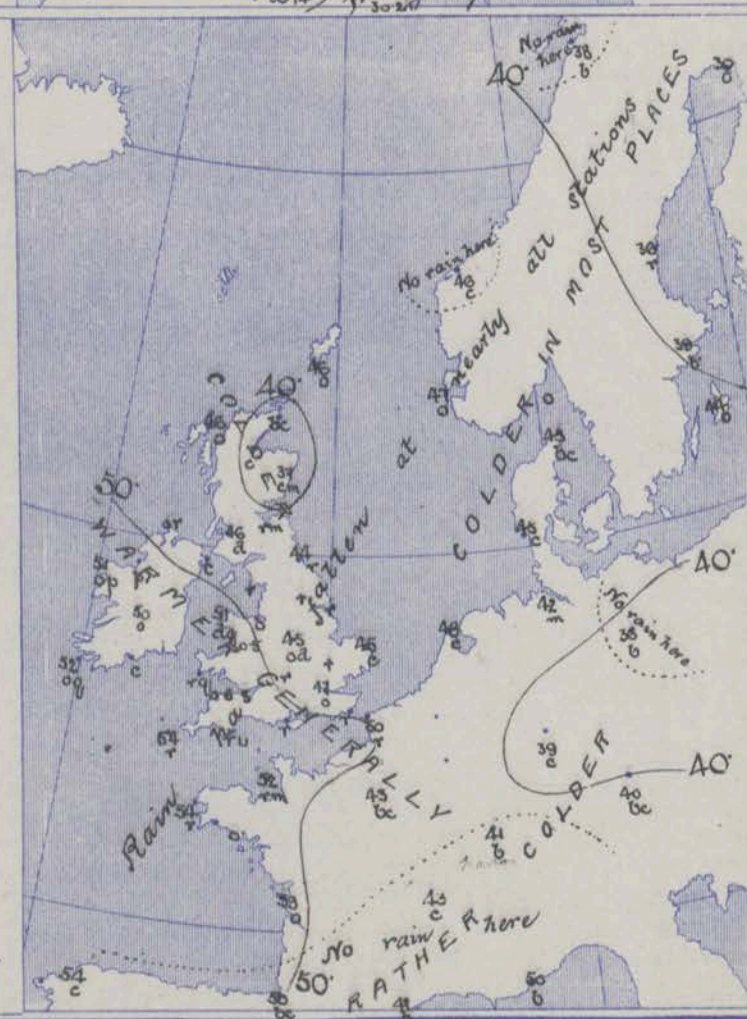
**RAINFALL**—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

### MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of November.)

STATIONS.	TEMPERATURE.				RAINFALL. (Inches.)
	Daily Max.	Daily Min.	at 8 a.m.		
			Dry.	Wet.	
Sumburgh Head.....	45.3	37.4	41.5	39.8	4.24
Stornoway .....	45.7	36.7	41.0	39.9	4.60
Wick .....	45.7	35.7	40.9	39.3	2.97
Nairn .....	44.7	35.5	39.1	37.5	2.32
Aberdeen .....	46.1	36.3	40.3	38.5	3.16
Leith .....	48.2	36.7	41.2	39.6	2.11
Shields .....	47.1	38.1	41.8	40.2	2.63
York .....	47.7	36.1	40.3	39.0	2.21
Loughborough .....	48.0	36.4	40.2	38.9	2.30
Ardrossan .....	47.7	38.9	42.6	40.8	3.92
Donaghadee .....	48.2	39.2	42.9	41.7	3.13
Holyhead .....	49.7	42.8	45.5	43.8	3.71
Liverpool .....	47.7	39.6	42.1	40.4	2.87
Parsonstown .....	49.1	36.9	41.7	40.0	2.84
Valencia .....	52.4	42.7	47.2	45.2	5.50
Roche's Point .....	51.1	41.8	45.9	44.3	4.56
Pembroke .....	50.2	43.7	46.7	44.7	3.96
Scilly .....	52.5	46.7	50.0	48.0	3.76
Jersey .....	51.9	44.2	47.5	45.6	4.24
Hurst Castle .....	50.5	40.3	44.6	43.6	2.98
Dover .....	49.1	40.7	44.0	42.4	3.56
LONDON .....	49.6	37.9	42.0	40.5	2.14
Oxford .....	48.6	37.6	41.0	39.7	2.30
Cambridge .....	48.8	35.7	40.3	39.5	2.02
Yarmouth .....	47.5	39.1	42.9	41.8	3.15

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





## GENERAL SITUATION AT 8 A.M.

### PRESSURE

Highest 30.2 ins. and upwards over the northern parts of the Gulf of Bothnia, and also in Spain and the Bay of France.  
Lowest 29.6 ins. and less in a large and irregularly formed area lying over the west and north of our Islands, and the northern parts of the North Sea. All defined minima were situated respectively off the northeast of Scotland and the north of Ireland, as well as over the St. Georges Channel.

### TEMPERATURE

Gradients rather steep over England and the north of France. Barometer falling generally, but rising again at Valencia.  
Highest 54° at Scilly, Brest, Lorient and Bournemouth, 53° at Pembroke, Rochefort and Lisbon, and 52° at Valencia, Roches Point, Tralee Point, Hurst Castle and Jersey.  
Lowest 30° at Haparanda, 36° at Hernösand and Berlin, 37° at Kairi and Aberdeen, 38° at Bodø & Utsik, and 39° at Stockholm and Umeå.

### WIND

Light and variable in Scotland, strong from the S.E. or E. in Scandinavia.  
S.W. in most other countries; strong in force over the Bristol and English Channels.

### WEATHER

Fine in the east of Scotland, as well as in Denmark, Germany, the Netherlands and central France.  
Cloudy or overcast elsewhere, with rain at nearly all the English stations, and passing showers in the N. of Ireland.  
In the course of the past 24 hours rain has fallen generally, the largest amount being 0.6 ins. at Pembroke, and 0.5 ins. at Holyhead.

### SEA

High at Brest and rough or rather so on our southwest coasts generally, as well as in the Bay of Biscay.

### PROBABLE CHANGES IN SYSTEM NOW PREVALENT

## FORECASTS

For the 24 hours ending at NOON on 4<sup>TH</sup> NOVEMBER 1889.

### DISTRICTS.

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

### FORECASTS.

NONE ISSUED

### DISTRICTS.

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

### WARNINGS

### FORECASTS

NONE ISSUED

The S. cone was hoisted last evening on all coasts.

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

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



# YESTERDAY'S 2 P.M. REPORTS.

	Bar:	Ther:		Wind		Wea:	Sea		Bar:	Ther:		Wind		Wea:	Sea:
		D	W	D	F					D	F				
Skudesnaes ...	29.65	49	45	SE	7	0	7	Holyhead ...	29.88	49	45	W	3	bc	4
Sumburgh Head ...	29.24	48	47	NE	1	2	5	Valencia ...	29.96	52	51	SW	3	cp	3
Stornoway ...	29.57	46	45	NW	5	2	5	Scilly ...	30.05	53	50	WNW	5	cp	5
Aberdeen ...	29.47	46	43	WSW	4	bc	3	Jersey ...	30.05	54	50	W	5	bc	4
Shields ...	29.64	49	44	W	4	C	2	Dungeness ...	29.92	55	48	WNW	5	bc	3
Ardrossan ...	29.69	48	46	W	7	C	5	London ...	29.93	52	45	W	3	bc	4
Malin Head ...	29.75	47	44	NW	5	bc	4	Yarmouth ...	29.82	49	45	W	4	bc	2
Mullaghmore ...	29.84	49	46	W	4	cp	3	Rochefort ...	30.22	59	55	NW	3	C	2
Belmullet ...	29.85	51	49	WSW	2	0	4								

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

The reports for yesterday morning showed that pressure was highest, 30.4 ins. and upwards, in a large anticyclone lying over northern and central Russia, but high, 30.2 ins. and upwards, in another large system lying over the Iberian Peninsula and the southern parts of the Bay of Biscay. The lowest readings 29.2 ins. and less, were found in a well defined, and rather deep depression which had advanced from our northwest coasts to the neighbourhood of the Shetlands, where it appeared to be steadily filling up. The wind was W. or NW. over the greater part of our Islands, but SW. on the eastern shores of St. Britain, as well as in the Netherlands, central France and the South of Germany. Over northern Europe moderate to strong breezes from the SE. were reported, and over central Russia light E. breezes, but over Italy, Spain and the Mediterranean the wind was very variable. The weather was fine over the greater part of Ireland, England, the Netherlands and the north of France, as well as in Italy and Algeria. Rain was, however, falling in the north of our Islands, as well as over central France, and snow in Lapland. Fog prevailed at some of the Russian and German stations. Temperature had risen a little in France and Spain as well as in the west of Norway, but fallen elsewhere; readings ranged from 80° and upwards over the Adriatic and the central and southern parts of the Mediterranean to a little below the freezing point over central and northern Russia. The highest individual readings were 69° at Malta, 68° at Brindisi, 63° at Lescina, 62° at Barcelona and Algiers, 61° at La Calle, 60° at San Fernando and Oran, and 59° at Leghorn, Sangüinaria and Cagliari; the lowest were 29° at Archangel, 30° at Kuopio and St. Petersburg, 31° at Moscow, 32° at Uleaborg, 33° at Haparanda, 33° at Berlin and 34° at Helsingfors, Swinemünde and Prague. In the course of the day the depression in the neighbourhood of the Shetlands continued to fill up steadily, but a new fall of the barometer set in on the Irish coasts. The wind backed to the SW. at many of our western stations, and at Valencia it increased to a strong breeze from the S.

### REMARKS ON THE WEATHER FOR THE 24 HOURS ENDING SAT 2<sup>ND</sup> NOVEMBER, 1880.

The reports for Friday morning showed that pressure was highest, 30.3 ins. and upwards, in an anticyclone lying over northern Russia, but high, 30.2 ins. and upwards, in another area lying over Morocco and the south of Spain. The lowest readings, 28.9 ins. and less, were found in a deep depression, the centre of which lay over the northeast of Ireland and the southeast of Scotland, the gradients in the immediate neighbourhood being very steep. Strong winds or gales were reported in nearly all parts of our Islands, — from W. on our western and southern coasts, from S. in the east, and from SE. in the north. Over Spain the west and north of France, the Netherlands and Denmark, however, the wind was light or moderate from the SW. or S. and in Scandinavia SE., but over Russia, Austria and Italy light variable breezes were reported. The weather was fine in Germany, the Netherlands, the west of Norway and the east of France, as well as in Algeria and the south of Spain. Elsewhere, however, the sky was cloudy or overcast, with rain in the north of Ireland and the north and east of England, as well as at Wisby and Brecon. Fog prevailed at several of the Russian stations. Temperature had risen several degrees over St. Britain, and to a smaller extent over Sweden and Portugal, but fallen elsewhere; readings ranged from 60° and upwards over the Adriatic and the southern parts of the Mediterranean to 40° or less over Russia, western Germany and central France. The highest individual readings were 68° at Brindisi, 66° at Oran, 64° at Lescina and La Calle, 62° at Algiers, 61° at Naples, and 60° at Cagliari; the lowest were 26° at Archangel, 33° at Uleaborg, 34° at St. Petersburg, 35° at Paris, 36° at Haparanda, Kuopio and Wiesbaden, and 39° at Moscow, Kharkov, Munster and Le Mans. In the course of the day the depression over the northwest of our Islands travelled north-northeastward to the northeast of Scotland. The barometer therefore rose in nearly all parts of Ireland and England, while the gale moderated, but in the south and west of Scotland the wind shifted to the W. and increased in force.

### 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, 4<sup>th</sup> November,* 1889.  
 Issued by the Meteorological Office, 63, Victoria Street, London. *R. H. SCOTT, Secretary.*

STATIONS.		YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
		Barometer at 32° F. and Sea Level.	Temp. in Shade.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Sea. (0 to 9.)	SHADE TEMP.		Amount of Rainfall.		
				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 ...	30.14	27	S	4	S	30.05	- .20	30	29	0	S	2.	0	*	30	25	0.08	
	Hernösand ...	30.01	35	SE	0	C	29.91	- .17	39	38	+ 3	SE	2	1	*	41	34	0.51	
	Stockholm ...	29.94	40	E	2	T	29.91	- .07	42	41	+ 3	E	2	0	*	43	37	0.12	
	Wisby ...	29.97	40	SE	4	B	29.98	+ .06	41	40	- 3	E	4	6	*	45	37	0.12	
	Bodö ...	29.82	37	E	4	B	29.73	- .23	40	38	+ 2	E	4	6	2	?	34	-	
	Christiansund	29.56	48	S	6	C	29.58	- .08	49	43	+ 3	SSW	4	0	4	50	43	-	
	Skudesnaes ...	29.67	46	SE	6	T	29.65	+ .06	48	45	+ 1	SE	6	0	5	?	45	0.51	
	Christiania Fjord (Fæder)	29.76	44	SE	5	0	29.79	+ .01	46	45	+ 2	SE	3	0	3	?	?	0.16	
	Skagen (The Scaw)	29.77	46	W	3	0	29.78	+ .02	46	45	+ 1	S	3	1	2	48	41	0.04	
	Fanö ...	29.78	44	E	4	T	29.72	- .01	44	44	- 1	SE	4	0	*	48	?	0.28	
BRITISH ISLANDS.	Sumburgh Head	29.45	46	W	1	0	29.64	+ .23	41	39	- 5	NE	1	6	3	50	39	0.02	
	Stornoway ...	29.53	46	NW	5	T	29.73	+ .24	36	35	- 10	NW	2	0	3	49	32	0.08	
	Wick ...	29.53	40	NW	1	0	29.71	+ .20	34	33	- 4	NW	1	0	1	45	32	0.01	
	Nairn ...	29.53	39	W	0	0	29.73	+ .20	41	40	+ 4	W	0	0	1	45	35	0.02	
	Aberdeen ...	29.56	44	W	1	0	29.71	+ .14	42	40	+ 5	WNW	2	0	3	47	36	0.03	
	Leith ...	29.54	45	SE	1	0	29.72	+ .16	44	43	+ 1	E	2	1	*	48	42	0.17	
	Shields ...	29.58	49	SW	2	m	29.69	+ .10	46	46	+ 2	NW	2	1	2	50	43	0.24	
	Spurn Head ...	29.55	49	SEW	2	0	29.65	- .04	49	48	+ 5	WSW	4	0	3	49	43	0.01	
	York ...	29.55	50	W	0	m	29.69	+ .03	48	48	+ 4	W	1	0	*	50	43	0.08	
	Loughborough	29.59	51	W	1	0	29.77	+ .04	48	47	+ 3	W	2	0	*	53	45	0.10	
GERMANY.	Ardrossan ...	29.54	48	W	0	opdm	29.74	+ .24	43	43	- 1	NW	3	0	2	48	43	0.03	
	Malin Head ...	29.60	49	NW	5	0	29.79	+ .37	43	40	- 5	NW	1	0	2	51	42	0.05	
	Mullaghmore...	29.70	49	NW	6	0	29.83	+ .33	40	38	- 11	NW	2	0	3	52	40	0.07	
	Belmullet ...	29.79	49	NW	3	0	29.84	+ .31	43	43	- 8	WSW	1	0	*	52	38	0.04	
	Donaghadee ...	29.59	52	NW	3	0	29.80	+ .31	41	40	- 7	W	3	0	2	54	40	0.02	
	Barrow-in-Furness	29.54	50	SE	3	T	29.71	+ .18	47	45	0	NW	4	0	*	51	45	0.04	
	Liverpool (Bidston)	29.60	50	W	3	0	29.78	+ .19	47	46	+ 1	WNW	4	0	4	52	45	0.08	
	Holyhead ...	29.59	52	WNW	4	0	29.81	+ .28	47	45	- 4	NW	4	0	4	53	47	0.05	
	Parsonstown ...	29.73	50	W	0	0	29.88	+ .32	34	34	- 16	W	0	0	*	53	34	0.02	
	Valencia...	29.87	51	NW	3	0	29.90	+ .24	45	43	- 7	ESE	1	0	1	53	42	0.04	
FRANCE AND NETHERLANDS.	Roche's Point...	29.90	51	NW	5	C	29.90	+ .29	43	41	- 9	NW	2	0	3	55	40	-	
	Pembroke (St. Ann's Hd.)	29.70	51	W	4	C	29.86	+ .30	48	46	- 5	NW	3	0	4	54	48	0.15	
	Scilly ...	29.78	52	WNW	6	op	29.89	+ .28	50	48	- 4	NW	4	0	4	54	48	0.08	
	Prawle Point ...	29.73	51	W	4	0	29.87	+ .16	50	45	- 7	WNW	3	0	2	55	49	0.21	
	Jersey (St. Aubin's)	29.74	55	WNW	5	C	29.91	+ .04	54	50	+ 2	WSW	3	0	3	56	51	0.49	
	Hurst Castle ...	29.64	54	SW	6	C	29.86	+ .06	52	51	0	WNW	3	0	2	54	50	0.25	
	Dungeness ...	29.62	52	SW	8	T	29.80	- .05	50	50	0	WNW	3	0	3	53	49	0.36	
	London ...	29.59	52	SW	3	0	29.79	0.00	50	48	+ 3	SW	1	0	*	53	47	0.20	
	Oxford ...	29.67	51	SW	2	0	29.81	+ .05	47	46	0	SW	1	0	*	53	46	0.43	
	Cambridge ...	29.67	51	S	1	0	29.77	0.00	49	48	+ 4	WSW	1	0	*	52	44	0.35	
PENINSULA.	Yarmouth ...	29.63	51	SSW	6	T	29.72	- .11	49	48	+ 4	W	3	0	2	51	43	0.14	
	Cuxhaven ...	29.40	44	S	3	0	29.74	- .14	45	45	+ 3	SE	3	0	*	46	?	0.04	
	Berlin ...	30.04	42	SEW	2	C	29.95	- .11	42	41	+ 6	SE	2	0	*	48	?	-	
	Wiesbaden ...	*	*	*	*	*	29.82	- .29	48	46	+ 9	W	0	1	*	50	?	0.28	
	Munich ...	30.10	36	SE	3	B	30.06	- .13	40	38	0	SE	2	0	*	48	32	-	
	The Helder ...	29.72	47	S	2	T	29.65	- .22	48	48	0	WSW	1	0	1	50	46	0.16	
	Brussels (9 a.m.)	*	*	*	*	*	29.80	- .20	51	50	+ 8	WSW	3	0	*	52	?	0.24	
	Cape Gris Nez	?	52	SSW	6	T	?	?	52	50	+ 2	W	5	0	5	55	48	0.55	
	Paris ...	29.86	50	S	4	T	29.93	- .14	50	48	+ 7	SW	2	0	*	52	?	0.28	
	Brest ...	?	55	NW	5	0	?	?	53	49	- 1	NW	1	0	4	59	47	0.28	
PENINSULA.	Lorient ...	29.90	55	WNW	5	0	29.97	+ .05	51	49	- 3	NW	2	0	4	57	50	0.24	
	Rochefort ...	30.07	55	WSW	5	T	?	?	56	54	+ 3	?	3	0	2	59	50	0.20	
	Belfort ...	30.07	49	NW	1	B	29.99	- .14	48	43	+ 7	SW	1	1	*	54	36	0.08	
	Lyons ...	30.12	47	SE	1	B	30.11	- .09	44	43	+ 1	S	1	0	*	56	?	0.04	
	Nice ...	30.11	55	SE	4	B	30.08	+ .05	57	49	+ 1	E	4	0	1	63	48	-	
	Perpignan ...	30.15	48	SE	2	B	30.16	- .05	50	50	+ 4	SW	2	0	*	65	?	0.04	
	Biarritz ...	29.75	58	W	3	0	30.12	- .02	55	53	+ 5	SEW	3	0	6	59	?	?	
	Corunna ...	30.28	54	N	3	B	30.23	- .03	51	49	- 2	N	1	0	2	61	50	-	
	Lisbon ...	30.28	54	N	3	B	30.23	- .03	51	49	- 2	N	1	0	2	61	50	-	

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

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



# WEATHER CHARTS

for 8 a.m. on

Monday 4<sup>th</sup> November.

1889.

## BAROMETER, WIND AND SEA.

### EXPLANATION OF MAP.

**BAROMETER**—Isobars are drawn for each tenth of an inch.

Changes since previous morning are stated in words.

**WIND**—Arrows show the prevalent winds. They fly with the wind and

their barbs and feathers refer to force thus—

→ = forces above 10; → = forces 8 to 10;

→ = forces 5 to 7; → = forces 1 to 4.

⊙ = dead calm.

**SEA DISTURBANCE**—Where considerable, is shown thus:

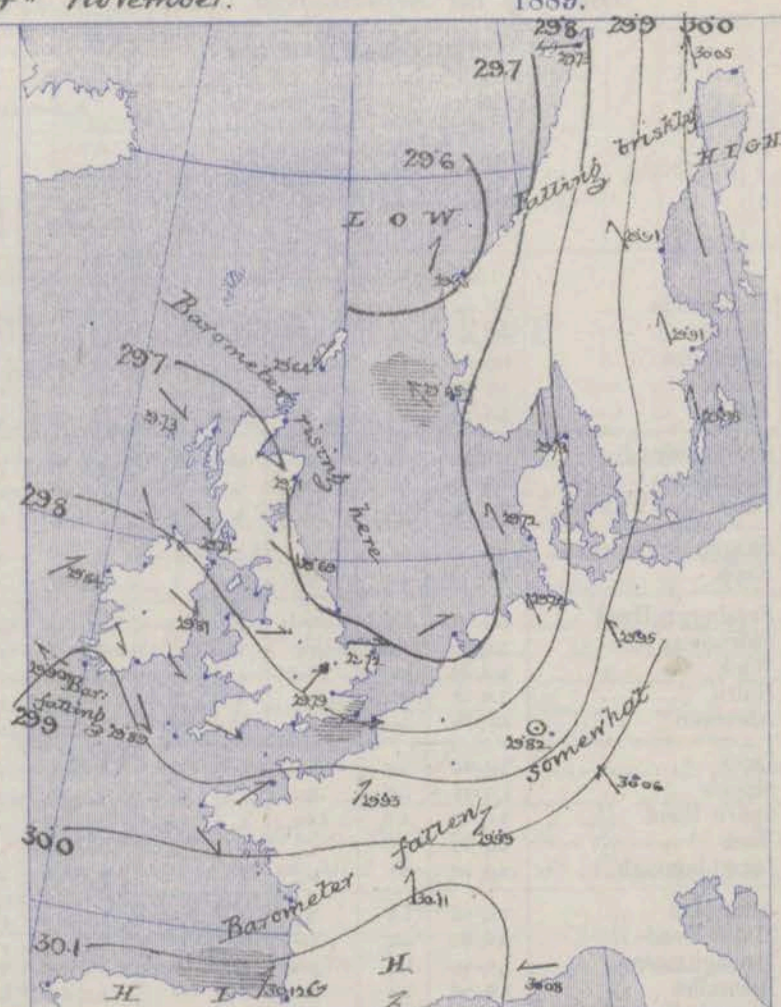
▨ = Rough. ▨ = High.

## MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of November.

During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS.
Sumburgh Head .....	29.687
Stornoway .....	29.707
Wick .....	29.726
Nairn .....	29.743
Aberdeen .....	29.756
Leith .....	29.793
Shields .....	29.815
York .....	29.844
Loughborough .....	29.876
Ardrossan .....	29.795
Donaghadee .....	29.811
Holyhead .....	29.835
Liverpool .....	29.852
Parsonstown .....	29.848
Valencia .....	29.864
Roche's Point .....	29.864
Pembroke .....	29.862
Silly .....	29.898
Jersey .....	29.923
Hurst Castle .....	29.898
Dover .....	29.893
LONDON .....	29.897
Oxford .....	29.893
Cambridge .....	29.885
Yarmouth .....	29.863



## 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.

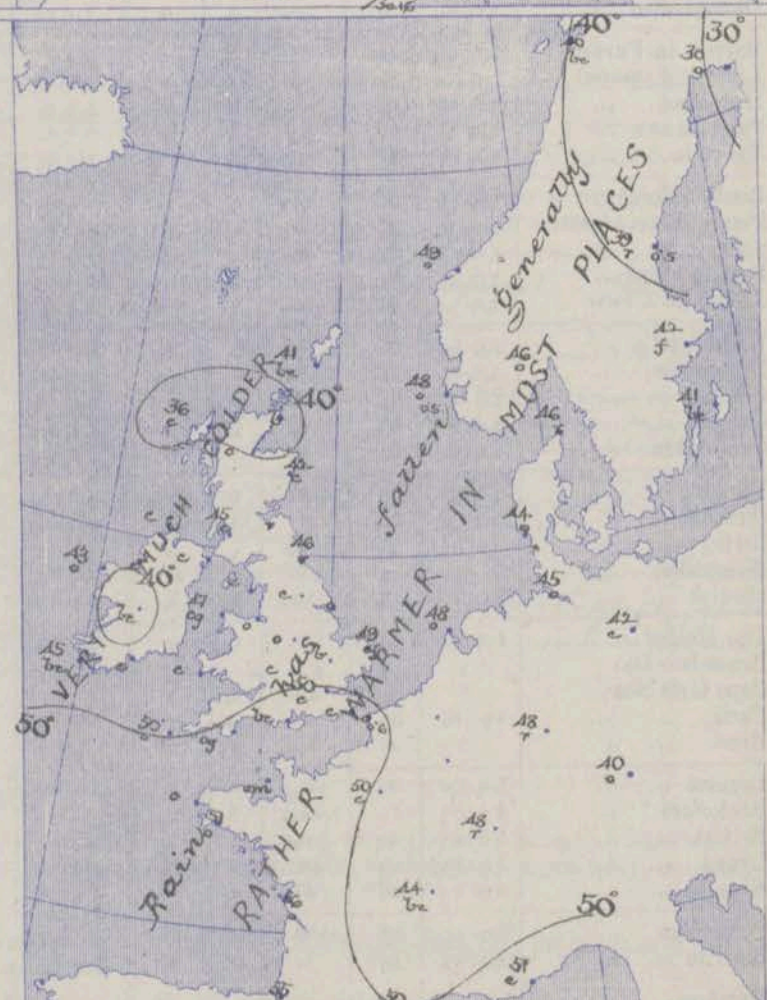
**RAINFALL**—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

### MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of November.)

STATIONS.	TEMPERATURE.				RAINFALL. (Inches.)
	Daily Max.	Daily Min.	at 8 a.m. Dry.	Wet.	
Sumburgh Head.....	45.3	37.4	41.5	39.8	4.24
Stornoway .....	45.7	36.7	41.0	39.9	4.60
Wick .....	45.7	35.7	40.9	39.3	2.97
Nairn .....	44.7	35.5	39.1	37.5	2.32
Aberdeen .....	46.1	36.3	40.3	38.5	3.16
Leith .....	48.2	36.7	41.2	39.6	2.11
Shields .....	47.1	38.1	41.8	40.2	2.63
York .....	47.7	36.1	40.3	39.0	2.21
Loughborough .....	48.0	36.4	40.2	38.9	2.30
Ardrossan .....	47.7	38.9	42.6	40.8	3.92
Donaghadee .....	48.2	39.2	42.9	41.7	3.13
Holyhead .....	49.7	42.8	45.5	43.8	3.71
Liverpool .....	47.7	39.6	42.1	40.4	2.87
Parsonstown .....	49.1	36.9	41.7	40.0	2.84
Valencia .....	52.4	42.7	47.2	45.2	5.50
Roche's Point .....	51.1	41.8	45.9	44.3	4.56
Pembroke .....	50.2	43.7	46.7	44.7	3.96
Silly .....	52.5	46.7	50.0	48.0	3.76
Jersey .....	51.9	44.2	47.5	45.6	4.24
Hurst Castle .....	50.5	40.3	44.6	43.6	2.98
Dover .....	49.1	40.7	44.0	42.4	3.56
LONDON .....	49.6	37.9	42.0	40.5	2.14
Oxford .....	48.6	37.6	41.0	39.7	2.30
Cambridge .....	48.8	35.7	40.3	39.5	2.02
Yarmouth .....	47.5	39.1	42.9	41.8	3.15

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 30.1 ins. and more over the Spanish Peninsula and south of France, and 30.0 ins. and more over Finland. Lowest 29.6 ins. and less off the west of Norway, and 29.7 ins. and less over the North Sea. Gradients were moderate; Barometer was rising over St. Britain falling again in the west of Ireland.
TEMPERATURE	Highest 56° at Rochford, 55° at Biarritz, 54° at Jersey, 50° to 52° along the south coast of England. Lowest 36° at Haparanda, 34° at Parsonstown and Wick, 36° at Stromoway, 34° at Harnissand, 40° at Mullaghmore. The fall in Ireland had been very decided during the night.
WIND	Moderate S <sup>W</sup> on the eastern shores of the North Sea, moderate W <sup>W</sup> and NW <sup>W</sup> in our Islands, light generally in Ireland and over France. In the extreme west of Ireland it was backing quickly towards S again.
WEATHER	Dull and gloomy over the North Sea, with rain in places, fair over the greater part of our Islands, but with an unsettled appearance (cirrus coming fast from W) of the sky. Rainfall yesterday was general - heaviest in the south.
SEA	Moderate in the west and southwest, slight or smooth in most other places.

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

From the renewed fall of the barometer, backing wind, and unsettled appearance observed at Mullaghmore it appeared as though a new depression of unknown size and intensity were approaching us from the Atlantic. Later telegrams, however, show that the barometer had not fallen since 8 am. and the indications are therefore not of a threatening character. The warning signals have consequently been lowered, and the forecasts modified.

## FORECASTS

For the 24 hours ending at NOON on 5<sup>TH</sup> NOVEMBER 1889. (Issued at 11.50 am.)

### DISTRICTS.

### FORECASTS.

0	SCOTLAND NORTH	Wind variable at first, then SW <sup>W</sup> , changeable, slight rain at times
1	SCOTLAND EAST	
2	ENGLAND N.E.	NW <sup>W</sup> winds and fair, then backing to W or SW foggy at night
3	ENGLAND EAST	
4	MIDLAND COUNTIES	
5	ENGLAND SOUTH	

### DISTRICTS.

### FORECASTS

6	SCOTLAND WEST	Wind becoming S <sup>W</sup> and SW <sup>W</sup>
7	ENGLAND N.W.	
8	ENGLAND S.W.	moderate, unsettled
9	IRELAND NORTH	
10	IRELAND SOUTH	

### WARNINGS

The S. Cone has been lowered everywhere

No. 0.—The South Cone, point downwards (↓), means that gales, or strong winds, are probable at first from the Southward (from S.E. round by S. to N.W.). Should it appear likely that a gale beginning from between W. and N.W. is likely to veer towards N. or N.E., the North Cone is hoisted in preference to the South Cone.  
The North Cone, point upwards (↑), means that gales, or strong winds, are probable, at first from the Northward (from N.W. round by N. to S.E.). Should it appear likely that a gale beginning from between E. and S.E. is likely to veer towards S. or S.W., the South Cone is hoisted in preference to the North Cone.



# YESTERDAY'S 2 P.M. REPORTS.

	Bar:	Ther:		Wind		Wea:	Sea		Bar:	Ther:		Wind		Wea:	Sea
		D	W	D	F					D	W	D	F		
Skudesnaes ...	29.68	46	15	SSW	4	0	5	Holyhead ...	29.56	51	50	NW	4	op	4
Sumburgh Head ...								Valencia ...							
Stornoway ...	29.49	48	47	S	1	0	2	Scilly ...							
Aberdeen ...								Jersey ...	29.69	55	53	SSW	7	0	5
Shields ...								Dungeness ...	29.72	52	51	SW	7	1	?
Ardrossan ...								London ...							
Malin Head ...	29.47	50	50	NW	4	0	2	Yarmouth ...							
Mullaghmore ...								Rochefort ...	30.11	56	55	SW	5	0	2
Belmullet ...	29.65	52	51	NW	4	0	4								

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

The reports for yesterday morning showed that pressure was highest, 30.5 in. and upwards in a large anticyclone lying over N. & Central Russia, but high 30.2 inches and upwards in another large system lying over the Iberian Peninsula and Western Algeria. The lowest readings, 29.4 inches to 29.6 inches, were found in a large and irregularly shaped area lying over the west and north of our Islands and the northern parts of the North Sea; all defined minima were situated respectively off the N.E. of Scotland, the N. of Ireland and the St. George's Channel. The wind was S.W. over the greater part of Ireland and England as well as in France, Germany, the Netherlands and Denmark, strong in force over the Bristol and English Channels. In Scotland, however, it was light and variable, and over northern Europe strong from the S.E. or E. Calms or variable breezes were also reported over nearly the whole of Eastern & Southern Europe. The weather was fine in Denmark, Germany and the S. of Sweden as well as in Italy and the south of France, but cloudy elsewhere, with rain at nearly all the English stations, and also in some parts of Russia, fog prevailed over the S. of Russia. Temperature had risen a little over Ireland, England, the Netherlands and the north of France, but fallen elsewhere, readings ranged from 60° and upwards over S. Italy and some parts of Algeria, to a few degrees below the freezing point over northern and Central Russia. The highest individual readings were 65° at Brindisi, 63° at Algiers, 62° at Palermo, 60° at Oran, 59° at Tangier and Constantinople and 58° at Barcelona and Naples; the lowest were 27° at Thessalonica, 28° at Archangel and Elieborg, 30° at Kopenhagen, 32° at St. Petersburg, 34° at Moscow, 35° at Koenigsberg and 36° at Rostock, Riga and Berlin.

In the course of the day the irregularly formed low pressure system over our Islands moved slowly E. and the wind increased to a gale from the S.W. over the Channel. On our west coasts the barometer rose briskly and the wind veered to the N.W. and.

## SUMMARY OF CHANGES IN THE WEATHER OVER THE BRITISH ISLANDS AND THEIR NEIGHBOURHOOD FROM THE 27<sup>TH</sup> OCTOBER TO THE 2<sup>ND</sup> NOVEMBER 1889.

The weather of the past week has been upon the whole of a very changeable, unsettled nature, but the heavy rains which have fallen at times have been interspersed by some fairly long intervals of bright sunshine, especially in the more eastern and southern parts of the Kingdom.

Barometrical pressure was at first highest over Scandinavia and northern Europe, and on the night of the 27<sup>th</sup> Oct., a well marked and rather deep depression advanced northwards from Spain to Brittany occasioning fresh to strong gales from the east and northeast on all our southern and eastern coasts, with heavy rain in France and the southern parts of England.

On the 29<sup>th</sup> Oct., however, the depression gradually filled up, the high pressure area moved southwards to Central Europe and a series of depressions began to travel in a N.N.E. direction, along our extreme west and northwest coasts. The strong E. winds in the south consequently died down, and a current of air from the S.W. spread slowly over the United Kingdom. On the 30<sup>th</sup> Oct. the S.W. wind blew strongly in most districts with heavy rain in all the more western and northern parts of the country.

The most important depression of the week was, however, observed between the 31<sup>st</sup> Oct. and 1<sup>st</sup> Nov. when a deep system in the centre of which readings were below 29.4 in. travelled N.E. across the N. of Ireland and Central Scotland. This disturbance occasioned heavy rain in the W. and strong winds or gales on all coasts, from W. in the W. & S. and from South or South-east in the E. & N. The W. gale which blew over the N. of Ireland, the N.W. of England, and the W. of Scotland was rather severe. On reaching the neighbourhood of the Shetlands the depression began to fill up, but at the close of the week the barometer was again falling decidedly in Ireland while the wind there was backing to the south and increasing in force.

Temperature has not differed much from the normal. On the night of the 27<sup>th</sup> Oct. frost was registered over Central Ireland and the north of Scotland, but at other times the weather has been fairly mild.

### 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, 5<sup>th</sup> November, 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 3 <sup>rd</sup> P. and Sea Level.	Temp. in Shade.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Sea. (0 to 1.)	SHADE TEMP.				
				Dirac.	Force. (0 to 12.)		Reading at 3 <sup>rd</sup> P. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Dirac.	Force. (0 to 12.)		Weather.	Max.	Min.	Amount of Rainfall.	
SCANDINAVIA.	Haparanda ...	30.00	33	2	0	b	29.97	-0.08	37	37	+7	SW	2	+	•	?	25	0.08	
	Hernösand ...	29.97	37	2	0	o	29.99	+0.03	41	39	+2	S	2	0	•	41	34	-	
	Stockholm ...	29.99	39	2	0	b	29.99	+0.08	42	41	0	SE	2	0	•	46	36	-	
	Wisby ...	30.00	44	5	4	r	29.91	-0.07	44	42	+3	SE	4	0	•	46	37	0.04	
	Bodö ...	29.70	42	0	4	o	29.75	+0.02	40	35	0	E	2	0	2	43	7	-	
	Christiansund	29.64	45	SE	2	bc	29.60	+0.02	45	43	-4	E	2	0	2	50	43	-	
	Skudesnaes ...	29.66	43	SE	1	r	29.65	-0.00	45	43	-3	NW	4	0	1	?	45	1.18	
	Christiania Fjord (Færdar)	29.80	46	SE	5	o	29.73	-0.06	46	45	0	SE	5	r	4	46	45	0.04	
	Skagen (The Scaw)	29.76	47	S	1	o	29.66	-0.12	46	46	0	S	5	0	3	48	45	0.12	
	Fanö ...	29.71	45	SE	4	r	29.69	-0.03	47	47	+3	SW	3	0	•	48	?	0.04	
BRITISH ISLANDS.	Sumburgh Head	29.68	40	2	0	b	29.45	-0.19	44	40	+3	S	2	bc	3	46	38	-	
	Stornoway ...	29.67	40	W	3	b	29.53	-0.20	45	44	+9	SW	4	bc	4	48	34	0.05	
	Wick ...	29.70	44	NW	1	b	29.57	-0.14	43	41	+9	SW	2	bc	1	44	32	-	
	Nairn ...	29.73	35	2	0	b	29.62	-0.11	37	36	-4	2	0	b	1	48	31	-	
	Aberdeen ...	29.76	41	W	2	c	29.70	-0.01	38	37	-4	S	2	cm	3	47	32	0.02	
	Leith ...	29.78	39	W	1	c	29.71	-0.01	43	41	-1	S	1	c	•	44	31	0.16	
	Shields ...	29.75	43	NW	2	op	29.74	+0.10	37	35	-9	SW	2	bc	2	48	34	0.16	
	Spurn Head ...	29.74	47	NW	4	o	29.84	+0.19	42	40	-7	NW	3	c	3	49	39	-	
	York ...	29.77	44	W	2	bc	29.86	+0.17	36	36	-12	SE	1	0	•	50	38	-	
	Loughborough	29.84	44	W	1	o	29.90	+0.13	31	31	-17	E	1	cm	•	50	30	-	
GERMANY.	Ardrossan ...	29.79	46	W	2	b	29.69	-0.05	45	47	+3	SW	3	0	3	49	43	-	
	Malin Head ...	29.77	43	S	2	op	29.62	-0.17	45	43	+2	SE	4	0	2	48	42	0.03	
	Mullaghmore ...	29.81	45	SW	3	c	29.63	-0.20	46	45	+6	SW	3	0	2	49	40	0.05	
	Belmullet ...	29.80	46	NW	3	op	29.63	-0.21	48	47	+5	SE	1	bc	•	50	43	0.23	
	Donaghadee ...	29.85	39	SW	2	c	29.73	-0.07	43	43	+2	SW	2	bc	0	48	38	0.01	
	Barrow-in-Furness	29.79	45	NW	4	bc	29.75	+0.04	47	44	0	S	6	0	•	50	40	0.04	
	Liverpool (Bidston)	29.84	45	NW	3	b	29.84	+0.06	43	41	-4	S	3	r	3	49	39	0.02	
	Holyhead ...	29.86	45	NW	2	b	29.77	-0.04	47	46	0	SW	4	pgm	3	50	46	0.04	
	Parsonstown ...	29.87	48	2	0	c	29.72	-0.16	45	44	+11	2	0	•	50	34	0.09		
	Valencia ...	29.90	49	SSW	2	c	29.73	-0.17	52	51	+7	NW	4	cm	4	52	43	0.28	
FRANCE AND NETHERLANDS.	Roche's Point...	29.91	49	NW	2	bc	29.77	-0.13	50	50	+7	NW	4	r	4	54	41	0.20	
	Pembroke (St. Ann's Hd.)	29.91	44	NW	2	b	29.83	-0.03	50	50	+2	SW	4	0	4	51	44	0.05	
	Scilly ...	29.90	50	N	2	bc	29.90	+0.01	51	49	+1	NW	4	0	4	51	47	0.05	
	Prawle Point ...	29.90	47	N	2	o	29.95	+0.08	47	44	-3	SW	2	0	2	52	39	0.01	
	Jersey (St. Aubin's)	29.89	53	W	2	opgm	29.95	+0.04	46	44	-8	NW	3	cm	3	54	45	0.11	
	Hurst Castle ...	29.88	50	NW	2	bc	29.95	+0.09	42	40	-10	SE	1	0	1	55	35	-	
	Dungeness ...	29.83	51	NW	2	bc	29.90	+0.10	35	34	-15	NW	3	0	1	57	34	-	
	London ...	29.88	49	W	1	o	29.92	+0.13	34	34	-16	NW	1	0	•	54	32	-	
	Oxford ...	29.90	43	W	1	o	29.95	+0.14	34	34	-13	W	1	0	•	52	33	-	
	Cambridge ...	29.87	48	W	1	o	29.92	+0.15	34	33	-15	SW	1	0	•	53	32	-	
PENINSULA.	Yarmouth ...	29.74	46	W	3	b	29.87	+0.15	37	36	-12	W	2	bc	2	51	35	0.01	
	Cuxhaven ...	29.74	45	SE	1	b	29.81	+0.07	44	43	+1	SW	3	0	•	49	40	0.02	
	Berlin ...	29.36	47	S	2	r	29.94	-0.01	45	44	+3	SW	2	0	•	50	41	0.08	
	Wiesbaden ...	?	•	•	•	•	?	?	45	43	-3	2	0	0	•	54	43	0.24	
	Munich ...	30.06	45	W	2	bc	30.03	-0.03	36	36	-4	S	2	bc	•	54	34	-	
	The Helder ...	29.77	50	NW	2	c	29.82	+0.17	48	47	0	NW	2	0	3	52	46	0.04	
	Brussels (9 a.m.)	?	•	•	•	•	29.91	+0.11	47	46	-4	SW	1	0	•	55	47	0.04	
	Cape Gris Nez	?	55	NW	4	o	?	?	45	42	-7	SE	2	0	2	55	43	-	
	Paris ...	29.94	50	S	1	c	29.90	-0.03	47	47	-3	N	1	0	•	56	46	-	
	Brest ...	?	51	2	0	o	?	?	51	44	-2	NW	2	0	2	57	45	-	
PENINSULA.	Lorient ...	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	
	Rochefort ...	29.92	57	SE	3	o	29.89	?	53	52	-3	NW	6	r	3	63	48	0.87	
	Belfort ...	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	
	Lyons ...	30.10	51	SW	1	b	29.91	-0.20	53	49	+9	S	3	0	•	60	?	-	
	Nica ...	30.07	54	SE	3	c	30.08	-0.00	50	48	-1	SE	3	0	1	61	46	-	
	Perpignan ...	30.01	52	SW	2	c	29.93	-0.23	51	50	+1	W	2	0	•	64	46	-	
	Biarritz ...	29.87	63	SW	3	o	29.97	-0.15	56	54	+1	NW	7	r	7	66	52	0.59	
	Corunna ...	?	?	•	•	•	?	?	?	?	?	?	?	?	?	?	?	?	
	Lisbon ...	30.15	38	NW	3	r	30.23	-0.00	55	52	+4	N	4	0	5	59	?	0.05	

For Explanation of Columns, see bottom of p 4

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



# WEATHER CHARTS

for 8 a.m. on Tuesday, 5<sup>th</sup> November.

1889.

## BAROMETER, WIND AND SEA.

### EXPLANATION OF MAP.

**BAROMETER**—Isobars are drawn for each tenth of an inch.

Changes since previous morning are stated in words.

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→ = forces above 10; → = forces 8 to 10;

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○ = dead calm.

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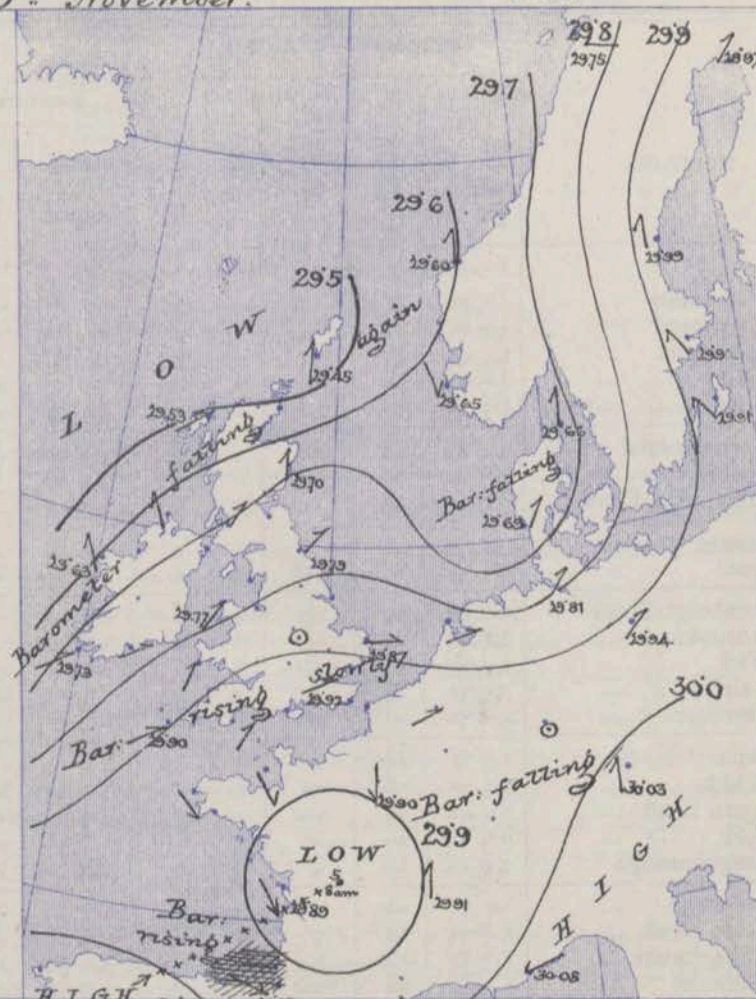
— = Rough. — = High.

## MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of November.

During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS.
Sumburgh Head .....	29.687
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York .....	29.844
Loughborough .....	29.876
Ardrossan .....	29.795
Donaghadee .....	29.811
Holyhead .....	29.835
Liverpool .....	29.852
Parsonstown .....	29.848
Valencia .....	29.864
Roche's Point .....	29.864
Pembroke .....	29.862
Scilly .....	29.898
Jersey .....	29.923
Hurst Castle .....	29.898
Dover .....	29.893
LONDON .....	29.897
Oxford .....	29.893
Cambridge .....	29.885
Yarmouth .....	29.863



## 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.

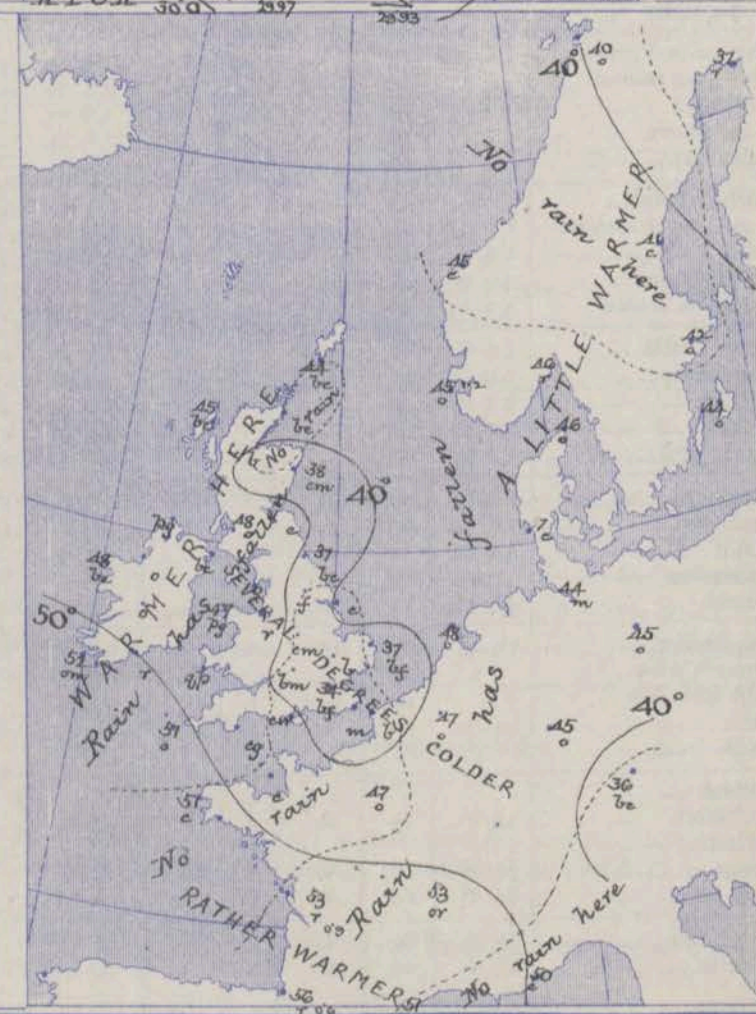
**RAINFALL**—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

### MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of November.)

STATIONS.	TEMPERATURE.				RAINFALL. (Inches.)
	Daily Max.	Daily Min.	at 8 a.m.		
			Dry.	Wet.	
Sumburgh Head.....	45.3	37.4	41.5	39.8	4.24
Stornoway .....	45.7	36.7	41.0	39.9	4.60
Wick .....	45.7	35.7	40.9	39.3	2.97
Nairn .....	44.7	35.5	39.1	37.5	2.32
Aberdeen .....	46.1	36.3	40.3	38.5	3.16
Leith .....	48.2	36.7	41.2	39.6	2.11
Shields .....	47.1	38.1	41.8	40.2	2.63
York .....	47.7	36.1	40.3	39.0	2.21
Loughborough .....	48.0	36.4	40.2	38.9	2.30
Ardrossan .....	47.7	38.9	42.6	40.8	3.92
Donaghadee.....	48.2	39.2	42.9	41.7	3.13
Holyhead .....	49.7	42.8	45.5	43.8	3.71
Liverpool .....	47.7	39.6	42.1	40.4	2.87
Parsonstown .....	49.1	36.9	41.7	40.0	2.84
Valencia .....	52.4	42.7	47.2	45.2	5.50
Roche's Point .....	51.1	41.8	45.9	44.3	4.56
Pembroke .....	50.2	43.7	46.7	44.7	3.96
Scilly .....	52.5	46.7	50.0	48.0	3.76
Jersey .....	51.9	44.2	47.5	45.6	4.24
Hurst Castle .....	50.5	40.3	44.6	43.6	2.98
Dover .....	49.1	40.7	44.0	42.4	3.56
LONDON .....	49.6	37.9	42.0	40.5	2.14
Oxford .....	48.6	37.6	41.0	39.7	2.30
Cambridge .....	48.8	35.7	40.3	39.5	2.02
Yarmouth .....	47.5	39.1	42.9	41.8	3.15

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





# GENERAL SITUATION AT 8 A.M.

## PRESSURE

*Highest*, 30.0 in: to 30.2 in: over the Spanish Peninsula, 29.9 in: and more over the Baltic and Gulf of Bothnia.  
*Lowest*, 29.5 in: and less, off our extreme northern coast, and 29.9 in: and less, over Central France.  
*Gradients* were moderate to slight—very variable in the south.  
*Barometer* was falling in the west and north and over France, rising over England the Bay of Biscay and Spain.

## TEMPERATURE

*Highest*, 56° at Biarritz, 53° at Rochefort, 52° at Valencia, 51° at Seilly and Brest.  
*Lowest*, 31° at Loughborough, 34° at Oxford, Cambridge and in London, 35° at Dungeness, 36° at York, and 37° at Haparanda.  
*It had fallen rapidly over England, where sharp frost occurred on the grass early this morning.*

## WIND

*Moderate* from SW. and S. at our western and northwestern stations, very light and variable over England.  
*N.W.*, strong to a gale, over the Bay of Biscay, light from SW over Germany.

## WEATHER

*Dull and showery*, over Ireland and the western parts of Great Britain.  
*Fair but foggy*, over England and the Channel, *dull and very rainy*, over France and the Bay of Biscay.  
*Solar and lunar halos* were seen in many places yesterday.

## SEA

*High at Biarritz*, rough at Lisbon, moderate on our west and northwest coast, slight or smooth elsewhere.

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The depression off our extreme western coast and over France does not seem likely to cause much wind on any part of our coast and it is probable that the weather will remain fine, but foggy, over the south and east of England, though further falls of rain are likely both in the western and northern parts of the British Isles and over France.

## FORECASTS

For the 24 hours ending at NOON on 6<sup>TH</sup> Nov<sup>R</sup> 1889.

### DISTRICTS.

### FORECASTS.

### DISTRICTS.

### FORECASTS

0 { SCOTLAND  
NORTH

SW<sup>W</sup> and S<sup>W</sup> breezes, fresh; showery.

1 { SCOTLAND  
EAST

{ SW<sup>W</sup> breezes, light or moderate;  
fair as a whole.

2 { ENGLAND  
N.E.

Same as N° 5

3 { ENGLAND  
EAST

4 { MIDLAND  
COUNTIES

SW<sup>W</sup> breezes, light. Local showers, cold and foggy at night.

5 { ENGLAND  
SOUTH

Varying airs; fair but foggy, cold at night.

6 { SCOTLAND  
WEST

Same as N° 0

7 { ENGLAND  
N.W.

8 { ENGLAND  
S.W.

SW<sup>W</sup> breezes, moderate; fair.


9 { IRELAND  
NORTH


Same as N° 0

10 { IRELAND  
SOUTH

### WARNINGS

NONE ISSUED.

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

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



# YESTERDAY'S 2 P.M. REPORTS.

Bar:								Ther:		Wind		Wea:	Sea:	Bar:								Ther:		Wind		Wea:	Sea:																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
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Skudesnaes ...	29.65	49	46	SE	4	0	4	Holyhead ...	...	29.85	48	45	W	3	bc	3	Valencia ...	...	29.91	52	49	SW	3	bc	3	Scilly ...	...	29.89	51	48	N	2	0	4	Jersey ...	...	29.88	54	51	SW	3	0	3	Dungeness ...	...	29.82	56	53	W	3	bc	3	London ...	...	29.83	54	49	W	1	0	4	Yarmouth ...	...	29.75	51	49	W	3	c	2	Rochefort ...	...	30.02	61	59	SW	3	c	2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
Sumburgh Head ...	29.68	45	39	Z	0	c	2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							

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

The reports for yesterday morning showed that pressure was highest, 30.4 in: and upwards, in a large anticyclone lying over Northern and Central Russia, but high, 30.2 in: and upwards, in another system lying over the southern parts of the Iberian Peninsula. The lowest readings, 29.6 in: and less, were found in a shallow depression lying off the coast of Norway, whence a trough of low readings, 29.7 in: and less, extended southwards over the North Sea and Holland. Light or moderate breezes from W. or NW. were reported over the greater part of the United Kingdom, and light SW. breezes in France and the north of Spain. Over Northern and Central Europe, however, the wind was S. or SE., and over Italy, the Mediterranean and the south of Spain NE. or N., while in Algeria it was chiefly S. The weather was fair in many parts of our Islands, as well as in Italy, Algeria, and the south of France, but dull elsewhere, with fog in many places and rain at some of the Russian stations, as well as in Western Germany, and the east of France. Temperatures had fallen several degrees in the west and extreme north of our Islands, as well as over Italy, Austria, and the greater part of Russia, but risen elsewhere; readings ranged from 55° and upwards over the Mediterranean, Algeria, the south of Italy and the coast of the Iberian Peninsula to 30° or less over Northern and Central Russia. The highest individual readings were 64° at Biskia, 62° at Algiers, 59° at Sanjuana, Casenna, and Palma, 58° at Barcelona, Cagliari, Palermo and Laferla, and 57° at Constantinople; the lowest were 18° at Archangel, 23° at Moscow, 30° at Nakhanda, Uleaborg and Kuopio, 34° at Helsingfors, and 35° at St. Petersburg.

In the course of the day the barometer fell a little on our western coasts and the wind in Ireland backed to the SW. with showers in the extreme west. Sharp frost was experienced over England at night.

### EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

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

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

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

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



# DAILY WEATHER REPORT.

for WEDNESDAY 6<sup>TH</sup> NOV<sup>R</sup>

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 29° F. and Sea Level.	Temp. in Shade.	WIND.			Weather.	BAROMETER.		SHADE TEMP.			WIND.			Sea. (0 to 2.)	Weather.	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 ...	29.07	SE	2	0		29.91	-0.06	36	36	-1	SE	2	0	•		39	30	—
	Hernösand ...	29.92	SE	4	7		29.65	-0.34	44	43	+3	SE	4	0	•		46	37	0.55
	Stockholm ...	29.81	SE	2	0		29.83	-0.16	43	41	+1	SE	2	0	•		48	37	0.08
	Wisby ...	29.87	SE	4	6		29.95	+0.04	45	42	+1	NW	6	0	•		48	41	0.08
	Bodö ...	29.74	E	2	C		29.62	-0.13	44	39	+4	E	4	0	2		48	36	—
	Christiansund	29.64	W	4	C		29.59	-0.01	42	38	-3	SEW	5	C	4		48	39	—
	Skudesnaes ...	29.81	WSEW	4	C		29.92	+0.27	45	42	0	WNW	4	0	4		46	43	0.24
	Christiania Fjord (Fæder)	29.69	WNW	2	0		29.79	+0.06	48	46	+2	SW	5	0	3		47	43	0.08
	Skagen (The Scaw)	29.80	W	3	C		29.92	+0.26	44	43	-2	SW	4	C	4		48	41	0.04
	Fanö ...	29.97	WSEW	2	6		30.09	+0.40	44	43	-3	W	3	C	•		50	39	0.04
BRITISH ISLANDS.	Sumburgh Head	29.58	SW	3	0		29.80	+0.35	45	42	+1	W	3	7	4		49	40	0.12
	Stornoway ...	29.76	W	3	6		29.96	+0.43	46	46	+1	SW	4	0	4		51	38	0.02
	Wick ...	29.73	NW	2	0		29.97	+0.40	43	41	0	NW	3	6	1		49	37	0.03
	Nairn ...	29.73	W	1	0		30.04	+0.42	41	39	+4	SW	1	6	1		51	35	0.02
	Aberdeen ...	29.79	SWW	2	C		30.06	+0.36	38	36	0	SW	2	6	2		46	35	—
	Leith ...	29.84	W	2	C		30.12	+0.41	45	42	+2	W	1	C	•		52	41	—
	Shields ...	29.88	SWW	1	6		30.17	+0.38	44	42	+7	WSEW	1	C	2		46	36	0.01
	Spurn Head ...	29.94	SW	3	6		30.19	+0.35	47	45	+5	WSEW	3	0	3		49	40	—
	York ...	29.92	SE	1	0		30.20	+0.34	45	44	+9	NW	1	0	•		49	35	—
	Loughborough	29.97	SE	1	0		30.26	+0.36	42	41	+11	E	1	0	•		52	31	—
GERMANY.	Ardrossan ...	29.85	WSEW	3	0		30.15	+0.46	49	46	+1	W	3	C	2		50	46	—
	Malin Head ...	29.86	NW	5	0		30.14	+0.32	47	45	+2	SW	4	0	2		51	43	0.02
	Mullaghmore ...	29.92	WNW	5	C		30.20	+0.57	47	44	+1	SW	2	0	3		52	45	0.03
	Belmullet ...	29.98	NW	1	0		30.20	+0.53	50	50	+2	SW	2	0	•		53	43	0.03
	Donaghadee ...	29.88	WSEW	3	6		30.23	+0.50	43	41	0	WSEW	3	C	1		53	42	—
	Barrow-in-Furness	29.88	SE	2	C		30.17	+0.42	48	47	+1	NW	3	6	•		49	46	0.04
	Liverpool (Bidston)	29.94	SWW	1	0		30.23	+0.39	48	47	+5	W	1	0	2		49	41	0.10
	Holyhead ...	29.92	SWW	1	6		30.26	+0.49	49	46	+2	NW	3	C	2		51	47	0.16
	Parsonstown ...	29.95	SE	2	C		30.29	+0.57	36	36	-9	SE	2	0	•		52	36	0.01
	Valencia ...	30.05	NW	3	6		30.33	+0.60	47	46	-5	SE	1	0	2		53	40	0.04
FRANCE AND NETHERLANDS.	Roche's Point...	29.94	WNW	5	C		30.31	+0.54	43	41	-7	NW	1	C	3		54	41	0.10
	Pembroke (St. Ann's Hd.)	29.93	WNW	2	6		30.29	+0.46	51	50	+1	N	2	C	3		51	47	0.12
	Scilly ...	29.90	WNW	5	C		30.28	+0.38	53	52	+2	N	4	0	4		53	49	0.17
	Prawle Point...	29.96	SE	2	0		30.31	+0.36	49	48	+2	WNW	1	6	1		51	44	0.04
	Jersey (St. Aubin's)	29.99	W	3	C		30.30	+0.35	48	47	+2	NW	1	6	3		54	45	—
	Hurst Castle ...	29.98	SE	1	6		30.31	+0.36	42	40	0	NW	1	6	1		52	40	—
	Dungeness ...	29.93	WNW	2	0		30.25	+0.38	37	36	+2	WNW	2	•	1		51	32	—
	London ...	29.99	NW	1	6		30.28	+0.36	43	41	+9	W	1	0	•		49	34	—
	Oxford ...	30.04	SE	2	6		30.30	+0.30	42	41	+8	SE	1	0	•		49	34	—
	Cambridge ...	30.04	SE	2	0		30.29	+0.37	43	42	+9	SE	2	0	•		51	31	—
PENINSULA.	Yarmouth ...	29.96	SE	2	0		30.23	+0.36	40	39	+3	W	2	6	2		47	30	—
	Cuxhaven ...	29.90	WNW	1	6		30.16	+0.35	42	42	-2	SW	1	6	•		49	41	—
	Berlin ...	29.99	SE	2	0		30.16	+0.22	40	40	-5	WNW	2	6	•		52	39	—
	Wiesbaden ...	•	•	•	•		30.12	?	50	48	+5	SE	2	0	•		50	?	0.08
	Munich ...	29.97	SE	3	C		30.11	+0.08	38	37	+2	E	3	7	•		52	34	0.12
	The Helder ...	30.00	NW	1	6		30.21	+0.39	45	43	-3	WSEW	1	6	1		50	41	0.04
	Brussels (9 a.m.)	•	•	•	•		30.26	+0.35	43	43	-4	N	1	6	•		51	39	—
	Cape Gris Nez	?	NE	1	0		?	?	46	42	+1	WSEW	2	6	•		52	43	—
	Paris ...	29.97	N	1	0		30.23	+0.33	38	37	-9	WNW	2	6	•		49	37	0.12
	Brest ...	?	WSEW	1	7		?	?	51	50	0	NE	2	0	2		53	45	0.20
GERMANY.	Lorient ...	30.01	SW	1	0		30.29	?	48	45	?	E	2	6	5		54	45	0.04
	Rochefort ...	30.11	NW	6	6		30.25	+0.36	45	45	-8	ENE	3	6	1		53	39	—
	Belfort ...	29.89	SW	1	7		30.08	+0.15	?	?	?	E	1	C	•		54	43	?
	Lyons ...	•	•	•	•		•	•	•	•	•	•	•	•	•		•	•	•
	Nice ...	29.99	NE	5	7		29.99	-0.09	50	48	0	ENE	4	C	3		52	46	1.58
	Perpignan ...	30.01	NW	4	0		30.11	+0.18	51	46	0	NW	4	0	•		53	51	—
	Biarritz ...	30.13	NW	5	7		30.14	+0.17	50	50	-6	SE	2	0	5		53	48	2.05
	Corunna ...	30.28	•	6	6		30.32	+0.09	53	51	-2	N	4	6	?		51	52	—
	Lisbon ...	•	•	•	•		•	•	•	•	•	•	•	•	•		•	•	•
	•	•	•	•	•		•	•	•	•	•	•	•	•	•		•	•	•

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

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



# WEATHER CHARTS

for 8 a.m. on Wednesday 6<sup>th</sup> November

1889.

## BAROMETER, WIND AND SEA.

### EXPLANATION OF MAP.

**BAROMETER**—Isobars are drawn for each tenth of an inch.

Changes since previous morning are stated in words.

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

→ = forces above 10; → = forces 8 to 10;

→ = forces 5 to 7; → = forces 1 to 4.

⊙ = dead calm.

**SEA DISTURBANCE**—Where considerable, is shown thus:

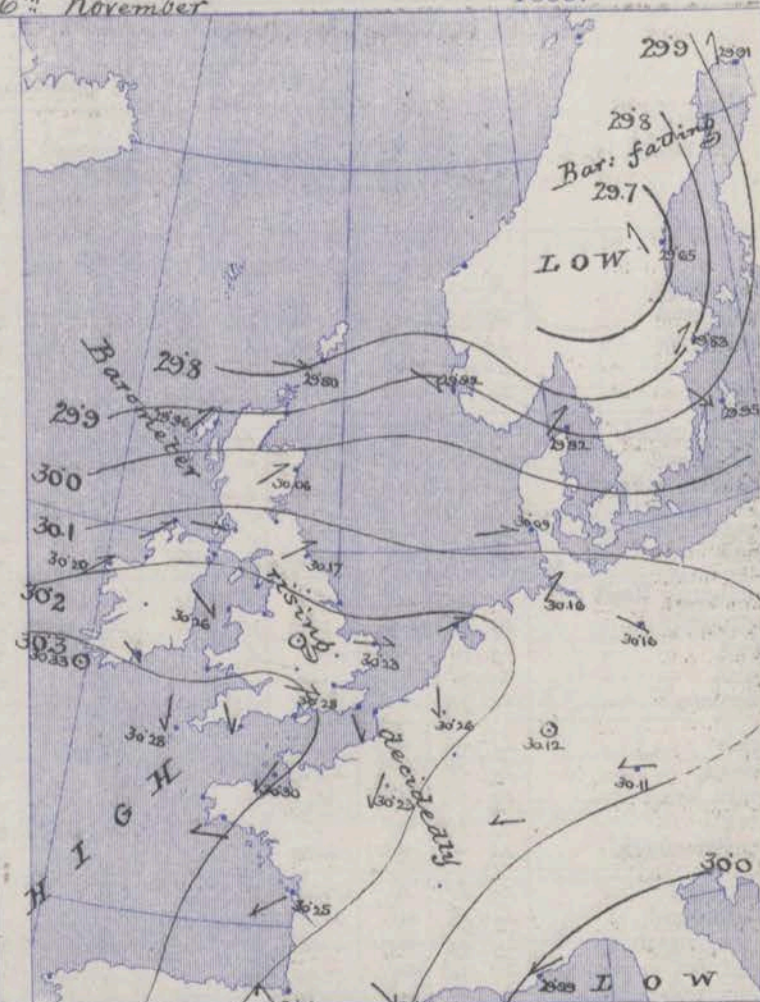
— = Rough. — = High.

## MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of November.

During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS.
	in.
Sumburgh Head .....	29.687
Stornoway .....	29.707
Wick .....	29.726
Nairn .....	29.743
Aberdeen .....	29.756
Leith .....	29.793
Shields .....	29.815
York .....	29.844
Loughborough .....	29.876
Ardrossan .....	29.795
Donaghadee .....	29.811
Holyhead .....	29.835
Liverpool .....	29.852
Parsonstown .....	29.848
Valencia .....	29.864
Roche's Point .....	29.864
Pembroke .....	29.862
Silly .....	29.898
Jersey .....	29.923
Hurst Castle .....	29.898
Dover .....	29.893
LONDON .....	29.897
Oxford .....	29.893
Cambridge .....	29.885
Yarmouth .....	29.863



## 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.

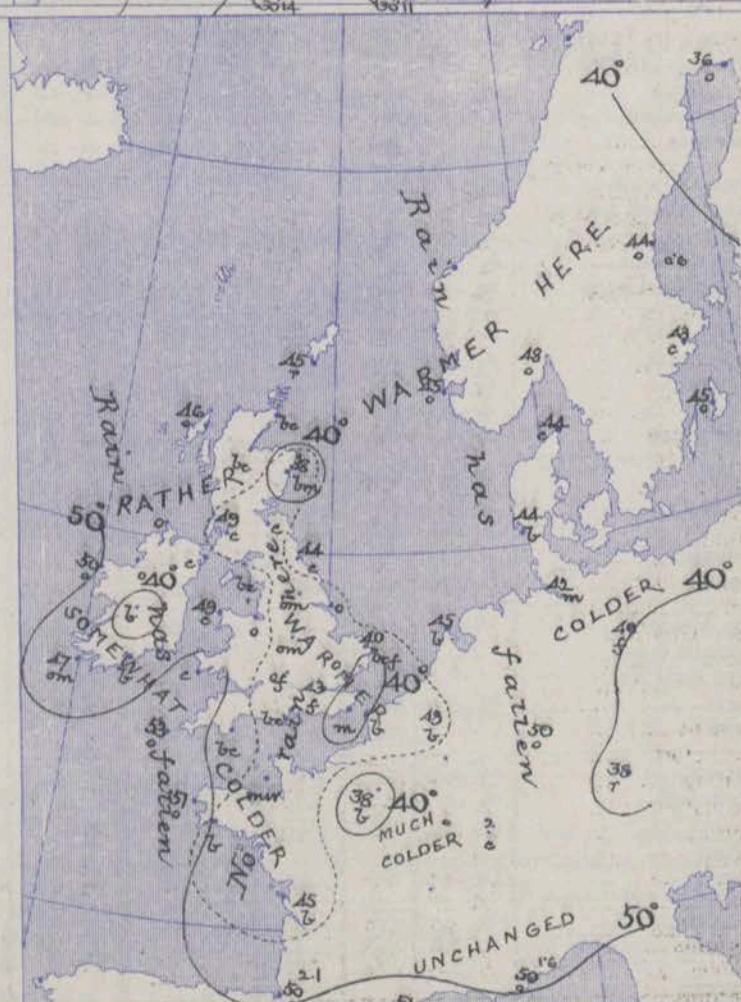
**RAINFALL**—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

### MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of November.)

STATIONS.	TEMPERATURE.				RAINFALL. (Inches.)
	Daily Max.	Daily Min.	at 8 a.m.		
			Dry.	Wet.	
Sumburgh Head.....	45.3	37.4	41.5	39.8	4.24
Stornoway .....	45.7	36.7	41.0	39.9	4.60
Wick .....	45.7	35.7	40.9	39.3	2.97
Nairn .....	44.7	35.5	39.1	37.5	2.32
Aberdeen .....	46.1	36.3	40.3	38.5	3.16
Leith .....	48.2	36.7	41.2	39.6	2.11
Shields .....	47.1	38.1	41.8	40.2	2.63
York .....	47.7	36.1	40.3	39.0	2.21
Loughborough .....	48.0	36.4	40.2	38.9	2.30
Ardrossan .....	47.7	38.9	42.6	40.8	3.92
Donaghadee .....	48.2	39.2	42.9	41.7	3.13
Holyhead.....	49.7	42.8	45.5	43.8	3.71
Liverpool .....	47.7	39.5	42.1	40.4	2.87
Parsonstown .....	49.1	36.9	41.7	40.0	2.84
Valencia .....	52.4	42.7	47.2	45.2	5.60
Roche's Point.....	51.1	41.8	45.9	44.3	4.56
Pembroke.....	50.2	43.7	46.7	44.7	3.96
Silly .....	52.5	46.7	50.0	48.0	3.76
Jersey .....	51.9	44.2	47.5	45.6	4.24
Hurst Castle .....	50.5	40.3	44.6	43.6	2.98
Dover .....	49.1	40.7	44.0	42.4	3.56
LONDON .....	49.6	37.9	42.0	40.5	2.14
Oxford .....	48.6	37.6	41.0	39.7	2.30
Cambridge .....	48.8	35.7	40.3	39.5	2.02
Yarmouth .....	47.5	39.1	42.9	41.8	3.15

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, 30.20 in. to 30.35 in., in a high pressure area lying over Ireland, England, the northwestern half of France and the Bay of Biscay.  
 Lowest, 29.6 in. and less, in a depression lying over Norway.  
 Gradients slight except in the north. Barometer rising except over Scandinavia.

### TEMPERATURE

Highest, 53° at Lillow and Seilly, 51° at Harpignas and Ruest, 50° at Belmullet, Biarritz and Nice.  
 Lowest, 36° at Haparanda and Banarstom, 38° at Paris, Munich and Aberdeen, 40° at Berlin and Falmouth.  
 Frost occurred on the grass in London during the earlier part of last night.

### WIND

Light to moderate from SW. at our northwestern and extreme northern stations. Fresh SW. to SE. over Scandinavia, and light from W. in the east; nearly calm over England, light N. in the Channel, and E. over the Bay of Biscay.

### WEATHER

Bull over many parts of the Continent, with rain at Munich; fine and bright at Paris, fair over our Islands generally, but with fog or haze in many places. A little rain fell yesterday at the western and northern stations.

### SEA

Rather rough over the Bay of Biscay, moderate in the far north, slight or smooth elsewhere.

### PROBABLE CHANGES IN SYSTEM NOW PREVALENT

There is no indication of any important change beyond the extending northwards of the high pressure area in the southwest.

## FORECASTS

For the 24 hours ending at NOON on 7<sup>th</sup> Nov<sup>r</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>1</sup>/<sub>2</sub> and SW<sup>1</sup>/<sub>2</sub> winds, moderate; some showers  
 { W<sup>1</sup>/<sub>2</sub> airs; fine, fogs locally.  
 Same as N°5  
 Same as N°1 and 2.  
 Varying NW<sup>1</sup>/<sub>2</sub> airs; dry, foggy.

### DISTRICTS.

### FORECASTS

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

Same as N°0.  
 W<sup>1</sup>/<sub>2</sub> breezes, light; fair.  
 Same as N°5  
 Same as N°7.  
 Varying airs; fair, local fogs.

### WARNINGS

NONE ISSUED.

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



# YESTERDAY'S 2 P.M. REPORTS.

	Bar:	Ther:		Wind		Wea:	Sea		Bar:	Ther:		Wind		Wea:	Sea:
		D	W	D	F					D	W	D	F		
Skudesnaes ...	29.75	46	40	WNW	4	o	3	Holyhead ...	29.81	50	49	SSW	3	cf	3
Sumburgh Head ...	29.57	47	44	SSW	2	C	3	Valencia ...	29.92	55	52	NW	4	cmg	4
Stornoway ...	29.59	51	49	SW	4	C	4	Scilly ...	29.88	52	52	SW	4	od	5
Aberdeen ...	29.71	45	42	SSW	2	cm	2	Jersey ...	29.96	54	?	WNW	3	C	3
Shields ...	29.80	46	44	SSW	1	om	2	Dungeness ...	29.93	49	44	WNW	2	bc	1
Ardrossan ...	29.77	50	48	WSW	3	o	3	London ...	29.94	49	45	NW	2	b	4
Malin Head ...	29.73	50	47	SW	3	of	3	Yarmouth ...	29.91	47	44	WNW	1	b	2
Mullaghmore ...	29.78	51	49	SW	2	cm	2	Rochefort ...	30.01	55	52	WNW	6	o	3
Belmullet ...	29.88	49	49	WNW	3	of	*								

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

The report for yesterday morning showed that pressure was still highest, 30.4 ins. and upwards, in a large anticyclone lying over central Russia, but high, 30.2 ins. and upwards in another area lying to the southwestward of the Iberian Peninsula. The lowest readings, 29.5 ins. and less, were found in an area lying to the northwestward and northward of Scotland, but a large shallow depression, with readings below 29.9 ins. was reported over France. The wind was light to fresh from the S<sup>W</sup> (SE to SW) over the whole of Northern Europe, including the northern parts of the United Kingdom, but in the south of our Islands it was SW<sup>1</sup> or W<sup>1</sup>. Over the Bay of Biscay strong NW<sup>1</sup> breezes were reported, while in Italy and the south of France the wind varied between NE. and E; in Algeria S<sup>1</sup> to SE<sup>1</sup> breezes were general. The weather was fine in the north and east of our Islands, as well as in Italy and Algeria, but cloudy or overcast elsewhere, with fog in many parts of Austria and Russia, and rain over France, the north of Spain, and the western parts of the United Kingdom. Temperature had fallen a few degrees over Great Britain, the west of Norway and the north of France, but risen elsewhere; readings ranged from between 55° and 65° over the Mediterranean, the Adriatic, and the south of Italy to a little below the freezing point over central England and the north of Russia. The highest individual readings were 66° at Malta, 64° at Rimini and Algiers, 61° at Constantinople, 60° at Barcelona, 59° at Sanguniaris and Bagdad and 57° at Arma and Naples; the lowest were 29° at Archangel, 31° at Loughborough, 34° at Ulmberg, Rega, Oxford, Cambridge and in London, 35° at St. Petersburg and Dungeness, and 36° at York and Munich.

In the course of the day the low-pressure system to the northward of our Islands and the shallow depression over France both travelled northeastwards, and the barometer rose in all parts of Western Europe. In the west of our Islands the wind veered to the NW<sup>1</sup> with improving 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 *Thursday, 7<sup>th</sup> November, 1889.*  
 Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.

STATIONS.		YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
		Barometer at 32° F. and Sea Level.	Temp. in Shade.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Sea. (0 to 9.)	SHADE TEMP.		Amount of Rainfall.		
				Dir.	Force. (0 to 12.)		Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Dir.	Force. (0 to 12.)		Weather.	Max.		Min.	
SCANDINAVIA.	Haparanda ...	29.65	35	SE	2	r	29.69	- .22	37	37	+ 1	E	2	O	*	39	32	0.16	
	Hernösand ...	29.63	37	WSW	2	c	29.77	+ .12	33	31	- 11	SE	0	b	*	43	?	-	
	Stockholm ...	29.84	41	SW	2	b	29.75	-.08	39	38	- 1	W	4	O	*	46	39	0.08	
	Wisby ...	29.95	46	W	6	b	29.71	-.24	43	42	- 2	W	6	O	*	46	41	0.16	
	Bodö ...	29.60	40	E	1	bc	29.77	+ .15	35	33	- 2	E	1	b	O	45	34	-	
	Christiansund	29.67	38	WNW	5	O	29.88	+ .21	41	38	- 3	SW	4	c	5	41	36	0.59	
	Skudesnaes ...	29.93	42	WNW	7	r	29.98	+ .05	47	45	+ 2	SE	4	r	3	48	45	0.28	
	Christiania Fjord (Fæder)	29.90	46	SW	6	c	30.03	+ .13	44	40	- 4	WNW	2	c	4	48	?	-	
	Skagen (The Scaw)	29.90	46	WNW	6	b	29.99	+ .09	48	44	+ 4	WNW	4	O	3	48	?	-	
	Fanö ...	30.15	46	W	4	c	30.15	+ .00	48	47	+ 1	W	4	r	*	50	?	0.04	
BRITISH ISLANDS.	Sumburgh Head	29.89	47	WNW	3	c	29.81	+ .08	51	51	+ 0	W	3	r	3	52	43	0.43	
	Stornoway ...	29.98	52	SW	3	O	29.94	-.04	54	54	+ 0	SW	5	r	4	54	45	0.06	
	Wick ...	30.00	30	W	0	bc	29.97	-.03	56	54	+ 13	W	1	bc	1	56	43	0.05	
	Nairn ...	30.02	52	W	4	bc	30.01	-.01	56	53	+ 15	W	4	bc	2	57	40	-	
	Aberdeen ...	30.08	54	SSW	2	cm	30.04	-.04	59	54	+ 21	SW	2	bc	2	59	38	-	
	Leith ...	30.17	49	W	2	bc	30.17	+ .00	56	55	+ 11	WSW	4	c	*	57	44	-	
	Shields ...	30.23	49	WSW	1	cm	30.24	+ .01	56	53	+ 12	W	2	c	2	56	42	-	
	Spurn Head ...	30.30	47	WSW	2	b	30.32	+ .02	46	45	- 1	SW	3	c	3	50	42	-	
	York ...	30.31	46	WSW	1	b	30.32	+ .01	58	52	+ 8	W	2	bc	*	53	43	-	
	Loughborough	30.37	46	WSW	1	b	30.42	+ .05	42	41	0	W	1	cmw	*	55	40	-	
GERMANY.	Ardrossan ...	30.20	50	SW	4	2	30.23	+ .03	52	51	+ 3	SSW	4	p	3	52	43	0.06	
	Malin Head ...	30.18	52	SSW	3	or	30.19	+ .01	54	53	+ 7	SSW	4	O	2	55	47	0.04	
	Mullaghmore ...	30.23	54	SW	3	c	30.27	+ .04	54	53	+ 7	SSW	5	ad	4	56	46	0.04	
	Belmullet ...	30.27	52	SW	2	Om	30.29	+ .02	53	53	+ 3	WSW	3	om	*	53	50	0.11	
	Donaghadee ...	30.26	52	SW	4	r	30.30	+ .04	53	52	+ 10	WSW	3	O	2	54	42	-	
	Barrow-in-Furness	30.29	49	NW	2	bc	30.35	+ .06	53	52	+ 5	SW	3	O	*	53	47	0.08	
	Liverpool (Bidston)	30.36	45	SW	2	b	30.41	+ .05	50	49	+ 2	SW	1	c	2	53	35	-	
	Holyhead ...	30.34	51	SW	4	c	30.40	+ .06	51	51	+ 2	SSW	3	gm	2	55	48	-	
	Parsonstown ...	30.33	52	W	0	O	30.39	+ .06	52	51	+ 16	W	0	O	*	53	36	0.01	
	Valencia ...	30.40	54	NW	2	Om	30.45	+ .05	55	54	+ 8	SW	3	O	4	55	46	0.05	
FRANCE AND NETHERLANDS.	Roche's Point...	30.41	52	WSW	2	c	30.46	+ .05	53	52	+ 10	WSW	3	cf	4	53	43	0.01	
	Pembroke (St. Ann's Hd.)	30.43	50	WNW	3	bc	30.50	+ .07	52	52	+ 1	WSW	4	cq	4	54	30	0.02	
	Scilly ...	30.41	51	WNW	2	b	30.54	+ .13	53	53	0	WSW	2	f	4	54	49	0.02	
	Prawle Point ...	30.47	50	WNW	3	bc	30.54	+ .07	49	49	0	WNW	3	bcm	2	56	44	-	
	Jersey (St. Aubin's)	30.43	53	WSW	1	bcm	30.56	+ .13	48	46	0	WNW	2	bcmw	2	57	44	-	
	Hurst Castle ...	30.42	53	WSW	1	c	30.54	+ .12	49	49	+ 7	WNW	1	ow	1	56	40	0.01	
	Dungeness ...	30.39	51	W	1	bc	30.48	+ .09	46	45	+ 9	WNW	2	bc	1	54	37	-	
	London ...	30.41	50	SW	1	bc	30.48	+ .07	42	41	- 1	SW	1	cm	*	53	40	-	
	Oxford ...	30.43	45	SW	1	b	30.49	+ .06	42	42	0	WSW	2	b	*	51	39	-	
	Cambridge ...	30.40	41	W	0	b	30.46	+ .06	44	43	+ 1	SW	1	b	*	51	38	-	
PENIN SULA.	Yarmouth ...	30.34	46	W	2	b	30.38	+ .04	43	42	+ 3	W	3	bcm	2	48	38	-	
	Cuxhaven ...	30.26	47	SW	2	m	30.27	+ .01	47	46	+ 3	WSW	3	f	*	49	?	-	
	Berlin ...	30.33	46	W	2	b	30.34	+ .01	43	42	+ 3	WNW	5	O	*	46	39	-	
	Wiesbaden ...	*	*	*	*	*	30.48	+ .15	42	41	- 8	W	1	O	*	?	?	-	
	Munich ...	30.34	42	W	0	O	30.49	+ .15	40	40	+ 2	W	1	f	*	43	37	0.08	
	The Helder ...	30.33	50	WSW	1	c	30.34	+ .01	50	48	+ 5	WSW	3	c	3	50	45	-	
	Brussels (9 a.m.)	*	*	*	*	*	30.50	+ .16	43	41	0	SSW	4	r	*	52	41	-	
	Cape Gris Nez	?	49	N	1	bc	?	?	51	48	+ 5	W	3	b	3	54	45	-	
	Paris ...	30.42	43	N	2	b	30.55	+ .13	31	31	- 7	WNW	1	m	*	53	31	-	
	Brest ...	?	54	W	0	bc	?	?	51	50	0	W	0	b	2	57	46	0.04	
FRANCE AND NETHERLANDS.	Lorient ...	30.43	53	W	1	b	30.57	+ .14	47	46	- 1	ENE	1	b	4	57	45	-	
	Rochefort ...	30.45	50	WNW	3	b	30.38	-.07	44	43	- 1	ENE	4	b	2	57	39	-	
	Belfort ...	30.22	48	E	1	c	30.41	+ .19	48	41	?	E	1	bc	*	53	43	-	
	Lyons ...	30.28	49	N	3	O	30.39	+ .11	47	45	- 1	WNW	4	O	*	52	47	-	
	Nice ...	30.09	55	E	2	b	30.19	+ .10	52	49	+ 2	ENE	2	r	3	61	48	0.04	
	Perpignan ...	30.19	55	NW	4	O	30.31	+ .12	52	46	+ 1	NW	5	O	*	61	51	-	
	Biarritz ...	30.33	58	NW	4	b	30.50	+ .17	42	41	- 8	E	2	O	2	59	41	-	
	Corunna ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	-	
	Lisbon ...	30.30	55	N	5	b	30.32	-.02	52	47	- 1	WNW	5	b	5	63	52	-	

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

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



# WEATHER CHARTS

for 8 a.m. on

Thursday, 7<sup>th</sup> November,

1889.

## BAROMETER, WIND AND SEA.

### EXPLANATION OF MAP.

**BAROMETER**—Isobars are drawn for each tenth of an inch.

Changes since previous morning are stated in words.

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

→ = forces above 10; → = forces 8 to 10;

→ = forces 5 to 7; → = forces 1 to 4.

○ = dead calm.

**SEA DISTURBANCE**—Where considerable, is shown thus:

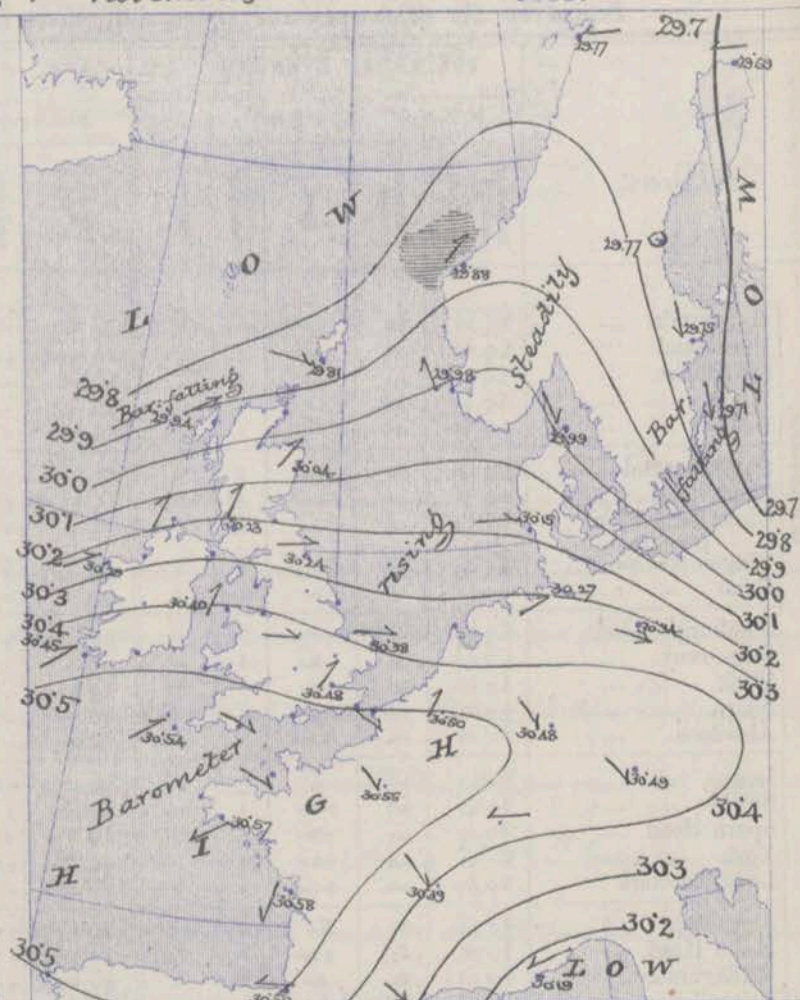
— Rough. — High.

## MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of November.

During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS
Sumburgh Head .....	29.687
Stornoway .....	29.707
Wick .....	29.726
Nairn .....	29.743
Aberdeen .....	29.756
Leith .....	29.793
Shields .....	29.815
York .....	29.844
Loughborough .....	29.876
Ardrossan .....	29.795
Donaghadee .....	29.811
Holyhead .....	29.835
Liverpool .....	29.852
Parsonstown .....	29.848
Valencia .....	29.864
Roche's Point .....	29.864
Pembroke .....	29.862
Sailly .....	29.898
Jersey .....	29.923
Hurst Castle .....	29.898
Dover .....	29.893
LONDON .....	29.897
Oxford .....	29.893
Cambridge .....	29.885
Yarmouth .....	29.863



## 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.

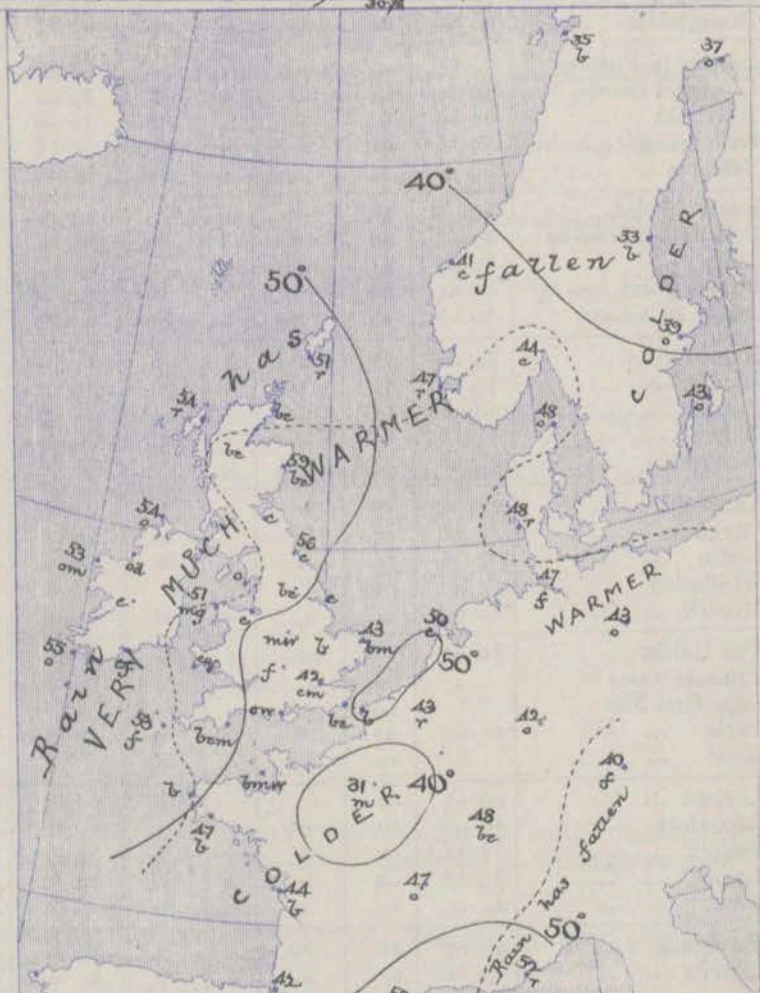
**RAINFALL**—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

### MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of November.)

STATIONS.	TEMPERATURE.				RAINFALL. (Inches.)
	Daily Max.	Daily Min.	at 8 a.m.		
			Dry.	Wet.	
Sumburgh Head.....	45.3	37.4	41.5	39.8	4.24
Stornoway .....	45.7	36.7	41.0	39.9	4.60
Wick .....	45.7	35.7	40.9	39.3	2.97
Nairn .....	44.7	35.5	39.1	37.5	2.32
Aberdeen .....	46.1	36.3	40.3	38.5	3.16
Leith .....	48.2	36.7	41.2	39.6	2.11
Shields .....	47.1	38.1	41.8	40.2	2.63
York .....	47.7	36.1	40.3	39.0	2.21
Loughborough .....	48.0	36.4	40.2	38.9	2.30
Ardrossan .....	47.7	38.9	42.6	40.8	3.92
Donaghadee.....	48.2	39.2	42.9	41.7	3.13
Holyhead .....	49.7	42.8	45.5	43.8	3.71
Liverpool .....	47.7	39.5	42.1	40.4	2.87
Parsonstown .....	49.1	36.9	41.7	40.0	2.84
Valencia .....	52.4	42.7	47.2	45.2	5.50
Roche's Point .....	51.1	41.8	45.9	44.3	4.56
Pembroke .....	50.2	43.7	46.7	44.7	3.96
Sailly .....	52.5	46.7	50.0	48.0	3.76
Jersey .....	51.9	44.2	47.5	45.6	4.24
Hurst Castle .....	50.5	40.3	44.6	43.6	2.98
Dover .....	49.1	40.7	44.0	42.4	3.56
LONDON .....	49.6	37.9	42.0	40.5	2.14
Oxford .....	48.6	37.6	41.0	39.7	2.30
Cambridge .....	48.8	35.7	40.3	39.5	2.02
Yarmouth .....	47.5	39.1	42.9	41.8	3.15

NOTE.—The Temperature means are for the 15 years 1871-85, the Rainfall means are mainly those for the 20 years 1865-85.





# GENERAL SITUATION AT 8 A.M.

## PRESSURE.

Highest, 30.4 in. to nearly 30.6 in. in an anticyclone now lying over the southern part of our area.  
 Lowest, 29.8 in. and less, off our extreme northwestern coast, and 29.7 in. and less, in a depression over the Baltic.  
 Gradients moderate for SW winds in our Islands, rather steep for NW winds over the western parts of the Baltic, and North Germany.  
 Barometer inclined to fall in the extreme northwest.

## TEMPERATURE

Highest, 59° at Aberdeen, 56° at Wick, Nairn, Keith, and Shields, 54° at Stromway, Malin Hd., and Mullaghmore.  
 Lowest, 31° at Paris, 33° at Helsingfors, 35° at Rode, 37° at Haparanda, and 39° at Stockholm.  
 The Scotch readings are very high for the time of year, and the rise there since yesterday has been very sudden. Aberdeen is 28° warmer than Paris this morning.

## WIND

Moderate from the SW<sup>nd</sup> on the western and northern coasts of our Islands.  
 Very light over England — light NW<sup>th</sup> over the Channel.  
 Variable over France — Calm and light NE<sup>th</sup> over the Bay of Biscay.  
 In the south of Ireland there is a strong breeze from the NW.

## WEATHER

Fair in most places, but with local fog. On our northwestern coast, in the Shetland Isles, and at Stromness, however, rain is falling, and at Lumbagh the fall has been considerable.

## SEA

Moderate on our western coasts generally, slight or smooth elsewhere.

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The anticyclone in the southwest and south is not giving way at present; but there are some indications of the advance of a low pressure system towards our extreme northern coasts, which will probably cause unsettled weather in Scotland generally, and an increase of temperature over England.

# FORECASTS

For the 24 hours ending at NOON on

8<sup>th</sup> Nov<sup>r</sup> 1889.

## DISTRICTS.

## FORECASTS.

0	SCOTLAND NORTH	SW <sup>th</sup> breezes, fresh; dull, mild, rain at times.
1	SCOTLAND EAST	SW <sup>th</sup> or W <sup>th</sup> breezes, very mild, perhaps rain.
2	ENGLAND N.E.	
3	ENGLAND EAST	W <sup>th</sup> and SW <sup>th</sup> breezes, light; fine, mild, occasional fog.
4	MIDLAND COUNTIES	
5	ENGLAND SOUTH	



## DISTRICTS.

## FORECASTS

6	SCOTLAND WEST	Same as No. 0.
7	ENGLAND N.W.	SW <sup>th</sup> winds, freshening; cloudy, some showers.
8	ENGLAND S.W.	
9	IRELAND NORTH	S <sup>th</sup> and SW <sup>th</sup> breezes, fresh; mild, rain at times.
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:	Ther:		Wind		Wea:	Sea		Bar:	Ther:		Wind		Wea:	Sea:
		D	W	D	F					D	F				
Skudesnaes ...	29.96	46	45	WNW	4	r	3	Holyhead ...	30.33	52	48	WSW	3	b	2
Sumburgh Head ...	29.85	48	46	W	3	o	4	Valencia ...	30.86	54	50	S	3	om	3
Stornoway ...	29.98	53	52	SW	3	o	3	Scilly ...	30.38	53	51	N	2	bc	4
Aberdeen ...	30.09	47	43	SSW	2	cm	2	Jersey ...	30.39	56	51	SSW	2	b	2
Shields ...	30.21	52	47	W	2	b	2	Dungeness ...	30.83	52	47	WNW	2	bc	1
Ardrossan ...	30.20	51	50	SSW	3	o	2	London ...	30.37	53	49	2	o	of	2
Malin Head ...	30.15	50	50	S	4	o	3	Yarmouth ...	30.29	48	47	W	2	bc f	2
Mullaghmore ...	30.22	54	52	SSW	5	om	3	Rochefort ...	30.37	50	53	NNE	3	b	2
Belmullet ...	30.24	53	53	WSW	2	o	2								

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

The reports for yesterday morning showed that pressure was still highest, 30.4 in: and upwards, in a large anticyclone lying over Russia, but high, 30.3 in: and upwards, in another large system lying over the southern parts of the United Kingdom, the northwest of France, the Bay of Biscay, and the western parts of the Iberian Peninsula. The lowest readings, 29.6 in: and less, were found in a large depression lying off the coast of Norway, but small shallow disturbances, with readings below 30.0 in: were lying respectively over the Gulf of Genoa and off the southwest coast of Sardinia. The winds were moderate from the SW<sup>nd</sup> over the northern parts of our Islands and the eastern shores of the North Sea, but S<sup>4</sup> or SE<sup>4</sup> over Sweden, the Baltic Provinces, and Northern Russia. Over the south of our Islands light NW<sup>4</sup> or N<sup>4</sup> breezes were reported, and over the Bay of Biscay and Spain NE<sup>4</sup> breezes, while in the south of France the wind was E<sup>4</sup>. Over Austria, Southern Italy and Algeria variable breezes prevailed. The weather was fair over the greater part of Western and Southern Europe, but dull in the more northern, central and eastern countries. Fog prevailed over England, Germany, and some parts of Russia and rain was falling at Helsingfors, Moscow, Munich, and Trieste, as well as at Algiers and Annaba. Temperature had changed very irregularly and readings ranged from 60° and upwards over the central and southern parts of the Mediterranean to 40° or less over Poland, Northern and Central Russia, the east of Scotland, and the central parts of Ireland, France, and Spain. The highest individual readings were 66° at Malta, 65° at Cagliari, 63° at Brindisi and Laibach, 62° at Otranto and Bari, 60° at Rome and Nemours, and 59° at Sanguinaria and Algiers; the lowest were 31° at Archangel, 33° at Cassow and Hermanstadt, 34° at St Petersburg, 35° at Kuopio and Moscow, 36° at Haparanda, Uleaborg, and Saimonstons and 37° at Warsaw.

In the course of the day the anticyclone to the southwestward of our Islands spread eastwards, but no important change occurred in the winds or weather.

### EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

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

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

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

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



# DAILY WEATHER REPORT.

for *Friday, 8<sup>th</sup> November,* 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.m. 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 ...	29.67	35	SE	2	0	29.55	- .14	33	33	- .4	SE	0	0	•	39	32	-	
	Hernösand ...	29.78	32	SE	0	0	29.54	- .23	32	31	- .1	SE	0	0	•	43	30	0.04	
	Stockholm ...	29.91	36	W	2	0	29.56	- .19	38	37	- .1	W	4	0	•	48	34	0.12	
	Wisby ...	29.97	42	W	4	0	29.57	- .14	45	43	+ .2	W	8	0	•	?	39	0.16	
	Bodö ...	29.61	36	E	4	0	29.44	- .33	37	34	+ .2	E	2	0	1	?	34	-	
	Christiansund	29.61	48	W	8	0	29.59	- .29	44	41	+ .3	W	9	0	6	48	39	0.43	
	Skudesnaes ...	29.96	44	W	8	0	30.05	+ .07	48	43	+ .5	W	7	0	4	?	?	0.23	
	Christiania Fjord (Færdor)	29.85	46	E	3	0	29.83	- .02	48	40	+ .8	W	3	0	3	?	?	-	
	Skagen (The Scaw)	29.80	50	W	4	0	29.91	- .08	47	43	- .4	W	7	0	4	50	45	0.12	
	Fanö ...	30.11	50	W	4	0	30.16	+ .05	47	45	- .2	W	5	0	•	52	?	-	
BRITISH ISLANDS.	Sumburgh Head	29.92	50	W	3	0	30.05	+ .13	47	43	- .4	W	4	0	6	52	43	0.06	
	Stornoway ...	30.17	44	W	3	0	30.28	+ .11	47	46	- .1	W	3	0	3	54	43	0.02	
	Wick ...	30.12	46	W	2	0	30.27	+ .15	46	44	- .2	W	2	0	1	58	42	0.02	
	Nairn ...	30.17	51	W	4	0	30.30	+ .13	47	43	- .4	W	2	0	1	59	44	-	
	Aberdeen ...	30.18	54	W	3	0	30.34	+ .16	47	42	- .5	W	2	0	2	62	45	-	
	Leith ...	30.27	52	W	3	0	30.38	+ .11	50	48	- .2	W	2	0	•	59	49	-	
	Shields ...	30.27	57	W	3	0	30.43	+ .16	48	46	- .2	W	3	0	2	60	45	-	
	Spurn Head ...	30.33	54	W	4	0	30.43	+ .10	49	47	- .2	W	3	0	3	57	45	-	
	York ...	30.34	56	W	4	0	30.47	+ .13	46	44	- .2	W	1	0	•	58	45	-	
	Loughborough	30.41	55	W	3	0	30.49	+ .08	49	48	- .1	W	2	0	•	62	42	-	
GERMANY.	Ardrossan ...	30.33	52	W	4	0	30.43	+ .10	51	49	- .2	W	3	0	2	58	49	-	
	Malin Head ...	30.38	50	W	3	0	30.43	+ .05	49	48	- .1	W	2	0	2	55	48	0.02	
	Mullaghmore ...	30.43	50	W	3	0	30.46	+ .03	50	49	- .1	W	2	0	2	55	49	0.07	
	Belmullet ...	30.44	49	W	1	0	30.47	+ .03	52	52	- .0	W	2	0	•	53	49	0.02	
	Donaghadee ...	30.41	56	W	3	0	30.48	+ .07	47	47	- .0	W	3	0	2	58	44	0.01	
	Barrow-in-Furness	30.37	53	W	2	0	30.46	+ .09	50	49	- .1	W	1	0	•	53	49	0.03	
	Liverpool (Bidston)	30.41	55	W	3	0	30.51	+ .10	49	49	- .0	W	1	0	1	59	48	0.01	
	Holyhead ...	30.43	54	W	3	0	30.51	+ .08	51	51	- .0	W	1	0	2	55	51	0.01	
	Parsonstown ...	30.46	54	W	2	0	30.53	+ .07	50	49	- .1	W	0	0	•	57	49	0.02	
	Valencia ...	30.52	53	W	1	0	30.60	+ .08	53	53	- .0	W	1	0	1	55	51	0.25	
FRANCE AND NETHERLANDS.	Roche's Point...	30.49	54	W	3	0	30.55	+ .06	53	52	- .1	W	1	0	3	55	51	0.01	
	Pembroke (St. Ann's Hd.)	30.52	53	W	4	0	30.56	+ .04	52	51	- .1	W	1	0	2	54	51	0.02	
	Scilly ...	30.56	50	W	4	0	30.56	+ .00	53	53	- .0	W	4	0	4	55	49	0.03	
	Prawle Point ...	30.57	52	W	2	0	30.56	+ .02	52	52	+ .0	W	3	0	2	54	48	0.01	
	Jersey (St. Aubin's)	30.59	53	W	2	0	30.58	+ .02	53	52	+ .1	W	3	0	3	59	46	0.01	
	Hurst Castle ...	30.54	54	W	2	0	30.55	+ .01	53	52	+ .1	W	2	0	1	57	48	-	
	Dungeness ...	30.48	48	W	3	0	30.53	+ .05	52	51	+ .1	W	2	0	1	56	46	-	
	London ...	30.50	53	W	2	0	30.50	+ .02	53	52	+ .1	W	1	0	•	54	41	-	
	Oxford ...	30.50	52	W	3	0	30.52	+ .03	52	51	+ .1	W	1	0	•	56	42	-	
	Cambridge ...	30.45	51	W	1	0	30.47	+ .02	51	50	+ .1	W	1	0	•	60	42	-	
PENINSULA.	Yarmouth ...	30.39	53	W	2	0	30.44	+ .06	47	47	+ .0	W	2	0	2	56	41	-	
	Cuxhaven ...	30.27	47	W	5	0	30.26	- .01	49	49	+ .0	W	4	0	•	50	47	-	
	Berlin ...	30.26	48	W	3	0	30.19	- .07	51	50	+ .1	W	5	0	•	52	?	0.04	
	Wiesbaden ...	*	*	*	*	*	30.50	+ .02	40	39	- .1	W	0	0	•	46	37	-	
	Munich ...	30.55	40	NE	1	0	30.54	+ .01	39	39	- .0	W	3	0	•	46	37	-	
	The Helder ...	30.36	52	W	2	0	30.40	+ .04	51	50	+ .1	W	1	0	1	52	50	-	
	Brussels (a.m.)	*	*	*	*	*	30.49	- .01	50	50	+ .0	W	1	0	•	53	?	0.04	
	Cape Gris Nez	?	51	W	5	0	?	?	53	52	+ .1	W	3	0	3	54	45	-	
	Paris ...	30.58	?	SE	1	0	30.56	+ .01	46	46	+ .0	W	1	0	•	54	39	-	
	Brest ...	?	52	SE	0	0	?	?	52	52	+ .0	W	1	0	1	57	46	0.04	
FRANCE AND NETHERLANDS.	Lorient ...	30.60	53	W	2	0	30.61	+ .01	50	49	+ .1	W	2	0	2	59	45	-	
	Rochefort ...	30.60	52	NE	3	0	30.60	+ .02	46	44	+ .2	NE	4	0	2	59	39	-	
	Belfort ...	30.45	44	NE	1	0	30.49	+ .04	41	38	- .3	SSE	1	0	•	53	37	-	
	Lyons ...	30.50	48	W	3	0	30.52	+ .03	42	41	- .1	W	2	0	•	53	42	-	
	Nice ...	30.27	56	E	4	0	30.27	+ .00	44	46	+ .2	E	4	0	1	66	28	0.04	
	Perpignan ...	30.38	52	W	4	0	30.38	+ .00	51	45	- .6	W	2	0	•	57	50	-	
	Biarritz ...	30.53	51	NE	3	0	30.51	+ .02	53	49	+ .4	W	3	0	2	55	?	-	
	Corunna ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	-	
	Lisbon ...	30.26	59	NE	4	0	30.31	+ .05	50	44	- .6	W	5	0	2	63	48	-	

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

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



# WEATHER CHARTS

for 8 a.m. on

Friday, 8<sup>th</sup> November

1889.

## BAROMETER, WIND AND SEA.

### EXPLANATION OF MAP.

**BAROMETER**—Isobars are drawn for each tenth of an inch.

Changes since previous morning are stated in words.

**WIND**—Arrows shew the prevalent winds. They fly with the wind and

their barbs and feathers refer to force thus—

→ = forces above 10; → = forces 8 to 10;

→ = forces 5 to 7; → = forces 1 to 4.

○ = dead calm.

**SEA DISTURBANCE**—Where considerable, is shewn thus:

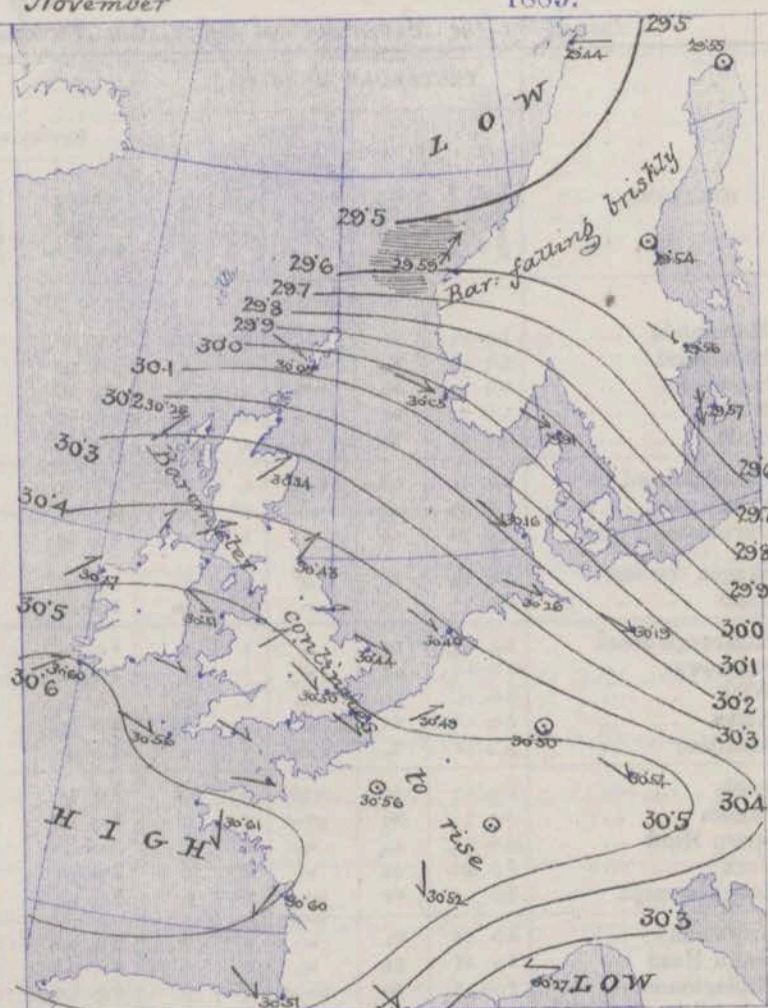
— = Rough. — = High.

## MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of November.

During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS.
Sumburgh Head .....	29.687
Stornoway .....	29.707
Wick .....	29.726
Nairn .....	29.743
Aberdeen .....	29.756
Leith .....	29.793
Shields .....	29.815
York .....	29.844
Loughborough .....	29.876
Ardrossan .....	29.795
Donaghadee .....	29.811
Holyhead .....	29.835
Liverpool .....	29.852
Parsonstown .....	29.848
Valencia .....	29.864
Roche's Point .....	29.864
Pembroke .....	29.862
Scilly .....	29.898
Jersey .....	29.923
Hurst Castle .....	29.898
Dover .....	29.893
LONDON .....	29.897
Oxford .....	29.893
Cambridge .....	29.885
Yarmouth .....	29.863



## 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.

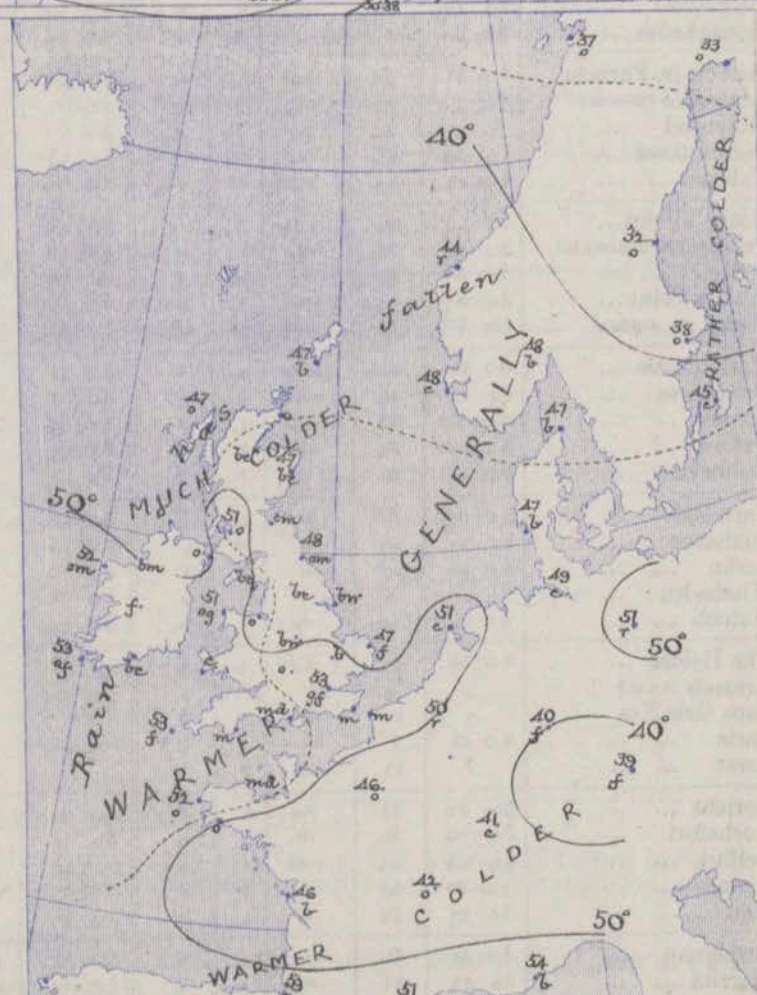
**RAINFALL**—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

### MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of November.)

STATIONS.	TEMPERATURE.				RAINFALL. (Inches.)
	Daily Max.	Daily Min.	at 8 a.m.		
			Dry.	Wet.	
Sumburgh Head.....	45.3	37.4	41.5	39.8	4.24
Stornoway .....	45.7	36.7	41.0	39.9	4.60
Wick .....	45.7	35.7	40.9	39.3	2.97
Nairn .....	44.7	35.5	39.1	37.5	2.32
Aberdeen .....	46.1	36.3	40.3	38.5	3.16
Leith .....	48.2	36.7	41.2	39.6	2.11
Shields .....	47.1	38.1	41.8	40.2	2.63
York .....	47.7	36.1	40.3	39.0	2.21
Loughborough .....	48.0	36.4	40.2	38.9	2.30
Ardrossan .....	47.7	38.9	42.6	40.8	3.92
Donaghadee .....	48.2	39.2	42.9	41.7	3.13
Holyhead .....	49.7	42.8	45.5	43.8	3.71
Liverpool .....	47.7	39.5	42.1	40.4	2.87
Parsonstown .....	49.1	36.9	41.7	40.0	2.84
Valencia .....	52.4	42.7	47.2	45.2	5.50
Roche's Point .....	51.1	41.8	45.9	44.3	4.56
Pembroke .....	50.2	43.7	46.7	44.7	3.96
Scilly .....	52.5	46.7	50.0	48.0	3.76
Jersey .....	51.9	44.2	47.5	45.6	4.24
Hurst Castle .....	50.5	40.3	44.6	43.6	2.98
Dover .....	49.1	40.7	44.0	42.4	3.56
LONDON .....	49.6	37.9	42.0	40.5	2.14
Oxford .....	48.6	37.6	41.0	39.7	2.30
Cambridge .....	48.8	35.7	40.3	39.5	2.02
Yarmouth .....	47.5	39.1	42.9	41.8	3.15

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, 30.4 in. to 30.6 in. in an extensive line over Ireland, England, France, and the Bay of Biscay.</p> <p>Lowest, 29.6 in. and less, over the Baltic, and 29.5 in. and less in the north of Norway.</p> <p>Gradients were slight in our islands, steep over Norway and Denmark.</p> <p>Barometer falling in the extreme north and northeast, and inclined to fall a little on our northwestern coast also.</p>
TEMPERATURE	<p>Highest, 54° at Aix, 53° at Valencia, 52° at Jersey, 51° at Carls and in London, 50° at Bath.</p> <p>Lowest, 32° at Helsingfors, 33° at Haparanda, 38° at Stockholm, 39° at Munich, 40° at Wiesbaden, 41° at Lyons.</p> <p>It has given way considerably in Scotland since yesterday, but has risen over our southeastern counties and the north of France.</p>
WIND	<p>Light SW<sup>ly</sup> on our north and northwest coasts — W<sup>ly</sup> to NW<sup>ly</sup> over England.</p> <p>Variable over France — N<sup>ly</sup> over the Bay of Biscay and Spain.</p> <p>In Denmark &amp; the south of Norway there is a moderate gale from NW, and at Mity from N. Christianund reports a strong gale from SW.</p>
WEATHER	<p>Cloudy, hazy or foggy, and damp over the Channel and England, fine in Scotland, raining at several stations lying to the E<sup>ward</sup> of the North Sea. Slight rain fell yesterday on our western coasts generally.</p>
SEA	<p>Rough in the far north, moderate in the west, slight or smooth elsewhere.</p>

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The present distribution of pressure is favourable for the advance of depressions towards Scotland and Norway from the W<sup>ard</sup> or NW<sup>ard</sup>. One such system now lies near Christianund and is moving southwards and there are slight indications that another may be approaching Scotland.

## FORECASTS

For the 24 hours ending at NOON on 9<sup>th</sup> Nov<sup>r</sup> 1889.

### DISTRICTS.

### FORECASTS.

0	SCOTLAND NORTH	SW <sup>ly</sup> and W <sup>ly</sup> winds, force doubtful; fine to unsettled and rainy.
1	SCOTLAND EAST	
2	ENGLAND N.E.	W <sup>ly</sup> and SW <sup>ly</sup> winds, light; fine and mild, then colder, foggy, and less settled.
3	ENGLAND EAST	
4	MIDLAND COUNTIES	
5	ENGLAND SOUTH	


### DISTRICTS.


### FORECASTS

6	SCOTLAND WEST	Same as Nos 0 and 1
7	ENGLAND N.W.	
8	ENGLAND S.W.	Same as Nos 2 to 5
9	IRELAND NORTH	
10	IRELAND SOUTH	SW <sup>ly</sup> breezes, light; fair and foggy, doubtful later.

### WARNINGS

NONE ISSUED.

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

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



# YESTERDAY'S 2 P.M. REPORTS.

	Bar:	Ther:		Wind		Wea:	Sea		Bar:		Ther:		Wind		Wea:	Sea
		D	W	D	F						D	W	D	F		
Skudesnaes ...	29.94	51	50	WSW	2	r	3		Holyhead ...	30.40	53	53	SSW	4	m q	2
Sumburgh Head ...	29.86	51	51	W	3	c	3		Valencia ...	30.49	56	56	WSW	3	om d	4
Stornoway ...	30.09	53	51	W	4	c	4		Scilly ...	30.56	53	52	W	4	f	5
Aberdeen ...	30.06	53	54	WSW	3	c	2		Jersey ...	30.59	57	53	WNW	3	c	3
Shields ...	30.23	53	55	SW	2	o	2		Dungeness ...	30.48	55	52	WNW	3	m	2
Ardrossan ...	30.24	55	54	WSW	3	c	3		London ...	30.50	53	51	W	1	o	2
Malin Head ...	30.29	52	52	W	4	o	3		Yarmouth ...	30.39	56	54	W	3	b	2
Mullaghmore ...	30.36	53	53	WSW	2	om	3		Rocheport ...	30.20	56	52	NE	4	b	2
Belmullet ...	30.40	53	53	W	2	om	2									

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

The reports for yesterday morning showed that pressure was highest, 30.5 in: and upwards, in a large anticyclone lying over the Bay of Biscay, the south of England, and the greater part of France, but high, 30.3 in: and upwards, in another large area lying over central Russia. The former system was apparently increasing, both in size and height, while the latter was inclined to give way. The lowest readings, 29.7 in: and less, were found in two small depressions lying respectively over the northern parts of the Gulf of Bothnia, and the Baltic, but a large area, with readings below 29.8 in: apparently existed to the southward of the British Isles. The wind was light to fresh from the SW<sup>nd</sup> or W<sup>nd</sup> over our Islands, the Netherlands, North Germany and the southern shores of the Baltic, and S<sup>4</sup> over central and Northern Russia, in the south of Scandinavia, however, it was N<sup>4</sup> or NW<sup>4</sup>. Over Spain, Italy, and the west and south of France light or moderate breezes from the NE<sup>4</sup> or E<sup>4</sup> were general, but over Eastern Europe and also in Algeria the wind was light and variable. The weather was fair over the greater part of Western Europe and also in Scandinavia, but foggy at some of our own southern and southeastern stations. Elsewhere, however, the sky was mostly cloudy or overcast, with fog in some parts of Russia, and rain at a few of the Danish, German and Russian stations, as well as in Algeria. Temperature had risen rapidly in the east of Scotland and to a less extent in other parts of our Islands, as well as in Finland, Denmark and North Germany; elsewhere, however, the thermometer had fallen a few degrees. Readings ranged from 60° and upwards over the south of Italy and the adjacent parts of the Mediterranean and from 55° and upwards in the north and east of Scotland and the northeast of England to 40° or less over Sweden, the north of Norway, and the northern and central parts of Russia, <sup>and</sup> 32° or less over the central parts of France and Austria. The highest individual reading, was 63° at Malta, 63° at Brindisi and Palermo, 62° at Sanguinaria, 61° at Cagliari, 59° at Legna and Naples, 57° at Leghorn, Barcelona, La Coruña and Constantinople; the lowest some 31° at Paris and Hermannstadt, 33° at Helsingfors, 34° at Archangel and Moscow, 35° at Rode, 36° at Madrid, 37° at Haparanda, and 38° at Uleaborg.

In the course of the day a large depression advanced to the west of Norway, where the barometer fell quickly with a gale from the SW<sup>4</sup>. In Scotland, however, the wind veered to the W<sup>4</sup>, and although temperature rose considerably during the early part of the day (reaching a maximum of 62° at Aberdeen) it fell somewhat decidedly towards night.

### EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

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

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

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

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



# DAILY WEATHER REPORT.

for *Saturday, 9<sup>th</sup> November, 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 4.)	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.)		Weather.	Max.	Min.	Amount of Rainfall.	
SCANDINAVIA.	Haparanda ...	29.54	27	NE	2	C	29.66	+1.11	30	29	-3	N	2	O	*	36	25	-	
	Hernösand ...	29.53	33	NE	0	O	29.70	+1.16	31	30	-1	N	2	C	*	39	28	-	
	Stockholm ...	29.67	39	W	2	B	29.59	+1.03	34	32	-4	WNW	2	C	*	43	?	-	
	Wisby ...	29.64	45	N	8	B	29.59	+1.02	41	38	-4	N	6	B	*	46	41	-	
	Bodö ...	29.43	37	E	2	Bc	29.75	+1.31	34	33	-3	E	1	Bc	0	37	32	-	
	Christiansund	29.60	41	WNW	3	T	29.86	+1.27	45	43	+1	NW	6	O	5	45	41	0.43	
	Skudesnaes ...	30.04	46	WNW	7	O	30.04	-0.01	43	40	-5	NW	8	Bc	5	?	41	0.04	
	Christiania Fjord (Fæder)	29.80	46	WNW	5	B	29.79	-0.04	45	40	-3	WNW	4	B	2	50	45	-	
	Skagen (The Scaw)	29.85	45	NW	6	B	29.80	-1.11	46	43	-1	NW	6	B	4	48	43	-	
	Fanö ...	30.12	47	WNW	6	C	30.00	-1.16	44	41	-3	NW	5	Bc	*	50	?	-	
BRITISH ISLANDS.	Sumburgh Head	30.09	46	NW	3	O	30.16	+1.11	42	40	-5	W	0	C	2	45	39	-	
	Stornoway ...	30.22	46	W	2	O	30.14	-1.14	52	52	+5	SW	3	T	3	52	44	0.20	
	Wick ...	30.23	46	NW	1	O	30.21	-0.06	45	44	-1	S	2	T	1	49	44	0.20	
	Nairn ...	30.25	47	W	0	O	30.18	-1.12	47	45	0	W	0	T	1	53	45	0.27	
	Aberdeen ...	30.27	49	WSW	2	O	30.23	-1.11	45	45	-2	W	0	O	2	53	45	0.14	
	Leith ...	30.29	53	WSW	3	C	30.23	-1.15	54	52	+4	WSW	3	C	*	55	49	-	
	Shields ...	30.34	52	SW	1	O	30.24	-1.19	53	51	+5	W	4	Bc	2	55	46	-	
	Spurn Head ...	30.43	52	WSW	2	Bc	30.28	-1.15	50	48	+1	W	4	C	3	52	47	-	
	York ...	30.41	52	W	1	O	30.31	-1.16	51	49	+5	W	3	B	*	54	45	-	
	Loughborough	30.45	50	WSW	1	C	30.37	-1.12	53	50	+4	WNW	2	C	*	58	47	-	
BRITISH ISLANDS.	Ardrossan ...	30.33	49	SW	2	T	30.32	-1.11	53	52	+2	W	4	O	3	53	49	0.04	
	Malin Head ...	30.34	52	WSW	5	O	30.34	-0.09	50	50	+1	WSW	5	adm	3	52	48	0.04	
	Mullaghmore ...	30.43	53	SW	4	O	30.43	-0.03	50	50	0	WSW	5	od	4	54	50	0.03	
	Belmullet ...	30.46	53	WSW	3	O	30.44	-0.03	51	51	-1	WSW	2	O	*	53	50	0.03	
	Donaghadee ...	30.41	55	SW	2	O	30.38	-1.10	51	50	+4	WSW	3	C	1	58	46	-	
	Barrow-in-Furness	30.41	52	W	2	T	30.34	-1.12	51	50	+1	NW	2	om	*	53	49	0.04	
	Liverpool (Bidston)	30.45	53	W	5	O	30.40	-1.11	51	50	+2	W	5	O	4	54	49	-	
	Holyhead ...	30.48	53	SW	1	O	30.44	-0.07	52	51	+1	WNW	3	og	2	55	51	0.01	
	Parsonstown ...	30.51	52	W	0	O	30.48	-0.05	49	48	-1	W	0	og	*	55	48	0.03	
	Valencia ...	30.57	54	W	1	O	30.53	-0.07	51	50	-2	W	0	odf	0	54	49	0.03	
GERMANY.	Roche's Point...	30.55	54	WNW	1	Bc	30.52	-0.03	52	50	-1	WNW	2	O	3	55	49	-	
	Pembroke (St. Ann's Hd.)	30.55	52	NW	1	B	30.48	-0.08	53	51	+1	WNW	3	C	3	54	51	0.02	
	Scilly ...	30.53	50	WNW	4	B	30.50	-0.06	51	51	-2	N	4	of	4	54	48	0.01	
	Prawle Point ...	30.54	51	NW	2	B	30.49	-0.07	48	48	-4	SW	1	f	2	60	45	-	
	Jersey (St. Aubin's)	30.53	56	WNW	3	O	30.48	-1.10	53	52	0	NW	3	om	3	56	49	0.04	
	Hurst Castle ...	30.50	54	WNW	2	C	30.45	-1.10	51	50	-2	WNW	2	C	1	59	48	-	
	Dungeness ...	30.45	51	NW	2	m	30.37	-1.16	50	49	-2	NW	3	m	1	58	44	-	
	London ...	30.49	50	W	1	ef	30.40	-1.10	47	47	-6	W	1	om	*	58	46	-	
	Oxford ...	30.48	49	WNW	2	B	30.41	-1.11	48	48	-4	W	1	efw	*	59	44	0.01	
	Cambridge ...	30.47	48	W	0	B	30.37	-1.12	52	50	+1	W	1	O	*	61	43	-	
FRANCE AND NETHERLANDS.	Yarmouth ...	30.42	50	W	0	B	30.31	-1.13	52	50	+5	WNW	3	Bc	2	53	46	-	
	Cuxhaven ...	30.28	48	NW	4	O	30.09	-1.19	50	48	+1	NW	5	Bc	*	50	48	-	
	Berlin ...	30.20	47	WNW	4	Bc	30.01	-1.18	46	44	-5	WNW	4	O	*	52	45	0.04	
	Wiesbaden ...	*	*	*	*	*	30.27	-1.23	48	46	+8	W	0	O	*	48	37	-	
	Munich ...	30.42	42	SW	3	m	30.29	-1.25	45	43	+6	SW	5	O	*	46	39	-	
	The Helder ...	30.37	50	WNW	1	B	30.22	-1.18	51	51	0	WNW	1	f	2	52	50	-	
	Brussels (9 a.m.)	*	*	*	*	*	30.33	-1.14	50	50	0	WSW	1	f	*	54	47	0.04	
	Cape Gris Nez	?	54	NW	3	B	?	?	52	51	-1	W	2	m	2	57	52	-	
	Paris ...	30.51	52	S	1	O	30.45	-1.11	49	48	+3	SW	1	O	*	?	?	-	
	Brest ...	?	54	W	0	m	?	?	51	50	-1	W	0	O	2	57	46	0.04	
FRANCE AND NETHERLANDS.	Lorient ...	30.56	52	W	0	O	30.49	-1.12	51	51	+1	WNW	1	O	2	54	48	-	
	Rochefort ...	30.54	50	NE	5	O	30.49	-1.11	51	51	+5	NE	3	O	2	57	45	-	
	Belfort ...	30.38	43	E	1	C	30.34	-1.15	41	37	0	ENE	1	C	*	52	36	-	
	Lyons ...	30.50	42	N	3	O	30.43	-1.09	42	41	0	WNW	1	O	*	46	?	-	
	Nice ...	30.24	64	ESE	5	B	30.19	-1.08	55	46	+1	ESE	4	B	1	70	50	-	
	Perpignan ...	30.38	50	NW	2	B	30.31	-1.07	47	45	-4	NW	2	B	*	61	41	-	
PENIN. ISLANDS.	Biarritz ...	30.46	52	W	3	O	30.43	-1.08	44	43	-9	ENE	2	m	2	55	39	-	
	Corunna ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	-	
PENIN. ISLANDS.	Lisbon ...	30.21	60	NE	5	B	30.19	-1.12	52	48	+2	NE	5	B	2	64	?	-	

For Explanation of Columns, see bottom of p 4.

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



# WEATHER CHARTS

for 8 a.m. on

Saturday, 9<sup>th</sup> November.

1889.

## BAROMETER, WIND AND SEA.

### EXPLANATION OF MAP.

**BAROMETER**—Isobars are drawn for each tenth of an inch.

Changes since previous morning are stated in words.

**WIND**—Arrows show the prevalent winds. They fly with the wind and

their barbs and feathers refer to force thus—

→ = forces above 10; → = forces 8 to 10;

→ = forces 5 to 7; → = forces 1 to 4.

○ = dead calm.

**SEA DISTURBANCE**—Where considerable, is shown thus:

— = Rough. — = High.

## MEAN HEIGHT OF THE BAROMETER

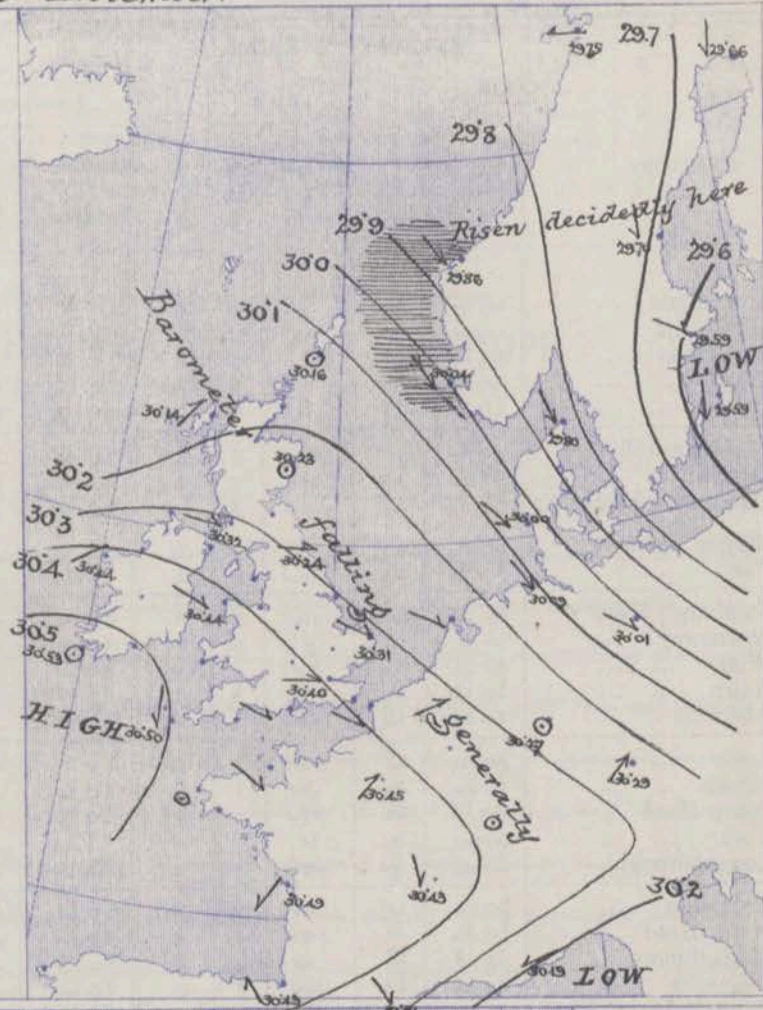
at 8.0 a.m. for the month of November.

During the 15 Years: 1871—1885.

### STATIONS.

### MEAN READINGS.

STATIONS.	MEAN READINGS.
Sumburgh Head .....	29.687
Stornoway .....	29.707
Wick .....	29.726
Nairn .....	29.743
Aberdeen .....	29.756
Leith .....	29.793
Shields .....	29.815
York .....	29.844
Loughborough .....	29.876
Ardrossan .....	29.795
Donaghadee .....	29.811
Holyhead .....	29.835
Liverpool .....	29.852
Parsonstown .....	29.848
Valencia .....	29.864
Roche's Point .....	29.864
Pembroke .....	29.862
Scilly .....	29.898
Jersey .....	29.923
Hurst Castle .....	29.898
Dover .....	29.893
LONDON .....	29.897
Oxford .....	29.893
Cambridge .....	29.885
Yarmouth .....	29.863



## 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.

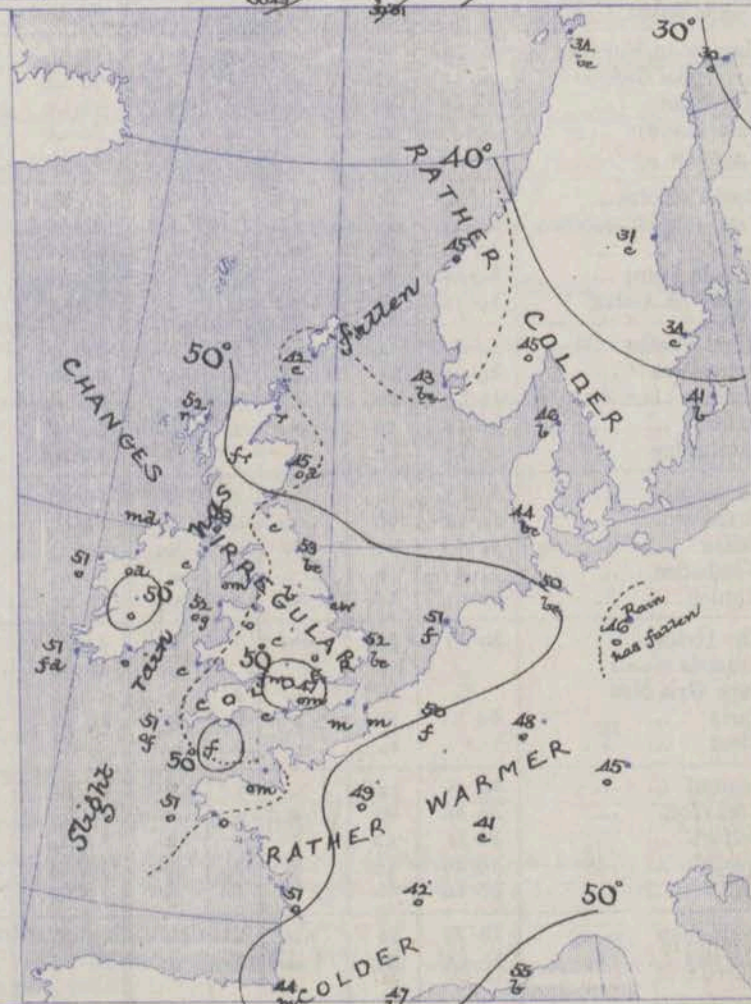
**RAINFALL**—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

### MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of November.)

STATIONS.	TEMPERATURE.				RAINFALL. (Inches.)
	Daily Max.	Daily Min.	at 8 a.m.		
			Dry.	Wet.	
Sumburgh Head.....	45.3	37.4	41.5	39.8	4.24
Stornoway .....	45.7	36.7	41.0	39.9	4.60
Wick .....	45.7	35.7	40.9	39.3	2.97
Nairn .....	44.7	35.5	39.1	37.5	2.32
Aberdeen .....	46.1	36.3	40.3	38.5	3.16
Leith.....	48.2	36.7	41.2	39.6	2.11
Shields .....	47.1	38.1	41.8	40.2	2.63
York .....	47.7	36.1	40.3	39.0	2.21
Loughborough .....	48.0	36.4	40.2	38.9	2.30
Ardrossan .....	47.7	38.9	42.6	40.8	3.92
Donaghadee.....	48.2	39.2	42.9	41.7	3.13
Holyhead.....	49.7	42.8	45.5	43.8	3.71
Liverpool .....	47.7	39.5	42.1	40.4	2.87
Parsonstown .....	49.1	36.9	41.7	40.0	2.84
Valencia .....	52.4	42.7	47.2	45.2	5.50
Roche's Point .....	51.1	41.8	45.9	44.3	4.56
Pembroke.....	50.2	43.7	46.7	44.7	3.96
Scilly .....	52.5	46.7	50.0	48.0	3.76
Jersey .....	51.9	44.2	47.5	45.6	4.24
Hurst Castle .....	50.5	40.3	44.6	43.6	2.98
Dover .....	49.1	40.7	44.0	42.4	3.56
LONDON .....	49.6	37.9	42.0	40.5	2.14
Oxford .....	48.6	37.6	41.0	39.7	2.30
Cambridge .....	48.8	35.7	40.3	39.5	2.02
Yarmouth .....	47.5	39.1	42.9	41.8	3.15

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, 30.40 in: to 30.50 in: and more, in a high pressure area situate over Ireland, England, France, and the Bay of Biscay.  
 Lowest, 29.60 in: and less, in a depression over the Baltic — 30.2 in: and less, over the Gulf of Genoa and also off our extreme NW. coast.  
 Gradient slight in our Islands and France, moderate over Denmark and the south of Norway.  
 Barometer rising in Sweden, Norway and the Shetland Isles, falling elsewhere — most over Germany.

## TEMPERATURE

Highest, 55° at Nice, 54° at Leith, 53° at Andersons, Shields and Pembroke, 52° at Fife and Cambridge, 51° at Belmullet, Kilmorra and Scilly.  
 Lowest, 30° at Haparanda, 31° at Helsingfors, 34° at Riga and Stockholm, 41° at Tientsin, 42° at Lumburg H.  
 It has fallen over the south of England since yesterday, not changed much over Ireland and Scotland, and is still high for the time of year.

## WIND

Fresh to strong from NW. on the eastern shores of the North Sea, moderate to light from NW and W over England and Ireland, moderate SW on our northwest coast. Over the Bay of Biscay the wind is NE and light.

## WEATHER

Fine and bright on our northeast and east coasts, as well as in some parts of Scandinavia, dull and gloomy elsewhere, with damp fog and mists in many places, rain at Lumburg Head.  
 Rain fell in the north of Scotland yesterday, and some slight showers at our western stations.

## SEA

Rather rough on the Norwegian coast, moderate in the west, slight or smooth elsewhere.

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

There is no indication of any immediate change of importance.

# FORECASTS

For the 24 hours ending at NOON on 10<sup>TH</sup> NOV<sup>R</sup> 1889.

## DISTRICTS.

## FORECASTS.

- |   |                  |   |
|---|------------------|---|
| 0 | SCOTLAND NORTH   | SW <sup>W</sup> breezes, freshening; rain at times.                           |
| 1 | SCOTLAND EAST    |   |
| 2 | ENGLAND N.E.     | SW <sup>W</sup> breezes, light; drizzle to showery.                           |
| 3 | ENGLAND EAST     | NW <sup>W</sup> to SW <sup>W</sup> breezes, damp, foggy and fair alternately. |
| 4 | MIDLAND COUNTIES |   |
| 5 | ENGLAND SOUTH    |   |



## DISTRICTS.

## FORECASTS

- |    |               |  |
|----|---------------|--|
| 6  | SCOTLAND WEST | SW <sup>W</sup> breezes, moderate; drizzle, some rain.                                 |
| 7  | ENGLAND N.W.  |  |
| 8  | ENGLAND S.W.  | NW <sup>W</sup> breezes, moderate; fair, local fogs.                                   |
| 9  | IRELAND NORTH | W <sup>W</sup> and SW <sup>W</sup> breezes, moderate to fresh, drizzle, rain at times. |
| 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:	Ther:		Wind		Wea:	Sea		Bar:	Ther:		Wind		Wea:	Sea
		D	W	D	F					D	W	D	F		
Skudesnaes ...															
Stumburgh Head ...	30.07	47	43	W	4	0	6								
Stornoway ...	30.28	47	47	W	3	0	8								
Aberdeen ...	30.30	51	46	W	2	0	2								
Shields ...	30.38	52	49	W	2	0	2								
Ardrossan ...	30.38	50	49	W	2	0	2								
Malin Head ...	30.36	52	52	W	2	0	4								
Mullaghmore ...	30.44	54	53	W	4	0	3								
Belmullet ...	30.50	53	53	W	2	0	2								
Holyhead ...	30.50	54	52	W	3	0	2								
Valencia ...	30.59	53	52	W	2	0	2								
Scilly ...	30.55	53	52	W	2	0	2								
Jersey ...	30.56	56	55	W	3	0	2								
Dungeness ...	30.46	57	54	W	3	0	2								
London ...	30.48	58	53	W	1	0	2								
Yarmouth ...	30.45	53	51	W	1	0	2								
Rocheport ...	30.59	53	51	W	4	0	2								

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

The reports for yesterday morning showed that pressure was highest, 30.4 in. to 30.6 in. and upwards, in a large anticyclone covering the whole of Ireland, England, the Bay of Biscay, South Germany, and the north of Spain, and lowest, 29.5 in. and less, in a large depression lying off the northwest of Norway. Another disturbance with readings below 30.0 in., was, however, lying over Scandinavia and its immediate neighbourhood. The wind was SW<sup>2</sup> in the northern parts of the United Kingdom and the west of Norway, and W<sup>2</sup> or NW<sup>2</sup> over the south of our Islands, the eastern shores of the North Sea, the Netherlands, Germany, and Austria; in the south of Norway the wind blew strongly from WNW, while at Christiansund there was a gale from the SW<sup>2</sup>. In Russia, however, the wind was S<sup>2</sup> or SE<sup>2</sup>, while over Italy, Spain, and the south of France it was chiefly NE<sup>2</sup>. The weather was fine over the greater part of Western Europe, but foggy over the southern parts of our Islands, and dull on our extreme north and northwest coasts. Elsewhere the sky was mostly overcast, with rain over Belgium, Germany and the south of Russia, as well as at Christiansund, snow at Archangel and Moscow. Fog prevailed over South Germany and the Gulf of Finland. Temperature had fallen several degrees in the north of our Islands, and to a smaller extent over Russia, Denmark and Central France, but risen in most other localities; readings ranged from between 55° and 65° over the central and southern parts of the Mediterranean to 35° or less over the north of Sweden, and the northern and central parts of Russia. The highest individual readings were 68° at Langueira, 63° at Palermo, 62° at Brindisi and Oran, 60° at Cagliari and Sfax, 59° at Leghorn, Naples, Algiers and Rabat; the lowest were 31° at Moscow, 32° at Uleaborg and Hemö, and 33° at Archangel and Kapsanada, 34° at Kuopio, 36° at Helsingfors and Riga, and 37° at Bodö and Ågö.

In the course of the day the depression off the northwest of Norway travelled eastwards across Scandinavia, but no important change was observed in the winds or weather over Western Europe.

### EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

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

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

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

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



# DAILY WEATHER REPORT.

for Sunday 10<sup>th</sup> Nov<sup>r</sup> 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.)		Weather.	Max.	Min.	Amount of Rainfall.	
SCANDINAVIA.	Haparanda ...	29.89	26	N	4	0	29.88	+ .22	27	27	- 3	N	4	b	*	30	19	—
	Hernösand ...	29.93	34	N	2	0	30.05	+ .35	29	28	- 2	N	2	b	*	39	29	0.04
	Stockholm ...	29.86	35	NNW	4	0	29.96	+ .37	34	33	0	NNW	4	0	*	41	30	—
	Wisby ...	29.80	40	NNW	6	r	29.91	+ .32	39	36	- 2	N	6	bc	*	41	37	0.04
	Bodö ...	30.03	36	Z	0	c	30.12	+ .37	35	33	+ 1	E	2	b	1	37	32	0.04
	Christiansund	30.11	43	N	3	0	30.12	+ .26	39	37	- 6	ESE	2	b	3	45	37	0.04
	Skudesnaes ...	30.17	44	NNW	2	0	30.11	+ .07	43	41	0	E	4	0	3	45	41	0.24
	Christiania Fjord (Færder)	30.05	44	NNW	3	b	30.10	+ .31	40	38	- 5	NNW	2	c	2	46	39	—
	Skagen (The Scaw)	30.06	46	NE	1	b	30.09	+ .29	43	38	- 3	Z	0	0	0	48	43	—
	Fanö ...	30.14	39	NW	2	b	30.10	+ .10	44	43	0	WSTW	1	0	*	48	39	—
BRITISH ISLANDS.	Sumburgh Head	30.10	44	SSE	2	r	30.08	- .08	46	45	+ 4	NW	3	0	4	46	41	0.53
	Stornoway ...	30.17	50	W	5	r	30.23	+ .09	51	51	- 1	W	3	0	3	53	49	0.03
	Wick ...	30.14	53	NW	1	bc	30.16	- .05	51	50	+ 6	NW	2	0	1	53	42	0.05
	Nairn ...	30.19	54	W	3	bc	30.23	+ .05	53	51	+ 6	W	2	bc	1	55	45	0.01
	Aberdeen ...	30.21	44	W	1	of	30.22	- .01	53	50	+ 8	NNW	3	bc	2	53	44	0.04
	Leith ...	30.29	51	W	3	bc	30.28	+ .05	51	50	- 3	W	1	b	*	58	49	—
	Shields ...	30.29	52	W	3	b	30.26	+ .02	49	47	- 4	W	3	bc	2	57	47	—
	Spurn Head ...	30.28	52	WNW	3	bc	30.28	.00	48	46	- 2	W	1	b	3	53	47	—
	York ...	30.33	51	W	2	b	30.31	.00	46	45	- 5	W	1	b	*	60	43	—
	Loughborough	30.36	51	NW	3	0	30.35	- .02	49	47	- 4	WNW	2	c	*	54	48	—
GERMANY.	Ardrossan ...	30.34	52	W	2	0	30.36	+ .04	52	51	- 1	W	1	0	1	53	50	—
	Malin Head ...	30.31	50	WSTW	5	am	30.38	+ .04	48	48	- 2	WSTW	3	0	2	51	48	0.01
	Mullaghmore ...	30.41	50	WSTW	4	cm	30.42	.00	49	49	- 1	WSTW	2	cm	1	53	49	—
	Belmullet ...	30.42	49	WSTW	2	am	30.44	.00	49	49	- 2	SW	1	cm	*	52	49	0.04
	Donaghadee ...	30.40	50	WSTW	2	bc	30.41	+ .03	49	49	- 2	W	2	c	c	55	48	—
	Barrow-in-Furness	30.35	52	NW	2	0	30.37	+ .05	51	50	- 1	NW	3	bc	*	52	50	—
	Liverpool (Bidston)	30.40	50	W	2	0	30.29	- .01	50	48	- 1	WNW	3	0	3	54	49	—
	Holyhead ...	30.43	52	NW	3	og	30.42	- .02	51	50	- 1	NW	3	c	2	54	50	—
	Parsonstown ...	30.46	50	Z	0	0	30.47	- .01	48	47	- 1	Z	0	0	*	52	47	0.02
	Valencia ...	30.49	51	SW	1	cm	30.49	- .04	48	48	- 3	ESE	1	af	1	50	46	0.01
FRANCE AND NETHERLANDS.	Roche's Point...	30.50	52	W	1	c	30.48	- .04	49	48	- 3	NW	3	cm	3	54	49	—
	Pembroke (St. Ann's Hd.)	30.47	50	NNW	2	c	30.45	- .03	50	48	- 3	NW	2	c	1	53	50	—
	Scilly ...	30.47	52	N	4	0	30.44	- .06	52	49	+ 1	NNE	4	0	5	58	49	—
	Prawle Point ...	30.46	50	N	1	0	30.45	- .04	48	47	0	N	1	og	0	53	47	—
	Jersey (St. Aubin's)	30.44	54	NW	3	am	30.43	- .05	53	50	0	NNW	3	cm	3	54	51	0.02
	Hurst Castle ...	30.42	53	WNW	1	c	30.42	- .03	51	50	0	NNW	1	cm	1	55	50	—
	Dungeness ...	30.33	52	WNW	3	m	30.35	- .02	50	49	0	NNW	2	m	1	55	48	—
	London ...	30.37	53	WNW	2	0	30.38	- .02	50	48	+ 3	NW	1	og	*	55	45	—
	Oxford ...	30.40	51	WNW	1	0	30.40	- .01	49	46	+ 1	NW	1	0	*	54	48	—
	Cambridge ...	30.37	51	W	1	0	30.37	.00	50	48	+ 2	W	1	0	*	58	46	—
PENIN- SULA.	Yarmouth ...	30.30	53	NW	2	c	30.30	- .01	49	48	- 3	NW	2	cm	3	55	48	0.03
	Cuxhaven ...	30.14	45	N	4	c	30.16	+ .07	47	45	- 3	WNW	2	c	*	50	45	—
	Berlin ...	30.02	42	WNW	4	b	30.13	+ .12	36	37	- 8	WNW	3	f	*	48	28	—
	Wiesbaden ...	*	*	*	*	*	30.29	+ .02	42	41	- 6	Z	0	0	*	50	37	0.12
	Munich ...	30.17	45	W	4	r	30.28	- .01	38	36	- 10	NW	3	c	*	46	36	0.35
	The Helder ...	30.27	49	N	1	c	30.22	.00	50	50	- 1	WNW	2	0	2	52	48	0.04
	Brussels (9 a.m.)	?	*	*	*	*	30.35	+ .02	51	51	+ 1	WNW	1	0	*	54	50	0.12
	Cape Gris Nez	?	53	W	4	m	?	?	52	50	0	NNW	4	0	4	55	50	—
	Paris ...	30.38	53	NNW	2	0	30.37	- .08	50	49	+ 1	Z	0	0	*	54	47	—
	Brest ...	?	52	Z	0	0	?	?	50	49	- 1	E	1	0	2	57	46	0.04
PENIN- SULA.	Lorient ...	30.46	53	NE	2	0	30.41	- .08	51	49	- 0	NE	3	0	2	54	48	—
	Rochefort ...	30.45	52	NE	3	c	30.41	- .08	51	50	0	NE	3	0	2	55	43	—
	Belfort ...	?	41	?	1	0	30.24	- .10	43	37	+ 2	S	1	c	*	52	36	—
	Lyons ...	30.45	45	NNW	2	c	30.29	- .14	49	47	+ 7	NNW	4	0	*	49	42	—
	Nice ...	30.09	54	E	2	b	30.00	- .19	51	48	- 4	E	4	b	1	64	48	—
	Perpignan ...	30.17	57	NW	4	b	30.11	- .20	54	50	+ 7	NW	4	b	*	57	47	—
PENIN- SULA.	Biarritz ...	30.40	49	E	2	0	30.34	- .09	47	45	+ 3	S	2	0	1	52	44	—
	Corunna ...	30.15	63	NE	4	b	30.24	- .13	48	46	+ 1	ENE	1	b	4	63	43	—
	Lisbon ...	30.15	63	NE	4	b	30.18	- .06	54	48	+ 2	NE	4	b	2	70	52	—

For Explanation of Columns, see bottom of p 4.

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



# WEATHER CHARTS

for 8 a.m. on

Sunday, 10<sup>th</sup> November,

1889.

## BAROMETER, WIND AND SEA.

### EXPLANATION OF MAP.

**BAROMETER**—Isobars are drawn for each tenth of an inch.

Changes since previous morning are stated in words.

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

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

**SEA DISTURBANCE**—Where considerable, is shown thus:

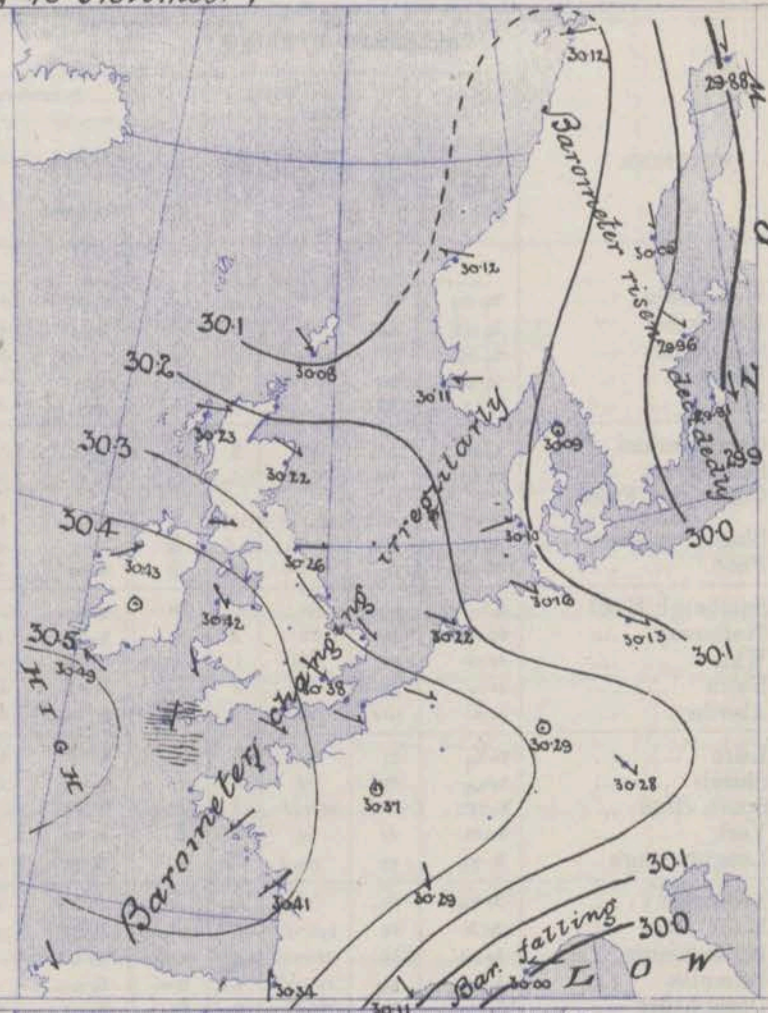
— = Rough. — = High.

## MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of November.

During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS.
Sumburgh Head .....	29.687
Stornoway .....	29.707
Wick .....	29.726
Nairn .....	29.743
Aberdeen .....	29.756
Leith .....	29.793
Shields .....	29.815
York .....	29.844
Loughborough .....	29.870
Ardrossan .....	29.795
Donaghadee .....	29.811
Holyhead .....	29.835
Liverpool .....	29.852
Parsonstown .....	29.848
Valencia .....	29.864
Roche's Point .....	29.864
Pembroke .....	29.862
Scilly .....	29.898
Jersey .....	29.923
Hurst Castle .....	29.898
Dover .....	29.893
LONDON .....	29.897
Oxford .....	29.893
Cambridge .....	29.885
Yarmouth .....	29.863





# GENERAL SITUATION AT 8 A.M.

## PRESSURE

Highest, 30.5 in.; and upwards, in an anticyclone lying off the south of Ireland.  
 Lowest, 29.9 in.; and less, over Finland and the eastern shore of the Baltic; 30.0 in.; and less, in a shallow depression lying over the Gulf of Genua.  
 Gradients slight. Barometre falling a little over the greater part of Ireland, England, and France, but rising elsewhere.

## TEMPERATURE

Highest, 54° at Perpignan, 53° at Kain and Aberdeen, and 52° at Anderson, Sully, and Siston.  
 Lowest, 27° at Haparanda, 29° at Helsingfors, 34° at Stockholm, 35° at Rode, 38° at Munich, and 39° at Vicks, and Christianmünd.  
 During yesterday the thermometer rose to 56° at Feith and Lambidge, and 60° at York.

## WIND

Light from the W. over all the more northern parts of the United Kingdom, and from the NW. in the South.  
 E. in the coast of Norway; N. in Sweden, NE. in the west of France.

## WEATHER

Fine in the eastern parts of Great Britain, as well as over the greater part of Scandinavia.  
 Cloudy or overcast elsewhere, with mist or fog at several of our eastern and southern stations and also at Berlin.  
 A little rain fell yesterday on our extreme north and northwest coasts.

## SEA

Rather rough at Sully, but slight or smooth on nearly all other parts of our coasts.

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

# FORECASTS

For the 24 hours ending at NOON on 11<sup>TH</sup> Nov<sup>R</sup> 1889.

## DISTRICTS.

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

## FORECASTS.

NO NE  
 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:	Ther:		Wind		Wea:	Sea		Bar:	Ther:		Wind		Wea:	Sea:
		D	W	D	F					D	W	D	F		
Skudesnaes ...	30.15	45	42	NNW	4	0	4	Holyhead ...	30.44	53	51	NN	3	og	2
Sumburgh Head ...	30.15	44	42	ESE	1	7	2	Valencia ...	30.57	58	52	SW	1	om	2
Stornoway ...	30.18	42	42	SW	4	0	4	Scilly ...	30.47	52	51	N	4	of	5
Aberdeen ...	30.22	49	48	S	1	0	2	Jersey ...	30.46	54	53	NNW	2	0	2
Shields ...	30.25	57	53	W	4	bc	2	Dungeness ...	30.34	55	51	NW	3	c	1
Ardrossan ...	30.34	53	52	NNW	3	0	3	London ...	30.37	55	57	2	0	0	4
Malin Head ...	30.36	51	57	WSW	5	0	4	Yarmouth ...	30.29	55	52	NW	3	c	2
Mullaghmore ...	30.42	52	51	WSW	4	cm	3	Rochefort ...	30.47	54	52	NE	3	0	2
Belmullet ...	30.43	52	52	WSW	2	0									

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

The reports for yesterday morning showed that pressure was still highest (30.3 in. to 30.5 in. and more) over Ireland, England, France, and the Bay of Biscay, whence it decreased to 29.3 in. and less, in a well marked depression lying over the Baltic Provinces to rather below 30.2 in. over the Mediterranean and also over the extreme southeast of Spain. The wind was SW<sup>4</sup> to NW<sup>2</sup>, moderate to light over the United Kingdom, NW<sup>2</sup> strong over the eastern shores of the North Sea, and Germany, and N<sup>2</sup> over the Baltic. In France it was very variable, while over the Bay of Biscay and Spain it was, as a whole, NE<sup>2</sup>. Weather was fine over many parts of the Mediterranean and Spain; dull and unsettled, as a whole, elsewhere, with rain in some parts of Russia, as well as on our own northern and northwestern coasts, and damp fog in several parts of the British Isles and their neighbourhood. Temperature was falling over Northern Europe and many parts of Russia, and changing irregularly over the British Isles and France. It was highest (60° and more) at several of the Mediterranean stations and exceeded 50° on many of the French, Dutch, British and Irish coasts. The lowest values, however, were 28° at Uleaborg, 30° at Haparanda, 31° at Helsingfors and 33° at Kuopio, 34° at Helsingfors and Stockholm, 35° at Moscow, and 36° at Kharkov.

Mild dull weather continued prevalent over Northwestern Europe all day, but in some localities the sky cleared occasionally.

### 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.

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for *Monday, 11<sup>th</sup> November, 1889.*  
 Issued by the Meteorological Office, 63, Victoria Street, London. *R. H. SCOTT, Secretary.*

STATIONS.	YESTERDAY EVENING.						8 A.M. TO DAY.										PAST 24 HOURS.		
	Barometer at 32° F. and Sea Level.	Temp. in Shade.	WIND.			BAROMETER.		SHADE TEMP.			WIND.			Sea. (0 to 3.)	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.)	Weather.		Max.	Min.	Amount of Rainfall.		
SCANDINAVIA.	Haparanda ...	30.02	39	2	0	b	30.10	+ 2.2	26	26	- 1	2	0	b	*	32	21	.	
	Hernösand ...	30.16	31	2	2	b	30.22	+ 1.7	24	24	- 5	2	0	b	*	37	?	.	
	Stockholm ...	30.12	32	2	2	b	30.24	+ 2.8	29	28	- 5	2	2	b	*	37	?	.	
	Wisby ...	30.13	38	2	6	bc	30.18	+ 2.7	39	36	0	2	4	bc	*	39	34	0.04	
	Bodö ...	30.14	38	1	1	bc	29.85	- 2.7	34	33	- 1	2	4	s	2	?	32	.	
	Christiansund	30.16	39	ESE	1	c	30.10	- 0.2	46	44	+ 7	WSE	4	0	4	46	37	.	
	Skudesnaes ...	30.29	45	2	0	c	30.29	+ 1.8	45	45	+ 2	SE	4	0	3	50	43	0.08	
	Christiania Fjord (Færd)	30.26	39	2	2	b	30.25	+ 1.5	35	34	- 5	WSE	2	0	1	43	34	.	
	Skagen (The Scaw)	30.26	42	2	1	b	30.30	+ 2.1	41	40	- 2	WSE	2	0	1	43	37	.	
	Fanö ...	30.29	35	2	1	b	30.39	+ 2.9	32	32	- 12	2	0	f	*	45	32	.	
BRITISH ISLANDS.	Sumburgh Head	30.14	49	2	0	f	30.24	+ 1.6	49	49	+ 3	W	1	0	3	50	45	0.02	
	Stornoway ...	30.26	51	SW	3	0	30.30	+ 0.7	49	49	- 2	SW	4	0	3	54	46	.	
	Wick ...	30.26	52	W	1	c	30.33	+ 1.2	50	49	- 1	2	0	0	0	56	45	.	
	Nairn ...	30.26	53	W	2	b	30.34	+ 1.1	46	45	- 7	2	0	b	1	58	45	.	
	Aberdeen ...	30.29	55	2	0	b	30.37	+ 1.5	40	39	- 13	W	1	cm	2	59	38	.	
	Leith ...	30.33	51	W	1	b	30.39	+ 1.1	49	47	- 2	W	1	cm	*	58	48	.	
	Shields ...	30.33	52	W	3	b	30.39	+ 1.3	48	47	- 1	W	1	c	2	59	47	.	
	Spurn Head ...	30.33	52	2	2	c	30.41	+ 1.3	49	47	+ 1	W	2	om	3	53	47	.	
	York ...	30.36	50	2	0	b	30.42	+ 1.1	49	48	+ 3	SSW	1	f	*	60	42	.	
	Loughborough	30.39	49	W	1	b	30.45	+ 1.0	49	48	0	W	1	om	*	58	47	.	
GERMANY.	Ardrossan ...	30.39	52	W	2	bc	30.41	+ 0.5	50	49	- 2	SSW	1	od p	1	54	49	.	
	Malin Head ...	30.39	50	W	2	of	30.40	+ 0.2	49	49	+ 1	S	1	0	1	51	48	.	
	Mullaghmore ...	30.42	51	2	0	om	30.41	- 0.2	47	46	- 2	ESE	4	om	3	51	46	.	
	Belmullet ...	30.44	51	SW	2	0	30.39	- 0.5	47	47	- 2	E	1	0	*	58	47	0.01	
	Donaghadee ...	30.43	49	W	2	m	30.44	+ 0.3	48	48	- 1	W	3	m	1	52	48	.	
	Barrow-in-Furness	30.37	51	W	2	0	30.39	+ 0.2	50	49	- 1	W	1	f	*	52	49	0.02	
	Liverpool (Bidston)	30.42	50	W	1	0	30.46	+ 0.7	47	46	- 3	W	1	od	2	51	47	0.03	
	Holyhead ...	30.44	51	2	0	og	30.45	+ 0.3	49	48	- 2	2	0	ogm	0	54	48	0.02	
	Parsonstown ...	30.45	49	2	0	0	30.42	- 0.5	46	45	- 2	2	0	0	*	50	45	0.01	
	Valencia ...	30.45	49	ESE	1	om	30.38	- 1.1	49	48	+ 1	ESE	1	ov	1	50	46	.	
FRANCE AND NETHERLANDS.	Roche's Point...	30.46	50	2	1	0	30.40	- 0.8	51	50	+ 2	SE	3	r	3	51	48	0.01	
	Pembroke (St. Ann's Hd.)	30.43	50	2	2	c	30.44	- 0.1	50	49	0	ESE	3	og	2	52	49	.	
	Scilly ...	30.40	52	2	0	0	30.35	- 0.9	58	50	+ 1	ESE	4	og	3	53	50	.	
	Prawle Point ...	30.41	50	2	0	0	30.41	- 0.4	52	51	+ 4	ENE	4	og	3	52	47	.	
	Jersey (St. Aubin's)	30.39	53	2	0	om	30.41	- 0.2	52	50	- 1	E	3	om	3	54	50	.	
	Hurst Castle ...	30.49	51	W	2	c	30.44	+ 0.2	51	51	0	ENE	1	om	0	55	47	.	
	Dungeness ...	30.32	47	W	2	m	30.39	+ 0.4	51	50	+ 1	ENE	3	2	2	52	44	0.01	
	London ...	30.36	52	W	1	c	30.44	+ 0.6	52	51	+ 2	NE	1	og f	*	54	49	.	
	Oxford ...	30.42	50	W	1	0	30.46	+ 0.6	49	48	0	W	1	ogm	*	54	49	.	
	Cambridge ...	30.40	50	2	0	0	30.46	+ 0.9	50	49	0	2	0	0	*	59	48	.	
PENINSULA.	Yarmouth ...	30.31	52	W	2	c	30.41	+ 1.1	49	48	0	NE	2	c f	3	54	48	0.01	
	Cuxhaven ...	30.27	45	E	3	c	30.43	+ 2.7	48	47	+ 1	W	1	m	*	48	45	.	
	Berlin ...	30.20	41	2	0	b	30.39	+ 2.6	32	32	- 6	SW	2	b	*	?	30	0.04	
	Wiesbaden ...	?	*	*	*	*	30.37	+ 0.8	44	41	+ 2	2	1	c	*	62	?	0.04	
	Munich ...	30.23	40	W	3	r	30.34	+ 0.6	38	37	0	ENE	3	r	*	43	37	0.51	
	The Helder ...	30.26	49	2	0	0	30.41	+ 1.9	45	43	- 5	E	1	c	1	52	45	0.04	
	Brussels (9 a.m.)	?	50	2	3	b	30.39	+ 0.4	47	46	- 4	ENE	1	0	*	53	47	0.04	
	Cape Gris Nez	?	50	2	3	b	?	?	51	50	- 1	ENE	3	r	3	55	50	0.04	
	Paris ...	30.36	51	2	0	0	30.38	+ 0.1	48	47	- 2	2	1	0	*	53	48	.	
	Brest ...	?	52	2	0	0	?	?	53	48	+ 3	SE	3	0	3	59	46	.	
PENINSULA.	Lorient ...	30.38	52	NE	3	0	30.33	- 0.8	52	48	+ 1	ENE	3	0	2	54	50	.	
	Rochefort ...	30.34	53	ENE	4	0	30.31	- 1.0	50	49	- 1	NE	4	b	2	55	45	.	
	Belfort ...	30.24	47	W	1	c	30.26	+ 0.2	40	38	- 3	SE	1	c	*	54	37	.	
	Lyons ...	30.28	51	2	0	0	30.25	- 0.4	48	46	- 1	2	2	bc	*	55	47	.	
	Nice ...	30.01	56	E	4	b	30.04	+ 0.4	52	46	+ 1	E	1	b	1	63	48	.	
PENINSULA.	Perpignan ...	30.12	53	2	1	b	30.13	+ 0.2	41	40	- 13	SW	1	b	*	62	40	.	
	Biarritz ...	30.28	48	E	2	0	30.19	- 1.5	48	46	+ 1	E	3	0	2	50	43	.	
	Corunna ...	?	*	*	*	*	?	?	?	?	?	?	?	?	?	?	?	.	
Lisbon ...	30.05	62	ENE	3	b	30.07	- 0.6	50	48	- 2	ENE	4	b	2	68	50	.		

For Explanation of Columns, see bottom of p 4.

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



# WEATHER CHARTS

for 8 a.m. on

Monday, 11<sup>th</sup> November,

1889.

## BAROMETER, WIND AND SEA.

### EXPLANATION OF MAP.

**BAROMETER**—Isobars are drawn for each tenth of an inch.

Changes since previous morning are stated in words.

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

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

**SEA DISTURBANCE**—Where considerable, is shown thus:

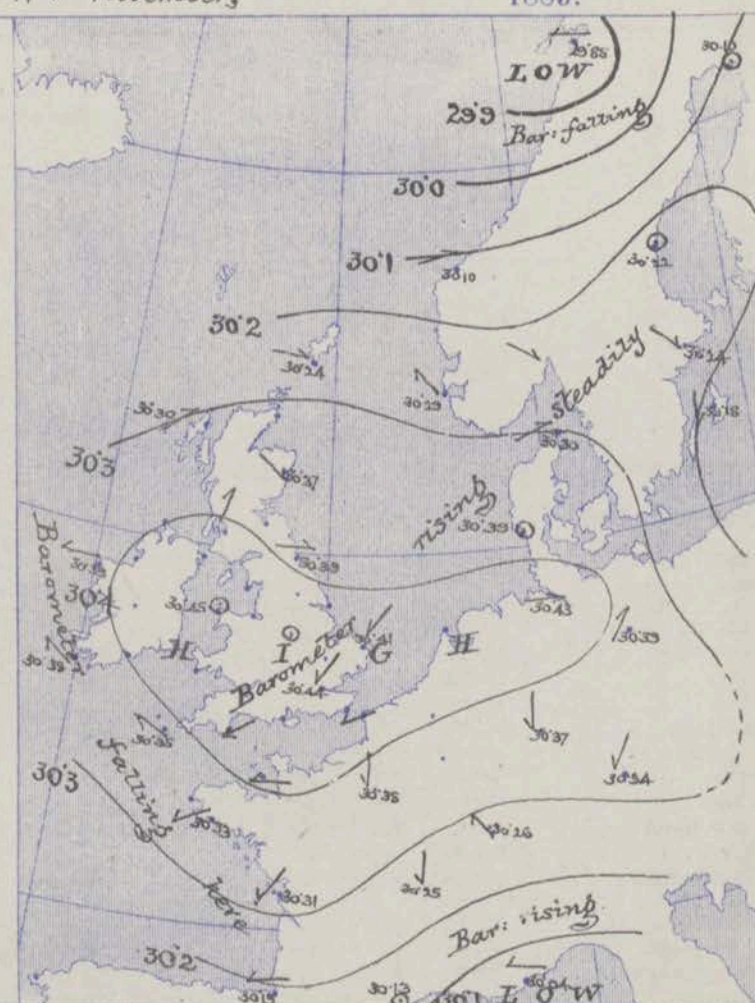
⚡ = Rough. ⚡ = High.

## MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of November.

During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS.
Sumburgh Head .....	29.687
Stornoway .....	29.707
Wick .....	29.726
Nairn .....	29.743
Aberdeen .....	29.756
Leith .....	29.793
Shields .....	29.815
York .....	29.844
Loughborough .....	29.876
Ardrossan .....	29.795
Donaghadee .....	29.811
Holyhead .....	29.835
Liverpool .....	29.852
Parsonstown .....	29.848
Valencia .....	29.864
Roche's Point .....	29.864
Pembroke .....	29.862
Scilly .....	29.898
Jersey .....	29.923
Hurst Castle .....	29.898
Dover .....	29.893
LONDON .....	29.897
Oxford .....	29.893
Cambridge .....	29.885
Yarmouth .....	29.863



## 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.

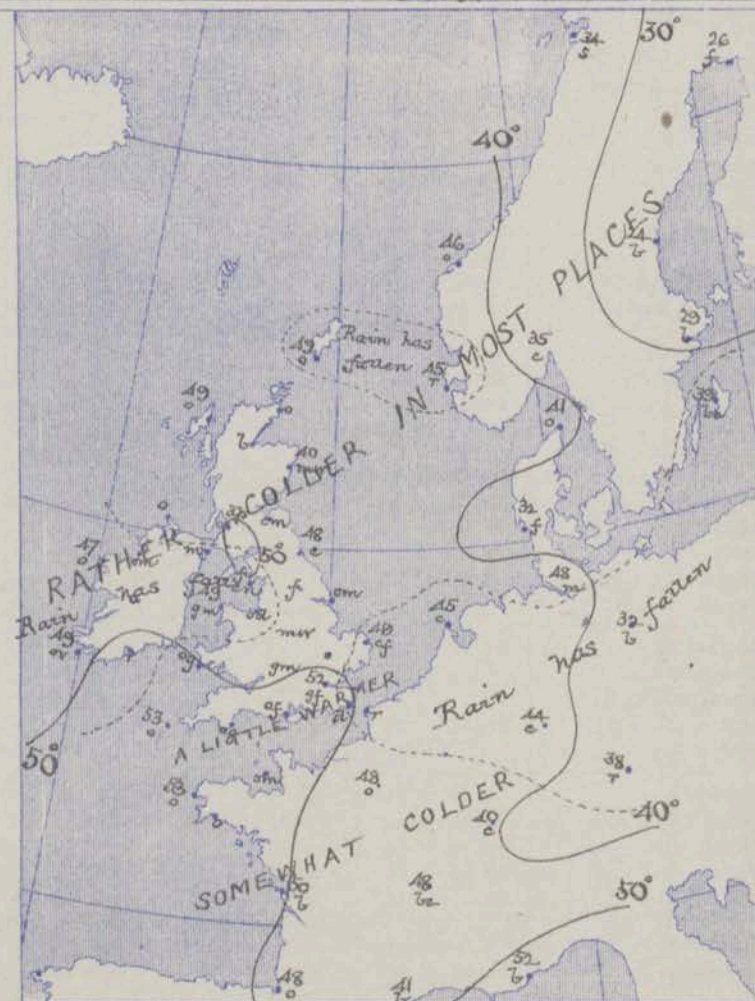
**RAINFALL**—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

## MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of November.)

STATIONS.	TEMPERATURE.				RAINFALL. (Inches.)
	Daily Max.	Daily Min.	at 8 a.m.		
			Dry.	Wet.	
Sumburgh Head.....	45.8	37.4	41.5	39.8	4.24
Stornoway .....	45.7	36.7	41.0	39.9	4.60
Wick .....	45.7	35.7	40.9	39.3	2.97
Nairn .....	44.7	35.5	39.1	37.5	2.32
Aberdeen .....	46.1	36.3	40.3	38.5	3.16
Leith .....	48.2	36.7	41.2	39.6	2.11
Shields .....	47.1	38.1	41.8	40.2	2.63
York .....	47.7	36.1	40.3	39.0	2.21
Loughborough .....	48.0	36.4	40.2	38.9	2.30
Ardrossan .....	47.7	38.9	42.6	40.8	3.92
Donaghadee.....	48.2	39.2	42.9	41.7	3.13
Holyhead.....	49.7	42.8	45.5	43.8	3.71
Liverpool .....	47.7	39.6	42.1	40.4	2.87
Parsonstown .....	49.1	36.9	41.7	40.0	2.84
Valencia .....	52.4	42.7	47.2	45.2	5.50
Roche's Point .....	51.1	41.8	45.9	44.3	4.56
Pembroke.....	50.2	43.7	46.7	44.7	3.96
Scilly .....	52.5	46.7	50.0	48.0	3.76
Jersey .....	51.9	44.2	47.5	45.6	4.24
Hurst Castle .....	50.5	40.3	44.6	43.6	2.98
Dover .....	49.1	40.7	44.0	42.4	3.56
LONDON .....	49.6	37.9	42.0	40.5	2.14
Oxford .....	48.6	37.6	41.0	39.7	2.30
Cambridge .....	48.8	35.7	40.3	39.5	2.02
Yarmouth .....	47.5	39.1	42.9	41.8	3.15

NOTE.—The Temperature means are for the 15 years 1871-85, the Rainfall means are mainly those for the 20 years 1860-85.





## GENERAL SITUATION AT 8 A.M.

PRESSURE	Highest, 30.4 in. and upwards, in an anticyclone <sup>lying</sup> over England, the east of Ireland, the Netherlands and the north of France. Lowest, 29.9 in. and less, in a depression lying off the northwest of Norway; 30.1 in. and less, over the southern part of France and Spain. Gradient slight. Barometer falling in the west and southwest of our Islands and the west of France, as well as in the west of Norway, but rising elsewhere.
TEMPERATURE	Highest, 53° at Sully and Brest, 52° at Roscoff, Jersey, Lorient, Nice, and in London, and 51° at Rocher Point, Hurst Castle and (Dungeness). Lowest, 24° at Helsingfors, 26° at Haparanda, 29° at Stockholm, 32° at Tams and Berlin, 34° at Rode, and 35° at Faerder. During yesterday, the thermometer rose to 58° at Kinn, Leith, and Loughborough, 59° at Aberdeen, Shields and Farnley and 60° at York.
WIND	Light or moderate from the E <sup>nd</sup> (SE to NE) over the west and south of our Islands and the west of France. Light from the W <sup>nd</sup> on the northeast coast of Great Britain and also on the eastern shore of the North Sea. Variable over Germany and east of France, calm in the north of Sweden.
WEATHER	Fair on the northeast coasts of Great Britain, as well as in Sweden, Germany, and south of France. Dull elsewhere, with fog or mist in many places and rain at Rocher Point, Gairney and Munich. Slight rain fell yesterday at some of our western stations.
SEA	Slight or smooth generally.

### PROBABLE CHANGES IN SYSTEM NOW PREVALENT

As the anticyclone moves eastwards the wind on our west and southwest coasts will probably freshen from the south-eastward, and the weather become increasingly unsettled. No other change is indicated at present.

## FORECASTS

For the 24 hours ending at NOON on 12<sup>th</sup> Nov<sup>r</sup> 1889.

### DISTRICTS.

### FORECASTS.

0 { SCOTLAND NORTH	Light breezes, chiefly SW <sup>ly</sup> ; fair generally
1 { SCOTLAND EAST	Light Variable breezes; fair generally but local fogs.
2 { ENGLAND N.E.	
3 { ENGLAND EAST	E <sup>ly</sup> Winds, light or moderate; dull, misty, slight rain locally.
4 { MIDLAND COUNTIES	
5 { ENGLAND SOUTH	



### DISTRICTS.

### FORECASTS

6 { SCOTLAND WEST	Variable breezes, finally SE <sup>ly</sup> ; dull, misty, slight rain locally.
7 { ENGLAND N.W.	
8 { ENGLAND S.W.	E <sup>ly</sup> and SE <sup>ly</sup> winds, freshening; dull, some rain.
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:	Ther:		Wind		Wea:	Sea		Bar:	Ther:		Wind		Wea:	Sea:
		D	W	D	F					D	W	D	F		
Skudesnaes ...	30.24	50	44	2	0	c	3	Holyhead ...	30.45	53	51	1W	2	c	2
Sumburgh Head ...								Valencia ...							
Stornoway ...	30.25	54	53	W	2	bc	3	Scilly ...							
Aberdeen ...								Jersey ...	30.44	54	51	1W	2	0	2
Shields ...								Dungeness ...	30.33	51	48	1W	2	m	1
Ardrossan ...								London ...							
Malin Head ...	30.38	50	50	WSW	4	0	3	Yarmouth ...							
Mullaghmore ...								Rochefort ...	30.37	54	52	1W	3	0	2
Belmullet ...	30.43	53	52	WSW	1	bc	0								

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

The reports for yesterday morning showed that pressure continued highest, (30.3 ins. to 30.5 ins.) over the British Islands and western Europe, while it was lowest, as follows — about 29.5 ins. over the northern half of Russia, rather below 30.0 ins. over the northern parts of the Mediterranean and Italy, and 30.1 ins. and less, over the Shetland Isles and off the west of Norway. The wind was light or moderate everywhere — W<sup>2</sup> and NW<sup>2</sup> over the United Kingdom, E<sup>2</sup> in Norway, NE<sup>2</sup> over the Bay of Biscay and Spain, NE<sup>2</sup> and E<sup>2</sup> over the south of France, and NW<sup>2</sup> to W<sup>2</sup> over the southern parts of the Mediterranean. It was N<sup>2</sup> over Finland and the Baltic, and drew round into NW. over Poland, Germany and Austria, and into W. over the south of Russia. Weather was fair as a whole over the greater part of the United Kingdom, but dull in many places, with damp fogs locally. Over all the northwestern, central and eastern parts of the Continent it was cloudy or overcast, with fog or rain in a few places, snow at Archangel. Over the northern parts of Scandinavia, however, and in the northeast and east of our Islands, as well as over Spain and the Mediterranean it was fine and bright. Rain had fallen in several parts of southern and eastern Europe since the previous day, and a little at some of the northwestern stations. Temperature remained high in the northwest and west, the highest morning values were 60° to 63° at some of the Mediterranean stations, 59° at Corunna, 58° at Barcelona and Lesina, 54° at Nice and Leghorn, 53° at Aberdeen, 52° at Scilly and Ardrossan, 51° at Ullick, Holyhead and Hurst Castle, 50° at Paris & in London; the lowest were 27° at Nyaranda and Uleaborg, 29° at Archangel, Hernisand and St. Petersburg, 30° at Kuopio, 34° at Moscow, 38° at Breslau, Munich and Nicolaieff, 40° at Lisbon.

Very little change occurred over the British Islands later.

### SUMMARY OF CHANGES IN THE WEATHER OVER THE BRITISH ISLANDS AND THEIR NEIGHBOURHOOD FROM THE 3<sup>RD</sup> TO THE 9<sup>TH</sup> NOV. 1889.

In the course of this week the weather over the British Islands has been of a very different character from that of several preceding weeks. On Monday some shallow and badly developed depressions, which had travelled across the Kingdom on the previous day, were jelling up over the North Sea and the western parts of Scandinavia, and some other unimportant disturbances advanced — one towards our western coasts, and the other over France on Monday night. The barometer then rose generally and decidedly, first in the southwest and afterwards over the remainder of our Islands, and a large high-pressure system was formed over the Bay of Biscay and France, and subsequently spread northwards over Ireland and England, while the only depression which appeared passed over Norway and Sweden to the Baltic. Temperature varied a good deal from time to time, the morning readings recorded inland on Tuesday and Wednesday being decidedly low. The thermometer then rose on Thursday the daily maxima over the northern parts of St. Britain varied from 58° to 62°, 60° was recorded at Cambridge, and 59° at Liverpool. On Friday the Scotch maxima were less high, but readings were recorded as high as 61° at Cambridge, 60° at Prawle Point, 59° at Oxford and Hurst Castle, and 58° at Donaghadee and in London. The air has been damp and misty, or foggy during most of the week, but the rainfall slight. Lunar halos and Rainbows have been seen at times both in our Islands and on the Continent.

### 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, 12<sup>th</sup> November, 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.				
				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.)		Weather.	Max.	Min.	Amount of Rainfall.	
SCANDINAVIA.	Haparanda ...	29.89	31	SW	2	bc	29.88	- .22	28	27	+ 2	Z	0	bc	*	?	?	-	
	Hernösand ...	30.13	31	Z	0	b	29.95	- .27	39	37	+ 15	Z	0	o	*	?	?	-	
	Stockholm ...	30.30	30	Z	0	b	30.27	+ .03	33	32	+ 4	W	2	o	*	36	27	-	
	Wisby ...	30.25	39	NW	4	b	30.27	+ .09	41	39	+ 2	NW	4	o	*	41	36	-	
	Bodö ...	29.84	46	WSW	8	r	30.02	+ .17	42	40	+ 8	W	2	e	1	46	?	0.12	
	Christiansund	30.20	48	WSW	7	c	30.13	+ .03	50	47	+ 4	SW	5	e	5	50	45	-	
	Skudesnaes ...	30.36	45	Z	0	o	30.34	+ .05	46	45	+ 1	ESE	4	o	3	46	43	-	
	Christiania Fjord (Færder)	30.28	37	N	2	b	30.33	+ .08	33	33	- 2	NNE	2	f	1	37	32	-	
	Skagen (The Scaw)	30.30	43	Z	0	o	30.30	- .00	41	41	0	WSW	1	f	0	43	37	0.08	
	Fanö ...	30.36	47	WSW	2	r	30.38	- .01	46	46	+ 44	W	4	o	*	48	32	0.12	
BRITISH ISLANDS.	Sumburgh Head	30.27	48	W	1	o	30.12	- .12	48	47	- 1	W	1	o	2	51	46	0.02	
	Stornoway ...	30.25	50	SW	4	o	30.10	- .20	51	50	+ 2	SW	5	o	5	52	47	0.04	
	Wick ...	30.30	46	Z	0	b	30.16	- .17	45	44	- 5	Z	0	c	0	55	42	-	
	Nairn ...	30.29	47	W	1	bc	30.16	- .18	51	48	+ 5	WSW	3	o	1	55	40	-	
	Aberdeen ...	30.35	47	ESE	1	bmw	30.24	- .13	48	46	+ 8	S	1	e	1	52	40	-	
	Leith ...	30.36	48	W	1	c	30.29	- .10	52	49	+ 3	W	1	om	*	53	46	-	
	Shields ...	30.38	50	W	1	m	30.37	- .02	47	45	- 1	S	2	m	2	51	45	-	
	Spurn Head ...	30.40	50	Z	0	o	30.39	- .02	47	45	- 2	S	4	o	3	51	46	-	
	York ...	30.42	50	W	1	o	30.40	- .02	49	48	0	S	1	f	*	50	47	-	
	Loughborough	30.43	51	ESE	1	o	30.40	- .05	46	44	- 3	ESE	2	f	*	52	45	-	
GERMANY.	Ardrossan ...	30.56	50	S	1	o	30.29	- .12	51	50	+ 1	S	3	o	2	51	48	0.03	
	Malin Head ...	30.30	45	S	4	odf	30.23	- .17	50	49	+ 1	S	4	om	1	50	45	-	
	Mullaghmore ...	30.32	48	NW	2	o	30.24	- .17	51	49	+ 4	S	5	ogm	3	?	46	-	
	Belmullet ...	30.29	49	S	2	o	30.23	- .16	50	49	+ 3	SW	1	ogm	*	51	46	0.03	
	Donaghadee ...	30.38	47	SW	2	m	30.31	- .13	51	50	+ 3	S	2	m	0	51	47	0.02	
	Barrow-in-Furness	30.39	48	NW	2	r	30.34	- .05	49	48	- 1	ESE	2	fd	*	50	46	0.05	
	Liverpool (Bidston)	30.42	47	SSW	1	o	30.37	- .09	49	48	+ 2	SE	1	o	2	50	46	-	
	Holyhead ...	30.41	48	Z	0	ogm	30.34	- .11	51	50	+ 2	Z	0	ogm	0	51	48	0.01	
	Parsonstown ...	30.34	50	Z	0	o	30.32	- .10	50	48	+ 4	Z	0	o	*	51	45	-	
	Valencia ...	30.28	51	SE	3	og	30.22	- .16	51	49	+ 2	ESE	3	o	2	51	48	0.04	
FRANCE AND NETHERLANDS.	Roche's Point...	30.32	52	SE	4	rm	30.26	- .14	52	51	+ 1	SE	4	o	4	52	50	0.02	
	Pembroke (St. Ann's Hd.)	30.37	52	ESE	3	m	30.32	- .12	50	49	0	ESE	4	cg	3	53	50	-	
	Scilly ...	30.29	53	ESE	5	o	30.24	- .11	51	48	- 2	ESE	4	o	4	54	50	-	
	Prawle Point ...	30.36	52	E	4	o	30.31	- .10	49	46	- 3	E	4	og	3	52	48	-	
	Jersey (St. Aubin's)	30.34	53	ESE	3	c	30.31	- .10	47	45	- 5	E	4	bm	3	54	46	-	
	Hurst Castle ...	30.39	53	ESE	2	m	30.36	- .08	47	46	- 4	E	4	bcm	1	54	46	-	
	Dungeness ...	30.37	51	E	3	o	30.39	- .00	43	41	- 8	SE	3	cg	2	53	42	-	
	London ...	30.38	51	NE	1	o	30.40	- .04	41	40	- 11	ESE	1	og	*	55	39	-	
	Oxford ...	30.42	51	NW	2	o	30.40	- .06	43	41	- 6	E	1	e	*	52	43	-	
	Cambridge ...	30.44	50	Z	0	o	30.42	- .04	39	39	- 11	Z	0	b	*	53	38	-	
PENIN- SULA.	Yarmouth ...	30.42	48	Z	0	c	30.42	+ .01	46	45	- 3	SE	3	b	3	51	43	0.02	
	Cuxhaven ...	30.46	40	SW	1	f	30.45	+ .02	40	39	- 8	SW	2	o	*	?	39	-	
	Berlin ...	30.47	40	Z	0	o	30.53	+ .14	35	35	+ 3	W	2	o	*	43	?	-	
	Wiesbaden ...	*	*	*	*	*	30.48	+ .11	35	33	- 9	NE	2	b	*	50	34	-	
	Munich ...	30.40	38	NE	2	o	30.45	+ .11	28	26	- 10	E	5	b	*	43	27	0.04	
	The Helder ...	30.46	41	SE	1	f	30.48	+ .07	38	38	- 7	ESE	1	f	1	46	37	-	
	Brussels (9 a.m.)	*	*	*	*	*	30.45	+ .06	33	32	- 14	ESE	1	b	*	48	31	-	
	Cape Gris Nez	?	47	E	4	o	?	?	39	37	- 12	ESE	3	m	2	54	37	0.04	
	Paris ...	30.35	48	NE	2	o	30.35	- .03	38	32	- 15	NE	2	b	*	52	32	-	
	Brest ...	?	51	ESE	3	o	?	?	48	47	- 5	E	2	o	3	57	46	0.04	

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

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



# WEATHER CHARTS

for 8 a.m. on Tuesday, 12<sup>th</sup> November.

1889.

## BAROMETER, WIND AND SEA.

### EXPLANATION OF MAP.

**BAROMETER**—Isobars are drawn for each tenth of an inch.

Changes since previous morning are stated in words.

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

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

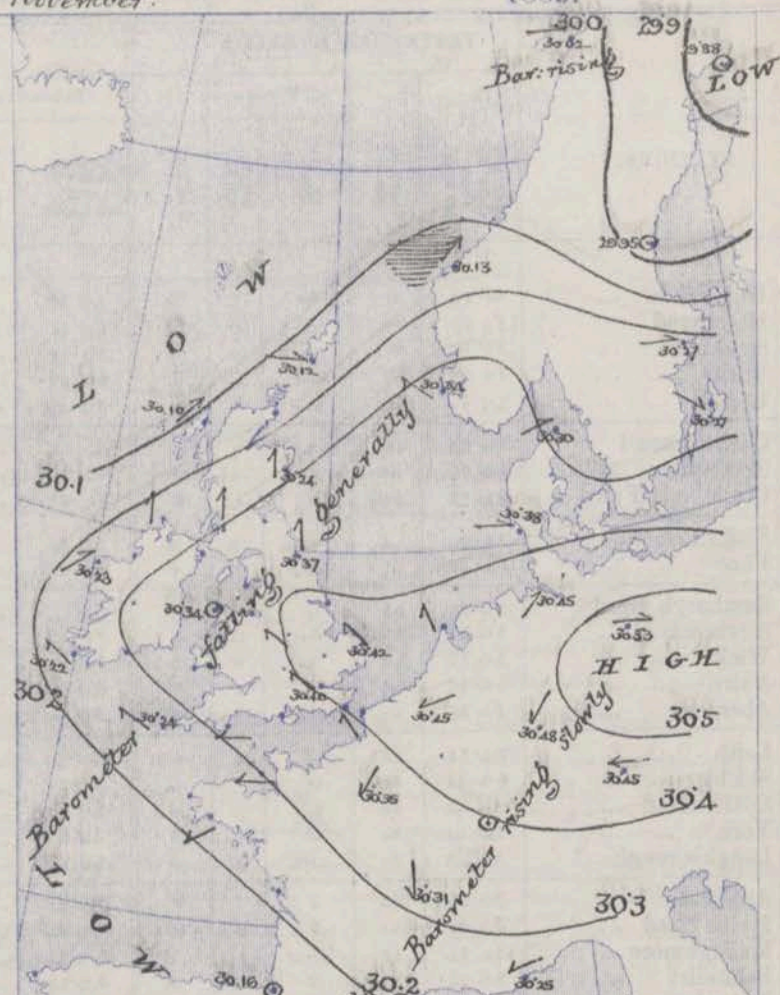
**SEA DISTURBANCE**—Where considerable, is shown thus:

— Rough. — High.

## MEAN HEIGHT OF THE BAROMETER

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

STATIONS.	MEAN READINGS.
Sumburgh Head .....	29.687
Stornoway .....	29.707
Wick .....	29.726
Nairn .....	29.743
Aberdeen .....	29.756
Leith .....	29.793
Shields .....	29.815
York .....	29.844
Loughborough .....	29.876
Ardrossan .....	29.795
Donaghadee .....	29.811
Holyhead .....	29.835
Liverpool .....	29.852
Parsonstown .....	29.848
Valencia .....	29.864
Roche's Point .....	29.864
Pembroke .....	29.862
Scilly .....	29.898
Jersey .....	29.923
Hurst Castle .....	29.898
Dover .....	29.893
LONDON .....	29.897
Oxford .....	29.893
Cambridge .....	29.885
Yarmouth .....	29.863



## 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.

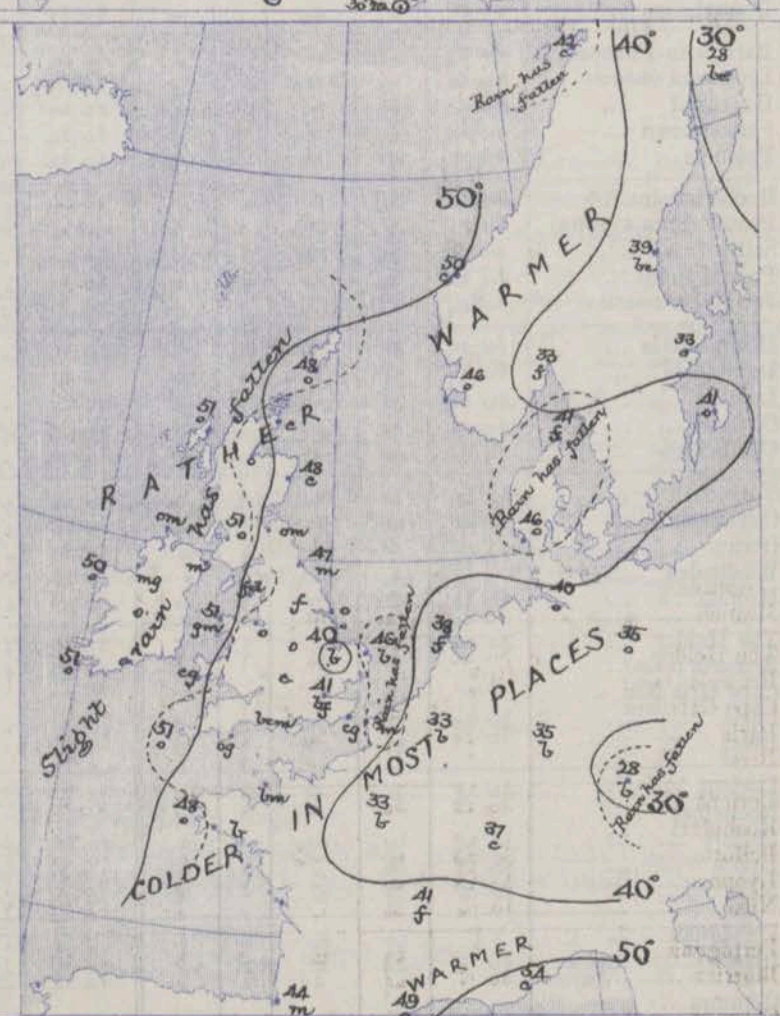
**RAINFALL**—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

### MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of November.)

STATIONS.	TEMPERATURE.				RAINFALL (Inches.)
	Daily Max.	Daily Min.	at 8 a.m.		
			Dry.	Wet.	
Sumburgh Head.....	45.3	37.4	41.5	39.8	4.24
Stornoway .....	45.7	36.7	41.0	39.9	4.60
Wick .....	45.7	35.7	40.9	39.3	2.97
Nairn .....	44.7	35.5	39.1	37.5	2.32
Aberdeen .....	46.1	36.3	40.3	38.5	3.16
Leith.....	48.2	36.7	41.2	39.6	2.11
Shields .....	47.1	38.1	41.8	40.2	2.63
York .....	47.7	36.1	40.3	39.0	2.21
Loughborough .....	48.0	36.4	40.2	38.9	2.30
Ardrossan .....	47.7	38.9	42.6	40.8	3.92
Donaghadee.....	48.2	39.2	42.9	41.7	3.13
Holyhead .....	49.7	42.8	45.5	43.8	3.71
Liverpool .....	47.7	39.6	42.1	40.4	2.87
Parsonstown .....	49.1	36.9	41.7	40.0	2.84
Valencia .....	52.4	42.7	47.2	45.2	5.50
Roche's Point .....	51.1	41.8	45.9	44.3	4.56
Pembroke .....	50.2	43.7	46.7	44.7	3.96
Scilly .....	52.5	46.7	50.0	48.0	3.76
Jersey .....	51.9	44.2	47.5	45.6	4.24
Hurst Castle .....	50.5	40.3	44.6	43.6	2.98
Dover .....	49.1	40.7	43.0	42.4	3.58
LONDON .....	49.6	37.9	42.0	40.5	2.11
Oxford .....	48.6	37.6	41.0	39.7	2.30
Cambridge .....	48.8	35.7	40.3	39.5	2.02
Yarmouth .....	47.5	39.1	42.9	41.8	3.15

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 over Germany.

Lowest, 29.9 in: and less, in the north of Sweden; 30.1 in: and less, in Portugal.

Gradients slight. Barometer rising in Denmark, Germany, and the east and south of France, but falling elsewhere.

## TEMPERATURE

Highest, 54° at Nice, 52° at Leith, Rotherhithe and Ladbroke, and 51° at Hornsey, Hain, Andover, Hull, Plymouth, Donaghadee, Holyhead, Valencia, and Sully.

Lowest, 28° at Haparanda and Umeå, 33° at Stockholm, Lander, Rouen, and Paris, and 35° at Berlin and Neubaden.

Slight ground frost was experienced in London early this morning.

## WIND

Light or moderate from the E. over the south of England and the greater part of France; S. or SW. in the north of our Islands. Calm in the north of Sweden, W. over Denmark, North Germany, and the south of Sweden; variable in the east of France.

## WEATHER

Fine in the southeast of England, as well as in France, the Netherlands, South Germany, and the northern parts of Scandinavia. Cloudy or overcast elsewhere, with fog at some of the English stations, as well as at Lander, Skagen, the Helles, and Lyons. Slight rain fell yesterday at some of our western and extreme northern stations.

## SEA

Rather rough at Christiansund and Hornsey and moderate on our southwest coasts, but slight or smooth elsewhere.

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The barometric fall is now greatest in the north and some depressions are apparently beginning to skirt the Scotch coast. S. and SW. winds are therefore likely to extend gradually to most parts of the United Kingdom, and on our northern coasts they will probably freshen somewhat with unsettled weather.

## FORECASTS

For the 24 hours ending at NOON on 13<sup>th</sup> Nov<sup>r</sup>

1889.

### DISTRICTS.

### FORECASTS.

0	SCOTLAND NORTH	SW <sup>2</sup> winds, freshening; drizzle, some rain.
1	SCOTLAND EAST	S <sup>2</sup> and SW <sup>2</sup> winds, moderate; fair generally but mist or fog locally.
2	ENGLAND N.E.	
3	ENGLAND EAST	E <sup>2</sup> and SE <sup>2</sup> winds, light; fair generally, frosty and foggy at night.
4	MIDLAND COUNTIES	
5	ENGLAND SOUTH	

### DISTRICTS.

### FORECASTS

6	SCOTLAND WEST	SE <sup>2</sup> and S <sup>2</sup> winds, moderate; drizzle, some rain.
7	ENGLAND N.W.	
8	ENGLAND S.W.	SE <sup>2</sup> winds, moderate; fair generally.
9	IRELAND NORTH	S <sup>2</sup> winds, fresh or strong, drizzle, some rain.
10	IRELAND SOUTH	

### WARNINGS

NONE ISSUED.

No. 1.—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.

No. 2.—The North Cone, point upwards (↑), means that gales, or strong winds, are probable, at first from the Northward (from N.W. round by N. to S.E.). Should it appear likely that a gale beginning from between E. and S.E. is likely to veer towards S. or S.W., the South Cone is hoisted in preference to the North Cone.



# YESTERDAY'S 2 P.M. REPORTS.

	Bar:	Ther:		Wind		Wea:	Sea		Bar:	Ther:		Wind		Wea:	Sea:
		D	W	D	F					D	W	D	F		
Skudesnaes ...	30.32	46	45	a	2	o	3	Holyhead ...	30.42	49	49	s	2	q m	2
Sumburgh Head ...	30.26	50	50	w	1	r	3	Valencia ...	30.32	51	49	ese	3	om	3
Stornoway ...	30.27	52	51	sw	4	c	4	Scilly ...	30.32	53	51	ese	5	o	4
Aberdeen ...	30.35	51	49	s	1	c	2	Jersey ...	30.37	53	52	ene	3	o	3
Shields ...	30.38	50	48	s	2	m	2	Dungeness ...	30.37	53	51	ene	3	bc	2
Ardrossan ...	30.38	50	49	s	1	o	1	London ...	30.42	55	53	se	1	ogm	4
Malin Head ...	30.34	47	47	s	3	o	1	Yarmouth ...	30.41	51	50	zs	o	ed	3
Mullaghmore ...	30.35	48	47	w	2	om	2	Rocheport ...	30.27	55	53	ene	5	c	2
Belmullet ...	30.33	48	47	s	2	o	2								

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

The reports for yesterday morning showed that the anticyclone recently lying off our southwestern coast was moving slowly across our Islands and the north of France in a northeasterly direction, and that pressure varied from between 30.30 in. and 30.46 in. within its limits, to 29.9 in. and less, over the extreme northwest of Norway and the southern half of Russia to 29.8 in. and less over Northern Russia, and to 30.1 in. and less, both over the Mediterranean and Portugal. The wind had consequently become SE<sup>ly</sup> over the southern part of our Islands, E<sup>ly</sup> in the south and over the Bay of Biscay, NE<sup>ly</sup> to E<sup>ly</sup> over France and Northern Italy, but remained N<sup>ly</sup> to NW<sup>ly</sup> over the Baltic, Germany, and Austria. The weather was fine over the Mediterranean, the south and east of Spain, and some parts of Germany and Austria, dull and gloomy elsewhere, with fog in many parts of the United Kingdom, rain at Munich, snow at Himmelsdorf. Temperature had fallen in most places, but remained high for the time of year over the greater part of the British Isles. It exceeded 60° at Sangüinaria and over the extreme southern and eastern part of the Mediterranean only and exceeded 50° in the southwest and south of our Islands and the north of France. The highest individual values were 68° at Nemours, 62° at Algiers, 61° at Brindisi and Sangüinaria, 60° at Palermo, 58° at Scilly and Brest, 52° at Hvalsborg and in London, 50° at Anderson, and 48° at Copenhagen; the lowest were 21° at Archangel, 20° at Stockholm, 24° at Helsingfors, 26° at Haparanda, 23° at Stockholm, 30° at Krasnoyarsk and St. Petersburg, 32° at Berlin, Breslau and Himmelsdorf.

During the day the anticyclone moved eastwards towards Germany, and the wind became more S<sup>ly</sup> on our western coast though it was still moderate or light in force.

### 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 13<sup>TH</sup> NOVEMBER 1889.

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

H. H. SCOTT, Secretary.																	
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For Explanation of Columns, see bottom of p 4.

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



# WEATHER CHARTS

for 8 a.m. on Wednesday, 13<sup>th</sup> November

1889.

## BAROMETER, WIND AND SEA.

### EXPLANATION OF MAP.

**BAROMETER**—Isobars are drawn for each tenth of an inch.

Changes since previous morning are stated in words.

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

→ = forces above 10; → = forces 8 to 10;

→ = forces 5 to 7; → = forces 1 to 4.

○ = dead calm.

**SEA DISTURBANCE**—Where considerable, is shown thus:

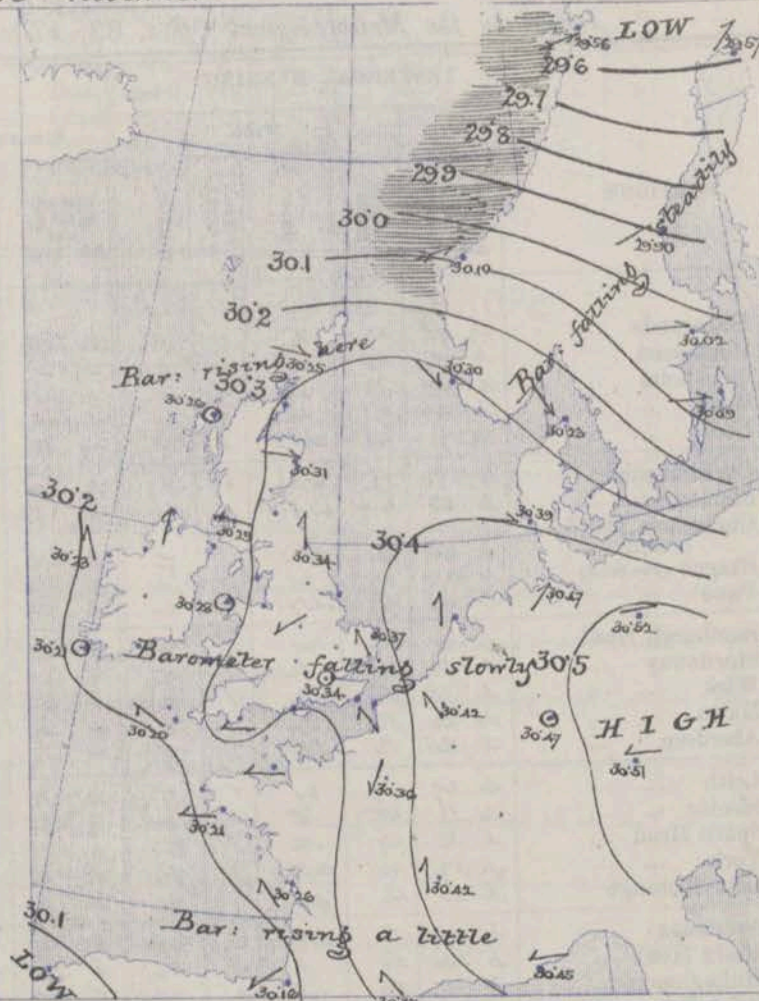
— = Rough. — = High.

## MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of November.

During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS.
Sumburgh Head .....	29.687
Stornoway .....	29.707
Wick .....	29.726
Nairn .....	29.743
Aberdeen .....	29.756
Leith .....	29.793
Shields .....	29.815
York .....	29.844
Loughborough .....	29.876
Ardrossan .....	29.795
Donaghadee .....	29.811
Holyhead .....	29.835
Liverpool .....	29.852
Parsonstown .....	29.848
Valencia .....	29.864
Roche's Point .....	29.864
Pembroke .....	29.862
Sally .....	29.898
Jersey .....	29.923
Hurst Castle .....	29.898
Dover .....	29.893
LONDON .....	29.897
Oxford .....	29.893
Cambridge .....	29.885
Yarmouth .....	29.863



## 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.

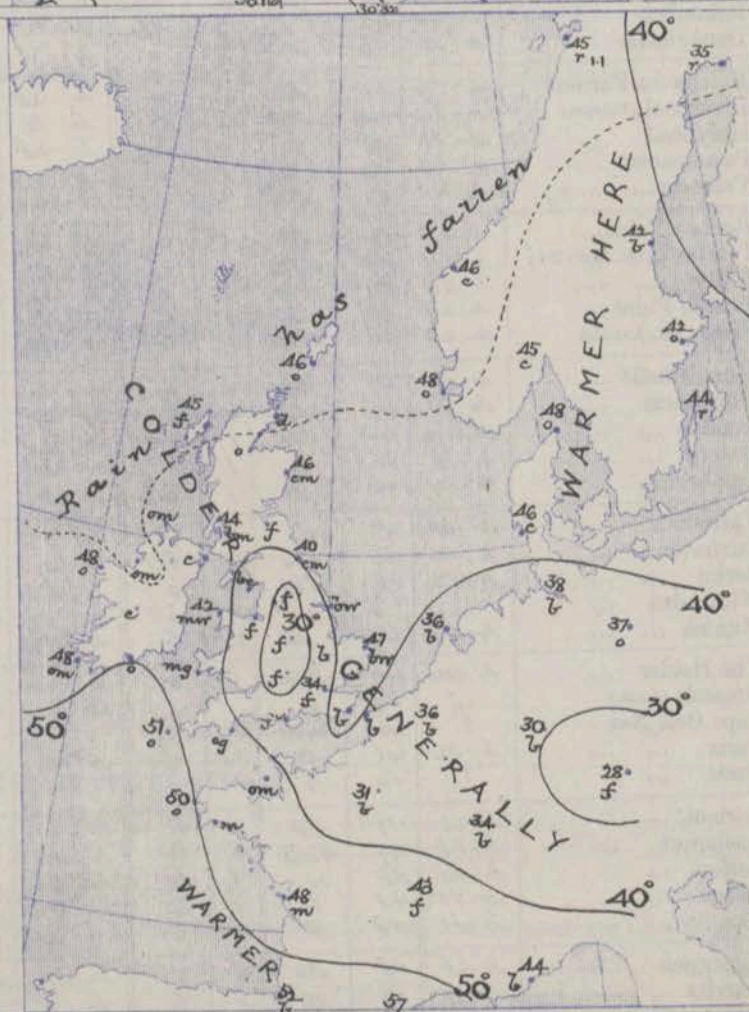
**RAINFALL**—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

### MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of November.)

STATIONS.	TEMPERATURE.				RAINFALL. (Inches.)
	Daily Max.	Daily Min.	Dry. at 8 a.m.	Wet.	
Sumburgh Head.....	45.3	37.4	41.5	39.8	4.24
Stornoway .....	45.7	36.7	41.0	39.9	4.60
Wick .....	45.7	35.7	40.9	39.3	2.97
Nairn .....	44.7	35.5	39.1	37.5	2.32
Aberdeen .....	46.1	36.3	40.3	38.5	3.16
Leith .....	48.2	36.7	41.2	39.6	2.11
Shields .....	47.1	38.1	41.8	40.2	2.63
York .....	47.7	36.1	40.3	39.0	2.21
Loughborough .....	48.0	36.4	40.2	38.9	2.30
Ardrossan .....	47.7	38.9	42.6	40.8	3.92
Donaghadee .....	48.2	39.2	42.9	41.7	3.13
Holyhead .....	49.7	42.8	45.5	43.8	3.71
Liverpool .....	47.7	39.5	42.1	40.4	2.87
Parsonstown .....	49.1	36.9	41.7	40.0	2.84
Valencia .....	52.4	42.7	47.2	45.2	5.50
Roche's Point .....	51.1	41.8	45.9	44.3	4.56
Pembroke .....	50.2	43.7	46.7	44.7	3.90
Sally .....	52.5	46.7	50.0	48.0	3.76
Jersey .....	51.9	44.2	47.5	45.6	4.24
Hurst Castle .....	50.5	40.3	44.6	43.6	2.98
Dover .....	49.1	40.7	44.0	42.4	3.56
LONDON .....	49.6	37.9	42.0	40.5	2.14
Oxford .....	48.6	37.6	41.0	39.7	2.30
Cambridge .....	48.8	35.7	40.3	39.5	2.02
Yarmouth .....	47.5	39.1	42.9	41.8	3.15

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 over Germany.  
Lowest, 29.6 in: and less, in a large depression lying over the north of Scandinavia; 30.1 in: and less, in Portugal.  
Gradients rather steep over the north of Scandinavia, but slight elsewhere.

Barometer rising in the north of Scotland and also in the south of France, but falling in most other localities.

## TEMPERATURE

Highest, 57° at Perpignan and Linton, 52° at Lissieux, 51° at Sully, 50° at Rochefort and Brest, and 48° at Mullaghmore and Howth Point.

Lowest, 27° at Loughborough, 28° at York, Oxford, and Munich, 30° at Miskaden, 31° at Paris, and 34° in London and at Belfast.

Sharp frost occurred over Central England last night, the lowest reading in the screen being 26° at Loughborough.

## WIND

Light or moderate from the E. or SE. over the greater part of Ireland, England, the Netherlands and France.

Calm or variable in Scotland; W. over Scandinavia, Denmark and North Germany, with a gale in the west of Norway.

## WEATHER

Dull over Ireland, the southeast of England and the north of Scotland, as well as at most of the Scandinavian stations, with rain at Ros, Haparanda and Umeå.  
Clear in most other localities, but foggy at many of the English stations and also at Munich and Lyons.  
Slight rain, yesterday in the extreme north of our islands and heavy rain (1.1 in) at Ros.

## SEA

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

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The large area of low pressure which lay to the northward of our islands yesterday is now passing across the north of Scandinavia. It is, however, not unlikely that a new depression will shortly begin to approach our extreme northern coast.

The anticyclone over Germany is inclined to move slowly southwards, but the general changes are at present not sufficiently decided to lead to any important alteration in the weather.

## FORECASTS

For the 24 hours ending at NOON on 14<sup>th</sup> Nov<sup>r</sup>

1889.

### DISTRICTS.

### FORECASTS.

- |   |                  |   |
|---|------------------|---|
| 0 | SCOTLAND NORTH   | Variable breezes, finally SW; dull, rain locally                          |
| 1 | SCOTLAND EAST    |   |
| 2 | ENGLAND N.E.     | Variable or S. airs; fair generally, but some mist or fog.                |
| 3 | ENGLAND EAST     |   |
| 4 | MIDLAND COUNTIES | E. and SE. winds, light; fair generally, but local fogs, frosty at night. |
| 5 | ENGLAND SOUTH    |   |

### DISTRICTS.

### FORECASTS

- |    |               |  |
|----|---------------|--|
| 6  | SCOTLAND WEST | E. winds, light; fair generally, but some fog or mist.                 |
| 7  | ENGLAND N.W.  |  |
| 8  | ENGLAND S.W.  | E. and SE. winds, moderate or fresh; dull, misty, slight rain locally. |
| 9  | IRELAND NORTH |  |
| 10 | IRELAND SOUTH |  |

### WARNINGS

NONE ISSUED.

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



# YESTERDAY'S 2 P.M. REPORTS.

	Bar:	Ther:		Wind		Wea:	Sea			Bar:	Ther:		Wind		Wea:	Sea.
		D	W	D	F						D	W	D	F		
Skudesnaes ...	30.29	49	48	S	6	of	4	Holyhead ...	...	30.32	50	48	SW	2	omg	1
Sumburgh Head ...	30.05	50	48	WSW	3	0	3	Valencia ...	...	30.21	53	50	SE	2	om	3
Stornoway ...	30.12	52	51	SW	4	0	4	Scilly ...	...	30.21	50	47	SE	3	0	3
Aberdeen ...	30.23	51	49	S	2	cm	1	Jersey ...	...	30.26	51	48	E	3	6m	3
Shields ...	30.32	51	49	S	2	m	2	Dungeness ...	...	30.34	49	45	ESE	3	6c	3
Ardrossan ...	30.28	52	51	SW	2	om	1	London ...	...	30.37	48	45	ESE	1	6m	*
Malin Head ...	30.23	51	49	S	3	om	1	Yarmouth ...	...	30.40	48	45	SE	3	0	3
Mullaghmore ...	30.24	53	50	SE	3	om	2	Rochefort ...	...	30.25	46	46	E	1	m	2
Belmullet ...	30.24	51	50	S	2	og	*									

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

The reports for yesterday morning showed that the central portion of the anticyclone which lay off our southwestern coast at the beginning of the week, and over England on Monday had reached Central Europe, and that pressure at about 8 am. ranged from between 30.4 in: and nearly 30.6 in: over Germany, Austria, and the east of France to less than 29.9 in: in a depression lying at the northern extremity of the Gulf of Bothnia, to 30.1 in: and less to the northward of Stornoway, as well as in the southwest of Spain, Greece, European Turkey, and Eastern Russia. Thus, while over the Mediterranean the wind was chiefly E<sup>ly</sup>, and over the Bay of Biscay and our southern coast SE<sup>ly</sup>, it was S<sup>ly</sup> over Scotland and the northeast of England, SW<sup>ly</sup> in the northwest of Norway, NW<sup>ly</sup> over the Baltic, and NE<sup>ly</sup> over the Adriatic (In the latter region it was strong). Over Central Europe there were very light and variable breezes reported. The weather was fine generally over Southern Europe and France, as well as over a considerable portion of the British Isles and North Sea, where, however, fog prevailed locally; elsewhere it was dull, with rain at Constantinople, snow at Kiev, and fog at Rharckor. Temperature was falling decidedly over France and the southeast of England, and was thus becoming lower than of late over Western Europe generally; the lowest morning values were 25° at Archangel, 28° at Haparanda and Munich, 29° at Uleaborg and Cracow, 30° at Nicolaieff, Moscow, and Münster, 31° at Kuspie, St Petersburg and Warsaw, and 33° at Paris and Rouen; it was, however, as high as 63° at Palermo, 62° at Algiers and Sanguinaria, 59° at Boudiri and Palma, 54° at Keri, 52° at Rochepoint, 51° at Scilly, Valencia, and Mullaghmore; in London it was 41°.

Very little change occurred over our Islands and Northwestern Europe later.

### EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

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

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

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

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



# DAILY WEATHER REPORT.

for *Thursday, 14<sup>th</sup> November, 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 2.)	SHADE TEMP.		Amount of Rainfall.		
			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.)		Weather.	Max.		Min.	
SCANDINAVIA.	Haparanda ...	29.88	34	SW	2	b	29.87	+ .30	36	35	- 2	SW	2	c	*	39	25	-
	Hernösand ...	30.21	35	NE	2	c	30.20	+ .30	36	34	- 6	20	0	bc	*	46	30	-
	Stockholm ...	30.26	36	W	2	b	30.30	+ .28	30	29	- 12	20	0	b	*	46	?	-
	Wisby ...	30.25	44	NE	4	b	30.32	+ .23	41	40	- 3	WNW	2	f	*	46	36	-
	Bodö ...	29.86	45	W	8	r	29.79	+ .23	45	43	0	WSW	9	f	6	46	41	0.24
	Christiansund	30.18	46	WSW	6	c	30.15	+ .05	47	44	+ 1	SW	4	c	6	?	43	0.16
	Skudesnaes ...	30.35	44	20	0	0	30.30	.00	46	44	- 2	SSE	4	0	4	50	?	-
	Christiania Fjord (Færder)	30.23	37	NEW	2	b	30.31	+ .15	33	33	- 12	r	2	f	1	?	?	-
	Skagen (The Scaw)	30.30	46	WNW	3	0	30.34	+ .11	45	45	- 3	WNW	3	0	3	48	45	-
	Fanö ...	30.40	44	20	0	bc	30.39	.00	37	39	- 9	ESE	2	b	*	48	36	-
BRITISH ISLANDS.	Sumburgh Head	30.21	47	20	0	0	30.14	- .11	43	43	- 3	20	0	0	2	50	42	-
	Stornoway ...	30.18	46	20	0	om	30.12	- .14	48	47	+ 3	SW	3	f	3	49	43	0.02
	Wick ...	30.22	48	20	0	b	30.14	- .16	37	36	- 8	WNW	1	c	1	50	32	0.05
	Nairn ...	30.20	45	20	0	f	30.15	- .12	41	40	- 5	W	1	f	1	50	33	-
	Aberdeen ...	30.25	42	W	1	bcmw	30.18	- .13	38	37	- 8	SW	1	0	1	53	35	-
	Leith ...	30.23	41	W	1	c	30.21	- .10	44	43	+ 7	W	1	om	*	49	35	-
	Shields ...	30.27	42	SW	2	m	30.27	- .07	45	43	+ 3	SW	2	m	2	48	37	-
	Spurn Head ...	30.29	47	S	1	bc	30.31	- .04	45	44	- 1	20	0	om	2	50	40	-
	York ...	30.31	37	SE	1	f	30.31	- .05	40	40	+ 12	ESE	1	f	*	40	29	0.01
	Loughborough	30.32	39	E	1	f	30.32	- .04	41	41	+ 14	E	1	omw	*	41	29	-
GERMANY.	Ardrossan ...	30.22	48	E	1	bcm	30.22	- .07	48	46	+ 4	WSW	1	bm	1	51	41	-
	Malin Head ...	30.20	46	S	1	om	30.19	- .06	44	41	- 4	S	3	bm	1	50	43	-
	Mullaghmore ...	30.20	48	20	0	om	30.19	- .06	47	44	- 2	ESE	2	om	3	?	45	-
	Belmullet ...	30.20	48	SSE	2	0	30.14	- .09	43	42	- 5	ESE	1	c	*	49	41	-
	Donaghadee ...	30.22	49	S	1	0	30.25	- .04	43	43	- 4	SSW	2	c	0	50	42	-
	Barrow-in-Furness	30.24	44	E	3	0	30.26	- .02	46	46	+ 9	E	2	f	*	46	37	0.02
	Liverpool (Bidston)	30.27	42	SSE	1	0	30.29	- .03	45	44	+ 8	SSE	2	0	3	46	37	0.02
	Holyhead ...	30.25	46	20	0	om	30.26	- .02	50	49	+ 8	S	1	om	1	50	42	-
	Parsonstown ...	30.22	46	20	0	0	30.19	- .05	49	47	+ 3	20	0	0	*	49	44	0.01
	Valencia ...	30.19	49	NE	1	ogm	30.13	- .08	58	52	+ 5	SSE	4	0	4	53	47	0.04
FRANCE AND NETHERLANDS.	Roche's Point...	30.20	49	SE	3	0	30.20	- .04	51	50	+ 1	SE	4	om	4	51	48	-
	Pembroke (St. Ann's Hd.)	30.24	51	SE	2	c	30.26	.00	48	48	+ 1	ESE	3	f	3	52	47	0.03
	Scilly ...	30.20	52	SE	3	0	30.21	+ .01	50	50	- 1	ESE	2	r	3	52	49	0.20
	Prawle Point ...	30.27	49	SE	2	0	30.29	- .02	52	51	+ 3	ESE	2	ogm	1	52	48	-
	Jersey (St. Aubin's)	30.28	47	SE	2	bcm	30.30	+ .03	49	48	+ 2	SE	3	om	3	52	43	-
	Hurst Castle ...	30.29	52	ESE	3	om	30.30	.00	50	50	+ 4	ESE	1	f	2	55	44	-
	Dungeness ...	30.31	49	S	3	b	30.33	.00	49	48	+ 3	S	3	m	2	51	45	-
	London ...	30.32	44	SE	1	bf	30.33	- .01	45	44	+ 11	20	0	f	*	52	34	0.01
	Oxford ...	30.33	41	20	0	0	30.33	- .01	44	44	+ 16	SE	1	f	*	44	28	-
	Cambridge ...	30.33	41	S	1	b	30.34	- .02	38	38	+ 7	20	0	f	*	52	30	-
PENINSULA.	Yarmouth ...	30.32	47	SSE	3	b	30.33	- .04	38	37	- 9	20	0	f	3	49	33	-
	Cuxhaven ...	30.46	41	SW	1	b	30.42	- .05	32	31	- 6	S	2	m	*	45	30	-
	Berlin ...	30.49	41	20	0	0	30.51	- .01	37	36	0	ESE	1	b	*	46	36	-
	Wiesbaden ...	*	*	*	*	*	30.52	+ .05	29	28	- 1	20	0	*	41	27	-	
	Munich ...	30.50	29	NE	3	f	30.55	+ .04	27	27	- 1	E	2	f	*	32	25	-
	The Helder ...	30.39	37	SE	1	b	30.38	- .06	30	29	- 6	S	1	f	1	43	30	-
	Brussels (9 a.m.)	*	43	SE	1	b	30.39	- .03	40	39	+ 4	20	0	bc	*	47	?	-
	Cape Gris Nez	?	43	SE	1	b	?	?	46	43	+ 10	S	2	b	2	50	?	-
	Paris ...	30.35	46	SE	2	b	30.34	+ .03	40	39	+ 9	SE	1	0	*	53	?	-
	Brest ...	?	50	20	0	0	?	?	51	50	+ 1	RSE	2	0	3	57	46	0.08
PENINSULA.	Lorient ...	30.25	50	E	2	0	30.24	+ .03	51	51	+ 10	ESE	3	f	2	?	41	-
	Rocheport ...	30.29	50	SE	3	b	30.34	+ .08	48	48	0	SE	4	f	3	55	43	-
	Belfort ...	30.38	39	E	1	b	30.45	+ .05	37	34	+ 3	WNW	1	c	*	51	32	-
	Lyons ...	30.43	50	S	2	b	30.49	+ .07	40	39	- 3	ESE	1	b	*	56	?	-
	Nice ...	30.48	51	NE	4	c	30.52	+ .07	42	39	- 2	ESE	4	b	1	55	39	-
	Perpignan ...	30.38	57	SE	3	c	30.38	+ .06	56	56	- 1	SE	3	c	*	62	54	0.12
	Biarritz ...	30.22	58	E	3	b	30.23	+ .07	49	46	- 3	SE	4	b	1	70	46	-
	Corunna ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	-
	Lisbon ...	30.02	58	NE	4	r	30.04	- .01	54	53	- 3	NE	5	r	4	59	54	0.28

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

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



# WEATHER CHARTS

for 8 a.m. on

Thursday, 14<sup>th</sup> November.

1889.

## BAROMETER, WIND AND SEA.

### EXPLANATION OF MAP.

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

**WIND**—Arrows show the prevalent winds. They fly with the wind and their bars 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:

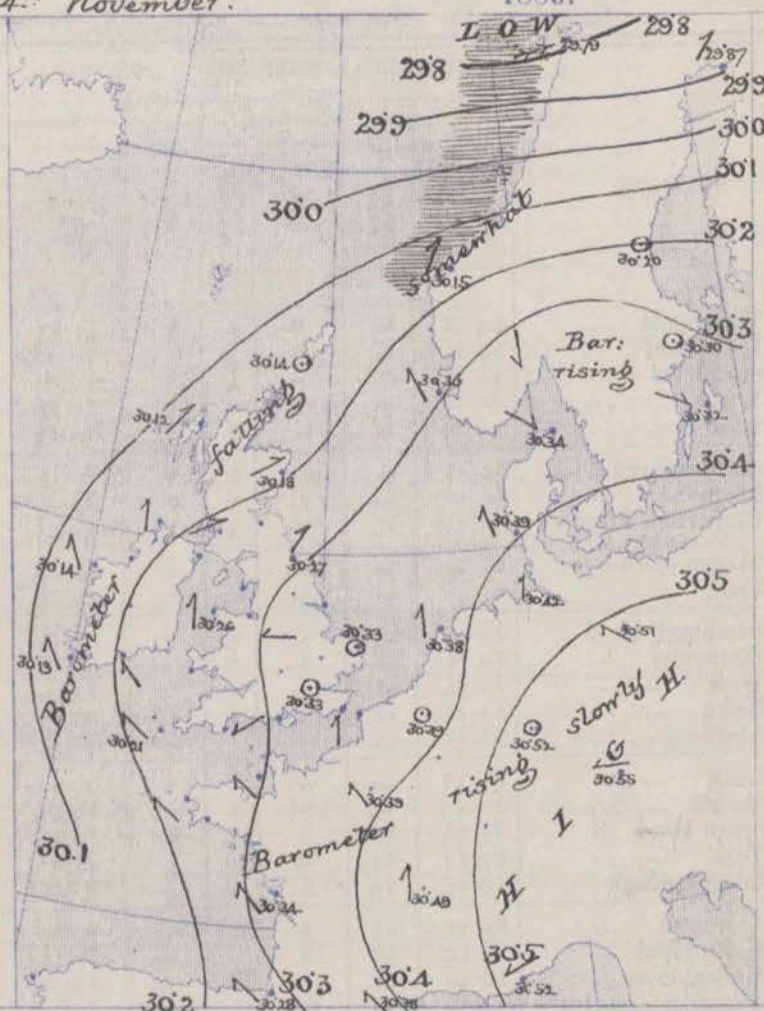
— Rough. — High.

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at 8.0 a.m. for the month of November.

During the 15 Years: 1871—1885.

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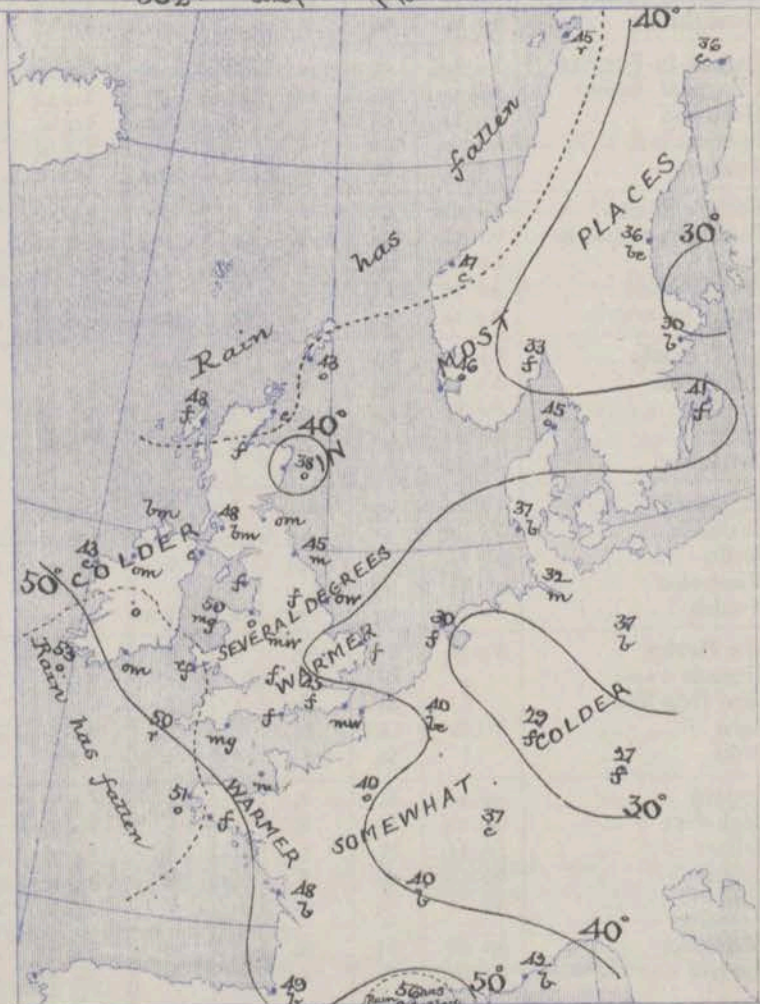
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(For the month of November.)

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Aberdeen .....	46.1	36.3	40.3	38.5	3.16
Leith.....	48.2	36.7	41.2	39.6	2.11
Shields .....	47.1	38.1	41.8	40.2	2.63
York .....	47.7	36.1	40.3	39.0	2.21
Loughborough .....	48.0	36.4	40.2	38.9	2.30
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Valencia .....	52.4	42.7	47.2	45.2	5.50
Roche's Point .....	51.1	41.8	45.9	44.3	4.56
Pembroke.....	50.2	43.7	46.7	44.7	3.96
Scilly .....	52.5	46.7	50.0	48.0	3.76
Jersey .....	51.9	44.2	47.5	45.6	4.24
Hurst Castle .....	50.5	40.3	44.6	43.6	2.98
Dover .....	49.1	40.7	44.0	42.4	3.56
LONDON .....	49.6	37.9	42.0	40.5	2.14
Oxford .....	48.6	37.6	41.0	39.7	2.30
Cambridge .....	48.8	35.7	40.3	39.5	2.02
Yarmouth .....	47.5	39.1	42.9	41.8	3.15

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





# GENERAL SITUATION AT 8 A.M.

## PRESSURE

Highest, 30.5 ins: and upwards, in an anticyclone lying over Germany, Switzerland, and the southeast of France.  
 Lowest, 29.8 ins: and less, in the extreme north of Scandinavia.  
 Gradients moderate over the north of Scandinavia, but slight elsewhere.  
 Barometer rising in France, Germany, and the southeast of England and the south of Sweden, but falling a little elsewhere.

## TEMPERATURE

Highest, 56° at Perpignan, 54° at Lisbon, 53° at Valencia, 52° at Havre Point, 51° at Fresh Point, 50° at Holyhead, Lillie, and Hunt Castle.  
 Lowest, 27° at Munich, 28° at Minsk, 30° at Stockholm, 31° at Copenhagen, 33° at Jansen, 36° at Haparanda and Harisand.  
 The maxima registered yesterday over the central and northern parts of England were very low; at York the thermometer did not exceed 40°.

## WIND

Chiefly light or moderate from the SE<sup>th</sup> or S<sup>th</sup>, but SW<sup>th</sup> in the east of Scotland and also over the greater part of Scandinavia.  
 At Bodo a strong gale from WSW is reported.

## WEATHER

Misty or foggy in nearly all parts of Western Europe, but fine in Sweden and also in the south of France.  
 Rain is falling at the mouth of the English and Bristol Channels, as well as at Bodo.  
 Slight rain fell yesterday at several of our western and extreme northern stations.

## SEA

rough off the west of Norway, and moderate off the south of Iceland, but slight or smooth elsewhere.

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

There are at present no indications of any decided change in the weather. Depressions are apparently moving northwards over the Atlantic, but these centres are at too great a distance from our shores to affect any but our extreme west and north-west coasts.

# FORECASTS

For the 24 hours ending at NOON on 15<sup>TH</sup> Nov<sup>R</sup> 1889.

## DISTRICTS.

## FORECASTS.

- |   |                  |  |
|---|------------------|--|
| 0 | SCOTLAND NORTH   | S <sup>th</sup> and SW <sup>th</sup> winds, freshening; drizzle, some rain.                    |
| 1 | SCOTLAND EAST    | S <sup>th</sup> and SW <sup>th</sup> winds, moderate; fair generally, but mist or fog locally. |
| 2 | ENGLAND N.E.     |  |
| 3 | ENGLAND EAST     | Light breezes, chiefly SE <sup>th</sup> ; fair generally but fog and slight rain locally.      |
| 4 | MIDLAND COUNTIES |  |
| 5 | ENGLAND SOUTH    |  |

## DISTRICTS.

## FORECASTS

- |    |               |   |
|----|---------------|---|
| 6  | SCOTLAND WEST | SE <sup>th</sup> winds, light; drizzle, misty.  |
| 7  | ENGLAND N.W.  |   |
| 8  | ENGLAND S.W.  | SE <sup>th</sup> winds, moderate; drizzle, foggy, rain locally.                       |
| 9  | IRELAND NORTH | SE <sup>th</sup> and S <sup>th</sup> winds, freshening; drizzle, misty, rain locally. |
| 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:	Ther:		Wind		Wea:	Sea		Bar:	Ther:		Wind		Wea:	Sea.
		D	W	D	F					D	W	D	F		
Skudesnaes ...	30.35	40	46	2	0	0	3	Holyhead ...	30.26	46	44	8	2	cm	1
Sumburgh Head ...	30.24	48	45	WSW	1	c	3	Valencia ...	30.19	52	49	e	1	cm	1
Stornoway ...	30.21	45	49	23	0	0	2	Scilly ...	30.20	52	50	SS2	4	0	3
Aberdeen ...	30.27	49	48	SS2	2	cm	1	Jersey ...	30.26	51	49	SS2	3	c	2
Shields ...	30.28	46	43	S	2	cm	2	Dungeness ...	30.32	51	45	SS2	3	b	2
Ardrossan ...	30.24	49	49	SS2	1	c	1	London ...	30.31	51	47	SS2	1	bf	2
Malin Head ...	30.22	49	49	S	2	0	0	Yarmouth ...	30.35	49	46	SS2	3	b	3
Mullaghmore ...	30.21	50	46	23	0	cm	2	Rocheport ...	30.28	52	50	SS2	3	0	2
Belmullet ...	30.21	49	48	S	2	0	2								

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

Yesterday morning's reports showed that the high pressure area recently noticed over Central Europe had moved a little to the southwards its centre being at 8 am between Prague and Vienna. The system was inclined to increase in height (intensity), and to spread southwards over the Mediterranean. In the meantime a depression had appeared over Lapland causing rather steep gradients for W winds over the northern parts of Scandinavia and the Gulf of Bothnia, but over the United Kingdom and Southern Europe no important change was observed. A WSW<sup>4</sup> gale had set in over the northern half of Norway during the night, while moderate NW<sup>4</sup> breezes were felt in Denmark, W<sup>4</sup> in the south of Sweden, and SW<sup>4</sup> to S<sup>4</sup> over the Gulf of Bothnia and Finland. Over the British Isles the wind was mainly SE<sup>4</sup>, in the Channel and Bay of Biscay it was E<sup>4</sup>, and over the northern parts of the Mediterranean E<sup>4</sup> to NE<sup>4</sup>. Temperature had risen over the Baltic, fallen decidedly over the British Isles, (where frost prevailed) France, Italy, and Austria. The highest morning values were 61° at San Fernando, Barcelona, Pampunaris, and Algiers, 60° at La Coruña and Bilbao; all other readings were below 60°, but 51° was recorded at Scilly, 50° at Rock Point and 48° to 49° along the west coast of Ireland. The lowest values were 21° at Archangel, 15° to 28° over Central Austria, 27° at Loughborough, 28° at York and Oxford, 30° to 31° over the southern half of Russia, 33° at Warsaw and Hermannstadt and 34° in London.

The depression in the far north subsequently passed off, and the barometer rose in those regions; elsewhere no great change 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. 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, 15<sup>th</sup> November,* 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 4.)	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 ...	29.81	38	SW	4	bc	29.93	+ .06	39	38	+ 3	msw	2	c	*	39	30	-	
	Hernösand ...	30.20	37	Z	0	b	30.20	- .00	30	29	- 6	Z	0	b	*	45	1	-	
	Stockholm ...	30.37	35	W	2	o	30.37	+ .07	38	37	+ 2	SW	2	o	*	?	28	-	
	Wisby ...	30.33	45	E	4	o	30.35	+ .03	44	42	+ 3	SW	4	o	*	46	34	-	
	Bodö ...	29.86	45	W	9	r	29.95	+ .16	46	44	+ 1	N	6	o	*	48	41	0.43	
	Christiansund	30.17	45	msw	4	b	30.13	- .02	46	43	- 1	SSW	2	o	5	50	43	-	
	Skudesnaes ...	30.28	48	SSW	6	o	30.24	- .06	47	45	+ 1	S	4	r	4	48	46	0.32	
	Christiania Fjord (Færder)	30.34	39	Z	0	f	30.26	- .08	43	42	+ 10	SSW	3	m	2	?	?	-	
	Skagen (The Scaw)	30.37	42	SW	1	o	30.32	- .02	41	40	- 4	SW	3	o	2	46	34	-	
	Fanö ...	30.38	36	SSW	2	c	30.35	- .04	40	40	+ 3	SSW	3	o	*	45	36	-	
BRITISH ISLANDS.	Sumburgh Head	30.10	42	Z	0	o	30.04	- .10	47	46	+ 4	SSW	1	o	2	48	40	-	
	Stornoway ...	30.10	47	SW	8	o	29.92	- .20	51	51	+ 3	SW	6	o	5	51	45	0.02	
	Wick ...	30.14	45	S	1	o	30.04	- .10	49	47	+ 12	S	3	c	1	49	35	-	
	Nairn ...	30.16	46	W	1	o	30.04	- .11	47	44	+ 6	Z	0	f	1	47	39	-	
	Aberdeen ...	30.22	39	SW	1	bm	30.13	- .05	46	44	+ 8	S	2	bcm	1	46	38	-	
	Leith ...	30.22	42	W	1	c	30.12	- .09	44	44	0	W	1	bcm	*	48	42	-	
	Shields ...	30.25	47	S	2	r	30.21	- .06	47	46	+ 2	SW	2	mp	2	49	38	0.26	
	Spurn Head ...	30.29	46	SSW	3	c	30.27	- .04	48	47	+ 3	SSW	3	bc	3	48	43	0.01	
	York ...	30.29	45	E	1	r	30.26	- .05	46	46	+ 6	SSW	1	c	*	47	37	0.19	
	Loughborough	30.31	46	SSW	2	o	30.30	- .02	49	49	+ 8	SSW	2	c	*	50	41	0.01	
GERMANY.	Ardrossan ...	30.19	49	E	2	rm	30.12	- .10	51	50	+ 3	SSW	3	bc	2	51	45	-	
	Malin Head ...	30.11	50	S	4	om	30.02	- .17	49	48	+ 5	S	4	b	1	51	44	-	
	Mullaghmore ...	30.09	53	SSW	5	cg	30.03	- .16	52	49	+ 5	SSW	5	c	4	55	47	0.02	
	Belmullet ...	30.07	52	S	2	o	29.99	- .15	52	52	+ 9	SW	5	o	*	52	42	0.02	
	Donaghadee ...	30.21	51	SSW	2	o	30.13	- .12	48	48	+ 5	SSW	2	b	0	53	42	-	
	Barrow-in-Furness	30.24	47	E	2	r	30.18	- .08	49	48	+ 3	SE	3	r f	*	49	46	0.24	
	Liverpool (Bidston)	30.25	49	SE	2	r	30.23	- .06	47	47	+ 2	SE	2	bc	3	49	45	0.40	
	Holyhead ...	30.23	49	Z	0	ogm	30.20	- .06	51	51	+ 1	SSW	2	bcm	2	52	42	0.45	
	Parsonstown ...	30.18	50	Z	0	c	30.14	- .05	50	48	+ 1	SW	1	o	*	55	46	0.01	
	Valencia ...	30.11	53	SSW	4	ogm	30.11	- .02	54	52	+ 1	SSW	6	o	5	54	52	-	
FRANCE AND NETHERLANDS.	Roche's Point...	30.16	52	SE	4	o	30.15	- .05	52	51	+ 1	SSW	4	o	4	53	50	0.01	
	Pembroke (St. Ann's Hd.)	30.23	51	SSW	3	r	30.25	- .01	53	53	+ 5	SSW	2	opm	3	54	48	0.14	
	Silly ...	30.19	53	SE	4	f	30.24	+ .03	52	52	+ 2	S	2	f	3	53	49	0.05	
	Prawle Point...	30.27	51	SE	2	o	30.32	+ .03	53	52	+ 1	SSW	2	cg	1	53	50	-	
	Jersey (St. Aubin's)	30.31	51	SSW	2	c	30.35	+ .05	51	50	+ 2	SSW	3	bcm	3	52	48	0.01	
	Hurst Castle ...	30.31	52	SE	3	bm	30.35	+ .05	53	52	+ 3	S	3	c	1	53	49	-	
	Dungeness ...	30.31	52	S	3	c	30.36	+ .03	52	52	+ 3	SW	2	o	1	52	43	-	
	London ...	30.32	49	S	1	f	30.37	+ .04	49	49	+ 4	SSW	1	og	*	50	43	-	
	Oxford ...	30.32	47	SE	1	f	30.34	+ .01	50	49	+ 6	SE	1	o	*	50	44	-	
	Cambridge ...	30.33	49	Z	0	f	30.35	+ .01	48	48	+ 10	S	1	o	*	50	38	-	
PENIN- SULA.	Yarmouth ...	30.33	48	SSW	1	b	30.34	+ .01	47	46	+ 9	SW	2	bf	2	47	36	-	
	Cuxhaven ...	30.44	35	S	2	f	30.43	+ .01	34	33	+ 2	S	2	f	*	40	?	-	
	Berlin ...	30.51	41	SE	2	b	30.53	+ .02	31	30	- 6	SSW	2	o	*	46	30	-	
	Wiesbaden ...	*	*	*	*	*	30.56	+ .04	35	33	+ 6	NE	1	o	*	36	?	-	
	Munich ...	30.58	28	NE	1	f	30.58	+ .03	28	28	+ 1	E	3	f	*	34	27	-	
	The Helder ...	30.39	40	SSW	1	f	30.36	- .02	42	42	+ 12	S	1	f	1	43	30	-	
	Brussels (9 a.m.)	*	*	*	*	*	30.43	+ .04	44	43	+ 4	S	1	bc	*	52	?	-	
	Cape Gris Nez	?	50	SW	2	o	?	?	47	46	+ 1	SW	1	b	1	54	39	-	
	Paris ...	30.39	49	SSW	1	b	30.44	+ .05	35	35	- 5	SE	1	b	*	57	33	-	
	Brest ...	?	56	SE	3	c	?	?	53	53	+ 2	SSW	1	c	2	55	?	0.04	
FRANCE AND NETHERLANDS.	Lorient ...	30.28	53	SE	4	bc	30.29	+ .05	51	51	0	SSW	2	f	2	55	48	-	
	Rocheport ...	30.33	53	SSW	3	b	30.39	+ .05	49	47	+ 1	SE	4	bf	2	59	43	-	
	Belfort ...	30.40	38	E	1	bc	30.45	0.0	35	32	- 2	SW	1	b	*	46	33	-	
	Lyons ...	30.44	50	S	1	b	30.52	+ .03	39	39	- 1	E	1	bf	*	57	39	-	
	Nice ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	-	
	Perpignan ...	30.38	54	S	1	b	30.46	+ .08	44	44	- 12	SW	1	b	*	66	43	-	
PENIN- SULA.	Biarritz ...	30.25	59	E	3	b	30.32	+ .09	57	51	+ 8	S	3	b	1	72	?	-	
	Corunna ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	-	
PENIN- SULA.	Lisbon ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	-	
	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	-	

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

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



# WEATHER CHARTS

for 8 a.m. on

Friday, 15<sup>th</sup> November.

1889.

## BAROMETER, WIND AND SEA.

### EXPLANATION OF MAP.

**BAROMETER**—Isobars are drawn for each tenth of an inch.

Changes since previous morning are stated in words.

**WIND**—Arrows show the prevalent winds. They fly with the wind and their bars 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:

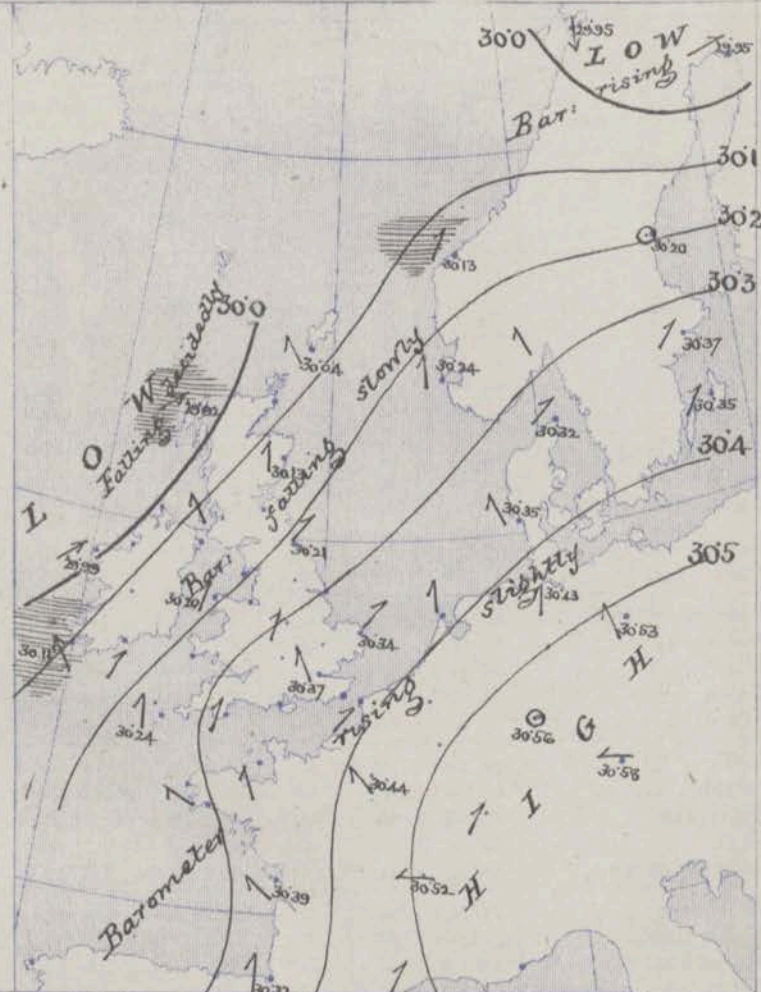
= Rough. = High.

## MEAN HEIGHT OF THE BAROMETER

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

During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS.
Sunburgh Head .....	29.687
Stornoway .....	29.707
Wick .....	29.726
Nairn .....	29.743
Aberdeen .....	29.756
Leith .....	29.793
Shields .....	29.815
York .....	29.844
Loughborough .....	29.876
Ardrossan .....	29.795
Donaghadee .....	29.811
Holyhead .....	29.835
Liverpool .....	29.852
Parsonstown .....	29.848
Valencia .....	29.864
Roche's Point .....	29.864
Pembroke .....	29.862
Sally .....	29.898
Jersey .....	29.923
Hurst Castle .....	29.898
Dover .....	29.893
LONDON .....	29.897
Oxford .....	29.893
Cambridge .....	29.885
Yarmouth .....	29.863



## 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.

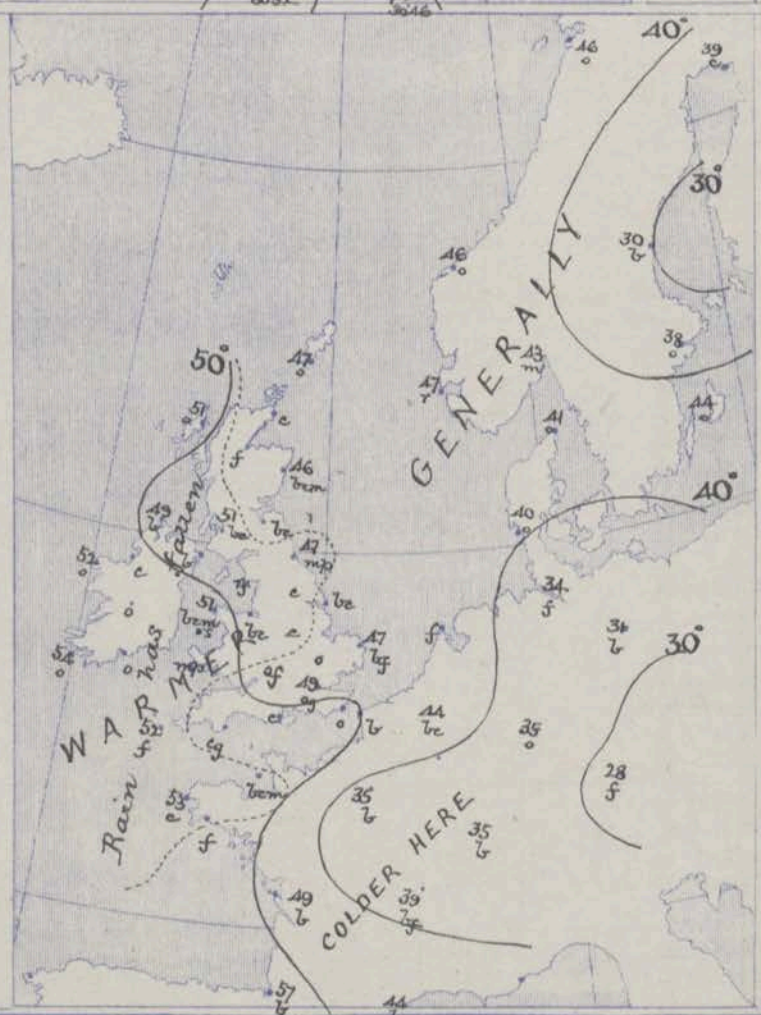
**RAINFALL**—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

### MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of November.)

STATIONS.	TEMPERATURE.				RAINFALL (Inches.)
	Daily Max.	Daily Min.	AT 8 A.M.		
			Dry.	Wet.	
Sunburgh Head.....	45.3	37.4	41.5	39.8	4.24
Stornoway .....	45.7	36.7	41.0	39.9	4.60
Wick .....	45.7	35.7	40.9	39.3	2.97
Nairn .....	44.7	35.5	39.1	37.5	2.32
Aberdeen .....	46.1	36.3	40.3	38.5	3.16
Leith .....	48.2	36.7	41.2	39.6	2.11
Shields .....	47.1	38.1	41.8	40.2	2.63
York .....	47.7	36.1	40.3	39.0	2.21
Loughborough .....	48.0	36.4	40.2	38.9	2.30
Ardrossan .....	47.7	38.9	42.6	40.8	3.92
Donaghadee.....	48.2	39.2	42.9	41.7	3.13
Holyhead.....	49.7	42.8	45.5	43.8	3.71
Liverpool .....	47.7	39.6	42.1	40.4	2.87
Parsonstown .....	49.1	36.9	41.7	40.0	2.84
Valencia .....	52.4	42.7	47.2	45.2	5.50
Roche's Point.....	51.1	41.8	45.9	44.3	4.56
Pembroke.....	50.2	43.7	46.7	44.7	3.96
Sally .....	52.5	40.7	50.0	48.0	3.76
Jersey .....	51.9	44.2	47.5	45.6	4.24
Hurst Castle .....	50.5	40.3	44.6	43.6	2.98
Dover .....	49.1	40.7	44.0	42.4	3.56
LONDON .....	49.6	37.9	42.0	40.5	2.14
Oxford .....	48.6	37.6	41.0	39.7	2.30
Cambridge .....	48.8	35.7	40.3	39.5	2.02
Yarmouth .....	47.5	39.1	42.9	41.8	3.15

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 over Germany and the east of France.  
 Lowest, 30.0 in: and less, over the north of Scandinavia, and also in a depression lying to the northward of our Islands.  
 Gradient slight, but increasing in the east and northwest. Barometer falling in all localities excepting France, Germany, and the south of England.

## TEMPERATURE

Highest, 57° at Bismarck, 54° at Valencia, and 53° at Knebworth, Hawke Point, Huntly and Brest.  
 Lowest, 28° at Munich, 30° at Harbin and 31° at Berlin, 34° at Copenhagen, and 35° at Wiesbaden, Paris and Belfast.

## WIND

S<sup>4</sup> or SW<sup>4</sup> over the greater part of our Islands, the North Sea and Scandinavia; fresh or strong in force on the west coast of Ireland and Scotland.  
 Light from the SE<sup>3</sup> or E<sup>2</sup> in France and Germany, strong from N. at Bodo.

## WEATHER

Dull on our southern and extreme northern coasts, as well as at many of the Scandinavian and Danish stations.  
 Fair or fine elsewhere, but foggy in places, and raining at Barrow in Turners.  
 Rain fell yesterday over Ireland, Wales, and the north of England, the largest amount being 0.5 in at Holyhead.

## SEA

Rather rough at Christianiaund, Stornoway and Valencia, but slight or smooth elsewhere.

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The depression which lies to the northward of our Islands will probably be followed shortly by other disturbances of greater depth, and increasing S<sup>4</sup> winds are therefore likely on all our western and northern coasts.

As the S<sup>4</sup> winds become more decided the weather will probably clear over the eastern and southern parts of the Kingdom.

## FORECASTS

For the 24 hours ending at NOON on 16<sup>th</sup> Nov<sup>r</sup> 1889.

### DISTRICTS.

### FORECASTS.

- |   |                  |  |
|---|------------------|--|
| 0 | SCOTLAND NORTH   | S <sup>2</sup> and SW <sup>2</sup> winds, fresh or strong; dull, some rain.                    |
| 1 | SCOTLAND EAST    | S <sup>2</sup> and SW <sup>2</sup> winds, freshening; fair generally, but slight rain locally. |
| 2 | ENGLAND N.E.     |  |
| 3 | ENGLAND EAST     | S <sup>2</sup> and SW <sup>2</sup> winds, light or moderate; fair, mild.                       |
| 4 | MIDLAND COUNTIES |  |
| 5 | ENGLAND SOUTH    |  |

### DISTRICTS.

### FORECASTS

- |    |               |   |
|----|---------------|---|
| 6  | SCOTLAND WEST | SE <sup>2</sup> and S <sup>2</sup> winds, freshening; fine to cloudy and some rain. |
| 7  | ENGLAND N.W.  |   |
| 8  | ENGLAND S.W.  | S <sup>2</sup> winds, freshening; cloudy, rain locally.                             |
| 9  | IRELAND NORTH | S <sup>2</sup> winds, increasing in force; dull, some rain.                         |
| 10 | IRELAND SOUTH |   |

### WARNINGS

NONE ISSUED.

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



# YESTERDAY'S 2 P.M. REPORTS.

	Bar:	Ther:		Wind		Wea:	Sea		Bar:	Ther:		Wind		Wea:	Sea
		D	W	D	F					D	W	D	F		
Skudesnaes ...	30.18	48	46	SE	0	0	4		Holyhead ...	30.25	50	49	SE	1	rgm
Sumburgh Head ...	30.11	46	44	20	0	C	2		Valencia ...	30.11	54	53	SE	4	om
Stornoway ...	30.11	49	48	SW	4	0	4		Scilly ...	30.19	52	51	SE	4	0
Aberdeen ...	30.19	44	41	SSW	1	bcn	1		Jersey ...	30.31	50	50	SE	3	m
Shields ...	30.26	49	46	8	2	m	2		Dungeness ...	30.31	51	50	S	3	c
Ardrossan ...	30.24	49	47	SE	1	0	1		London ...	30.32	50	49	20	0	om
Malin Head ...	30.13	43	40	SE	3	0	1		Yarmouth ...	30.33	48	47	20	0	bf
Mullaghmore ...	30.13	53	50	S	3	e	2		Rocheport ...	30.35	58	57	SE	3	r
Belmullet ...	30.09	52	51	S	2	bc	2								

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

The reports for yesterday morning showed that pressure was highest (30.4 in. to 30.5 in. and more) over Central and Southeastern Europe, the Adriatic, and Mediterranean, and that it decreased to 29.8 in. and less over Lapland and the north of Russia, to 30.1 in. off the west of Ireland, and to about 30.0 in. off the extreme southwest of Spain. SE<sup>1</sup> and S<sup>1</sup> breezes of little strength were consequently prevalent over the British Isles with the west and north of France, SW<sup>1</sup> over Norway, NW<sup>1</sup> over Finland, NE<sup>1</sup> over the Mediterranean, and variable air over Central Europe. Weather was dull over the United Kingdom, with thick wet fog in many places, fine and bright in many parts of France, foggy over Germany, and the southern parts of the Baltic; in Lapland and Russia it was unsettled, with cold rain in some places, snow in several others. Heavy rain was reported at Constantinople. Temperature had recovered decidedly over the United Kingdom, fallen over Italy and the south of France. It was only at the Algerian and some of the Spanish coast stations that the morning reading exceeded 60°, in the southwest of our Islands, however, and on the coast of Brittany it exceeded 50°, but elsewhere was much lower. The lowest readings of all were (1) 25° at Haparanda, 30° at Uleaborg and Moscow, 31° at Kuopio, 32° at Kharkov and Odessa, and 33° at Nikolaioff and Kermel; (2) 27° at Munich, 28° at Prague and Münden, 29° at Wiesbaden, 30° at the Helder, and 32° at Cuxhaven.

Throughout the day the thermometer remained high at the British and Irish stations, with gloomy damp weather and a good deal of rain on our northwest coasts; the higher temperature spread eastwards across the North Sea.

### 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. i. 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, 16<sup>th</sup> November, 1889.*  
*Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.*

		YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
STATIONS.		Barometer at 32° F. and Sea Level.	Temp. in Shade.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Sea. (0 to 9.)	SHADE TEMP.				
				Dir.	Force. (0 to 12.)		Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Dir.	Force. (0 to 12.)		Weather.	Max.	Min.	Amount of Rainfall.	
SCANDINAVIA.	Haparanda ...	29.87	36	SW	2	b	29.81	- .12	32	31	- .7	2	0	bc	*	4.1	?	-	
	Hernösand ...	30.14	31	SW	0	b	30.03	- .17	33	32	+ .3	2	0	0	*	4.1	24	-	
	Stockholm ...	30.28	37	SW	2	0	30.15	- .22	41	41	+ .3	SW	2	0	*	4.3	30	-	
	Wisby ...	30.35	44	SW	4	0	30.17	- .18	44	43	0	W	4	0	*	4.5	4.1	-	
	Bodö ...	29.97	45	WSW	8	0	29.86	- .09	46	44	0	WSW	4	0	3	4.6	4.3	0.08	
	Christiansund	30.08	45	SSE	1	0	29.92	- .21	47	44	+ .1	2	0	Y	4	?	4.3	-	
	Skudesnaes ...	30.19	49	SSE	2	0	30.15	- .09	50	49	+ .3	SW	6	Y	5	5.0	?	0.39	
	Christiania Fjord (Fierder)	30.25	45	WSW	2	m	30.16	- .10	40	40	- .3	W	4	0	2	?	3.9	-	
	Skagen (The Scaw)	30.26	45	SW	3	m	30.23	- .09	47	46	+ .6	SW	2	1	1	6.1	4.1	0.04	
	Fanö ...	30.33	47	SW	8	0	30.38	- .00	48	47	+ .8	SW	4	1	4	4.8	?	-	
BRITISH ISLANDS.	Sumburgh Head	29.96	49	S	2	0	30.17	+ .13	46	42	- .1	W	4	bc	4	5.0	4.3	0.12	
	Stornoway ...	29.87	51	SW	7	Y	30.33	+ .41	40	39	- .11	W	3	bc	4	5.3	3.8	0.52	
	Wick ...	29.97	49	SW	3	0	30.36	+ .32	41	39	- .8	WSW	3	bc	1	5.2	3.8	0.03	
	Nairn ...	29.99	52	W	1	0	30.37	+ .33	42	39	- .5	W	3	b	1	5.5	3.7	0.04	
	Aberdeen ...	30.10	49	SSW	2	b	30.38	+ .25	40	38	- .6	W	2	b	2	5.0	4.0	0.03	
	Leith ...	30.13	49	W	1	C	30.41	+ .29	44	42	0	W	1	b	*	5.7	4.2	0.03	
	Shields ...	30.21	53	SSE	3	0	30.42	+ .21	49	46	+ .2	WSW	1	0	2	5.4	4.5	0.01	
	Spurn Head ...	30.29	49	SSW	3	C	30.42	+ .15	50	49	+ .2	SSW	3	0	3	5.2	4.6	-	
	York ...	30.27	52	SSE	1	0	30.42	+ .16	51	50	+ .5	S	1	Y	*	5.5	4.6	0.02	
	Loughborough	30.33	52	S	1	0	30.45	+ .15	51	50	+ .2	SW	2	C	*	5.5	4.9	-	
BRITISH ISLANDS.	Ardrossan ...	30.13	52	SSE	4	bc	30.46	+ .34	42	40	- .9	2	0	bc	0	5.3	4.0	0.15	
	Malin Head ...	29.99	50	S	5	org	30.45	+ .43	47	43	- .2	NW	2	b	3	5.3	4.6	0.01	
	Mullaghmore ...	30.03	53	NW	6	Y	30.49	+ .46	43	40	- .9	NW	1	b	3	5.6	4.1	0.09	
	Belmullet ...	30.07	50	W	2	0	30.51	+ .52	42	41	- .10	E	1	b	*	5.3	4.0	0.37	
	Donaghadee ...	30.15	51	SW	2	C	30.48	+ .35	42	41	- .6	WSW	3	b	1	5.5	4.0	0.08	
	Barrow-in-Furness	30.24	52	SE	4	bc	30.45	+ .27	49	48	0	NW	2	om	*	5.3	4.8	0.09	
	Liverpool (Bidston)	30.27	52	S	1	b	30.45	+ .22	49	48	+ .2	NW	1	Y	2	5.6	4.7	0.14	
	Holyhead ...	30.25	52	SSW	4	C	30.45	+ .25	51	50	0	NW	3	og	3	5.5	5.0	0.19	
	Parsonstown ...	30.15	53	SE	2	C	30.51	+ .37	39	38	- .11	2	0	1	*	5.6	3.9	0.05	
	Valencia ...	30.14	53	WSW	7	Ygu	30.47	+ .36	48	46	- .6	ENE	2	b	3	5.5	4.7	0.42	
GERMANY.	Roche's Point...	30.23	53	SSW	4	0	30.46	+ .31	48	47	- .4	W	1	C	3	5.4	4.6	0.10	
	Pembroke (St. Ann's Hd.)	30.31	52	SSW	3	0	30.46	+ .21	53	52	0	SSW	2	0	3	5.5	5.1	0.01	
	Scilly ...	30.29	52	S	4	f	30.46	+ .22	53	53	+ .1	2	0	f	2.6	5.4	5.1	0.02	
	Prawle Point...	30.29	53	SSW	1	m	30.48	+ .16	53	53	0	S	1	ogm	1	5.6	5.1	-	
	Jersey (St. Aubin's)	30.40	53	SSE	2	of	30.52	+ .17	52	51	+ .1	SE	2	of	2	5.3	4.9	-	
	Hurst Castle ...	30.38	55	SSW	1	0	30.51	+ .16	54	53	+ .1	W	1	0	1	5.9	5.2	-	
	Dungeness ...	30.36	53	SW	3	bc	30.49	+ .13	53	52	+ .1	W	1	ow	1	5.7	4.9	-	
	London ...	30.37	52	S	1	bc	30.50	+ .13	50	50	+ .1	W	1	og	*	6.0	4.7	-	
	Oxford ...	30.38	49	W	1	0	30.56	+ .16	50	49	0	SSW	1	0	*	5.7	4.9	-	
	Cambridge ...	30.37	48	2	0	f	30.48	+ .13	49	49	+ .1	2	0	of d	*	5.3	4.1	0.03	
FRANCE AND NETHERLANDS.	Yarmouth ...	30.37	51	WSW	1	bcf	30.46	+ .12	46	46	- .1	W	2	1	2	5.1	4.3	-	
	Cuxhaven ...	30.42	50	SSW	1	f	30.46	+ .03	44	44	+ .10	SW	2	1	*	4.4	?	-	
	Berlin ...	30.49	37	SW	2	bc	30.50	- .03	36	35	+ .5	SW	2	0	*	4.1	?	-	
	Wiesbaden ...	*	*	*	*	*	30.62	+ .06	37	36	+ .2	2	0	*	3.7	?	-		
	Munich ...	30.60	27	E	2	f	30.64	+ .06	26	26	- .2	SW	4	1	*	3.2	2.2	-	
	The Helder ...	30.41	49	SSW	1	b	30.44	+ .08	46	46	+ .4	S	1	f	*	5.0	4.1	-	
	Brussels (9 a.m.)	*	*	*	*	*	30.54	+ .11	43	42	- .1	SSW	1	0	*	5.4	4.2	-	
	Cape Gris Nez	?	51	S	3	b	?	?	50	49	+ .3	S	3	m	2	5.7	4.6	-	
	Paris ...	30.47	47	S	1	bc	30.56	+ .12	37	37	+ .2	SSE	1	b	*	5.7	?	-	
	Brest ...	?	54	S	1	m	?	?	54	53	+ .1	SE	2	C	2	5.7	4.8	0.04	
FRANCE AND NETHERLANDS.	Lorient ...	30.36	54	S	1	0	30.52	+ .23	53	53	+ .2	SE	1	m	2	5.5	5.0	-	
	Rochefort ...	30.45	55	SSE	3	b	30.58	+ .19	48	46	- .1	SE	3	b	2	6.3	4.1	-	
	Belfort ...	30.51	38	E	1	b	30.58	+ .13	35	32	0	E	1	C	*	4.6	3.2	-	
	Lyons ...	30.54	49	SSE	1	b	30.66	+ .14	33	33	- .6	NE	1	f	*	5.7	3.3	-	
	Nice ...	30.53	50	E	2	b	30.58	+ .14	45	48	- .6	NE	4	b	1	5.7	4.3	-	
	Perpignan ...	30.48	54	2	0	b	30.56	+ .10	48	46	+ .4	SW	1	0	*	6.5	?	-	
	Biarritz ...	30.39	59	E	3	b	30.49	+ .17	46	45	- .11	SSE	4	b	1	6.8	4.5	-	
	Corunna ...	30.26	62	NE	4	b	30.32	+ .11	54	51	- .3	NE	4	b	2	6.6	5.4	-	
	Lisbon ...	30.26	62	NE	4	b	30.32	+ .11	54	51	- .3	NE	4	b	2	6.6	5.4	-	

For Explanation of Columns, see bottom of p 4.

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



# WEATHER CHARTS

for 8 a.m. on

Saturday 16<sup>th</sup> November

1889.

## BAROMETER, WIND AND SEA.

### EXPLANATION OF MAP.

**BAROMETER**—Isobars are drawn for each tenth of an inch.

Changes since previous morning are stated in words.

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

→ = forces above 10; → = forces 8 to 10;

→ = forces 5 to 7; → = forces 1 to 4.

○ = dead calm.

**SEA DISTURBANCE**—Where considerable, is shown thus:

— Rough. — High.

### MEAN HEIGHT OF THE BAROMETER

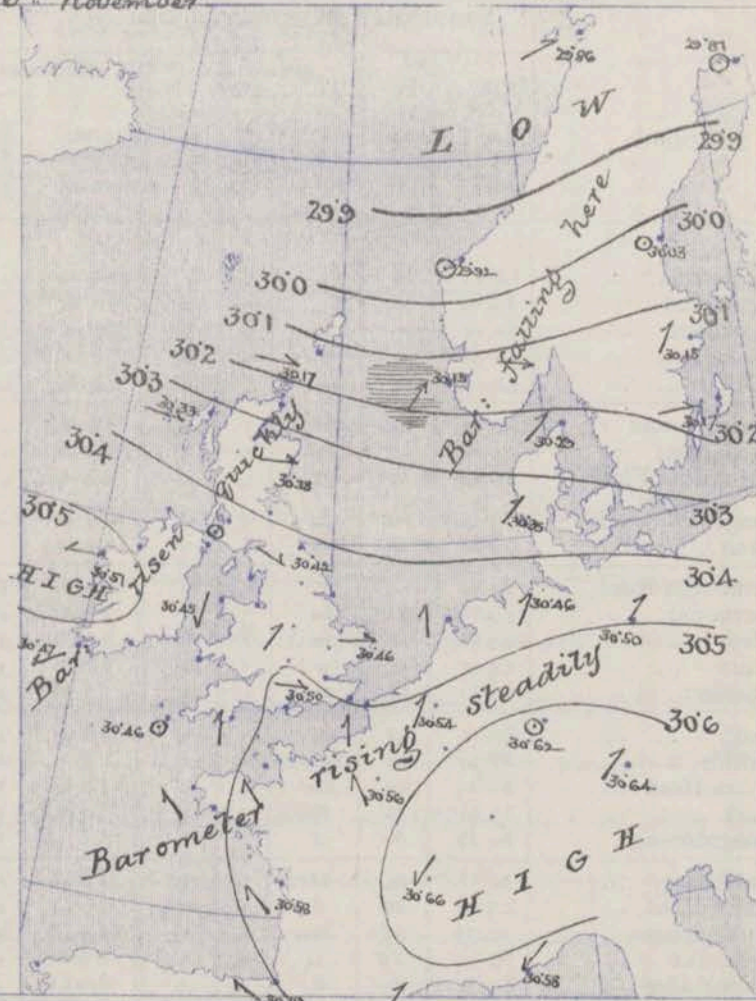
at 8.0 a.m. for the month of November.

During the 15 Years: 1871—1885.

#### STATIONS.

#### MEAN READINGS.

STATIONS.	MEAN READINGS.
Sumburgh Head .....	29.687
Stornoway .....	29.707
Wick .....	29.726
Nairn .....	29.743
Aberdeen .....	29.756
Leith .....	29.793
Shields .....	29.815
York .....	29.844
Loughborough .....	29.876
Ardrossan .....	29.795
Donaghadee .....	29.811
Holyhead .....	29.835
Liverpool .....	29.852
Parsonstown .....	29.848
Valencia .....	29.864
Roche's Point .....	29.864
Pembroke .....	29.862
Scilly .....	29.898
Jersey .....	29.923
Hurst Castle .....	29.898
Dover .....	29.893
LONDON .....	29.897
Oxford .....	29.893
Cambridge .....	29.885
Yarmouth .....	29.863



## 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.

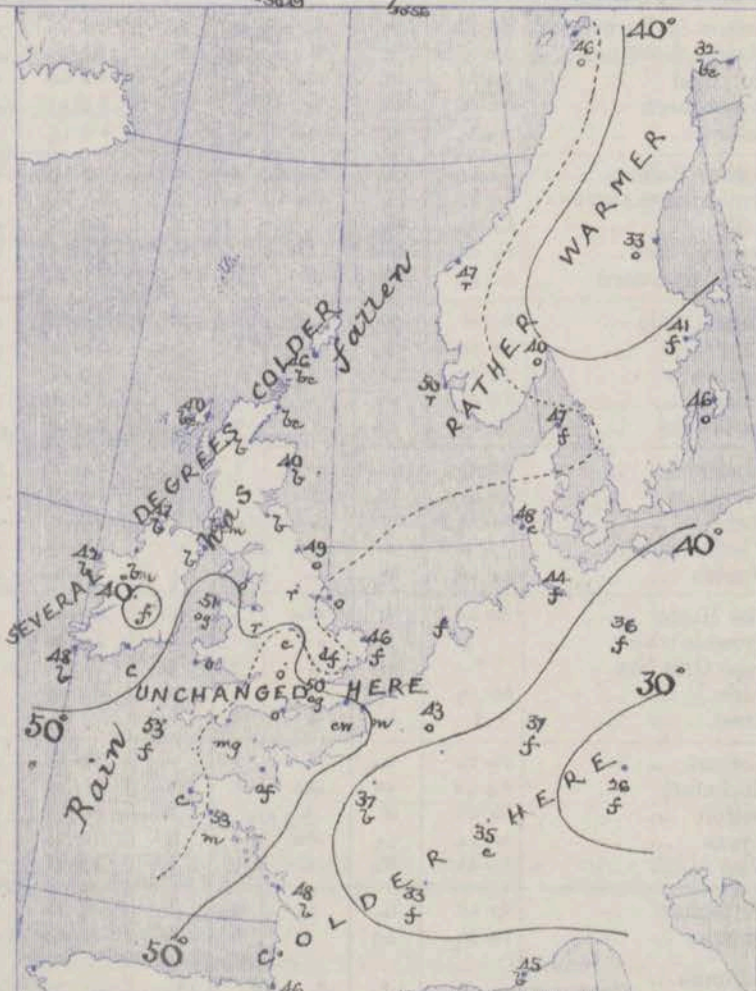
**RAINFALL**—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

### MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of November.)

STATIONS.	TEMPERATURE.				RAINFALL (Inches.)
	Daily Max.	Daily Min.	at 8 a.m. Dry.	Wet.	
Sumburgh Head.....	45.3	37.4	41.5	39.8	4.24
Stornoway .....	45.7	36.7	41.0	39.9	4.60
Wick .....	45.7	35.7	40.9	39.3	2.97
Nairn .....	44.7	35.5	39.1	37.5	2.32
Aberdeen .....	46.1	36.3	40.3	38.5	3.16
Leith .....	48.2	36.7	41.2	39.6	2.11
Shields .....	47.1	38.1	41.8	40.2	2.63
York .....	47.7	36.1	40.3	39.0	2.21
Loughborough .....	48.0	36.4	40.2	38.9	2.30
Ardrossan .....	47.7	38.9	42.6	40.8	3.92
Donaghadee .....	48.2	39.2	42.9	41.7	3.13
Holyhead .....	49.7	42.8	45.5	43.8	3.71
Liverpool .....	47.7	39.5	42.1	40.4	2.87
Parsonstown .....	49.1	36.9	41.7	40.0	2.84
Valencia .....	52.4	42.7	47.2	45.2	5.50
Roche's Point .....	51.1	41.8	45.9	44.3	4.56
Pembroke .....	50.2	43.7	40.7	44.7	3.96
Scilly .....	52.5	46.7	50.0	48.0	3.76
Jersey .....	51.9	44.2	47.5	45.6	4.24
Hurst Castle .....	50.5	40.3	44.6	43.6	2.98
Dover .....	49.1	40.7	44.0	42.4	3.56
LONDON .....	49.6	37.9	42.0	40.5	2.14
Oxford .....	48.6	37.6	41.0	39.7	2.30
Cambridge .....	48.8	35.7	40.3	39.5	2.02
Yarmouth .....	47.5	39.1	42.9	41.8	3.15

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





# GENERAL SITUATION AT 8 A.M.

## PRESSURE

Highest, 30.6 in: and upwards, in an anticyclone lying over South Germany and the east of France; 30.5 in: and upwards, in a new system which has appeared over Ireland.  
 Lowest, 29.3 in: and less, over the north of Scandinavia.  
 Gradients slight generally. Barometer rising at all but the Scandinavian stations—quickly on our western coast.

## TEMPERATURE

Highest, 54° at Hunt-Castle, Brest, and Lister, 53° at Penzance, Lillie, Boulogne, Dunkirk, and Lorient, and 52° at Jersey.  
 Lowest, 26° at Munich, 32° at Haparanda, 33° at Helsingfors and Lyons, 35° at Belfast, 36° at Berlin, and 37° at Wiesbaden and Paris.  
 The maxima registered yesterday were above 55° in many parts of the United Kingdom; in London the thermometer rose to 60°.

## WIND

Light or moderate from the W. over Scandinavia and the northern and eastern parts of our Islands.  
 Variable on our southern coast, light from SE over France, and from SW over Denmark and Germany.

## WEATHER

Fine in Ireland, Scotland, and the west and south of France; foggy in Denmark, Germany and the east of France.  
 Rainy in the north of England and the west of Norway; dull over the southern parts of England.  
 Rain fell yesterday in all the more western and northern parts of our Islands.

## SEA

Rather rough at Helsingfors, and moderate off the north of Scotland, but slight or smooth in nearly all other localities.

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The depression which lay to the northward of our Islands yesterday has travelled away quickly in a northeasterly direction and a new anticyclone has appeared over Ireland.

The latter system will probably spread backwards and join the large high pressure area which still lies over Germany and France. Variable breezes are therefore probable over England with a renewal of foggy weather and a decided fall of temperature.

## FORECASTS

For the 24 hours ending at NOON on 17<sup>TH</sup> Nov<sup>R</sup> 1889.

### DISTRICTS.

### FORECASTS.

- |   |                  |   |
|---|------------------|---|
| 0 | SCOTLAND NORTH   | W <sup>W</sup> and NW <sup>W</sup> winds, light or moderate; fine generally.                              |
| 1 | SCOTLAND EAST    |   |
| 2 | ENGLAND N.E.     | Light variable breezes, cloudy generally with some mist or fog, slight rain locally. Temperature falling. |
| 3 | ENGLAND EAST     |   |
| 4 | MIDLAND COUNTIES |   |
| 5 | ENGLAND SOUTH    |   |



### DISTRICTS.

### FORECASTS

- |    |               |  |
|----|---------------|--|
| 6  | SCOTLAND WEST | NW <sup>W</sup> and N <sup>W</sup> winds, light; fair generally, but local fogs. |
| 7  | ENGLAND N.W.  |  |
| 8  | ENGLAND S.W.  | Variable breezes, finally N <sup>W</sup> ; dull, some mist or fog.               |
| 9  | IRELAND NORTH | N <sup>W</sup> winds, light; fair generally, but local fogs.                     |
| 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:	Ther:		Wind		Wea:	Sea		Bar:	Ther:		Wind		Wea:	Sea
		D	W	D	F					D	W	D	F		
Skudesnaes ...	30.21	48	48	SSW	6	r	5	Holyhead ...	30.23	54	53	SSW	4	c	3
Sumburgh Head ...	30.00	46	47	S	1	b	2	Valencia ...	30.11	55	53	SSW	6	om	6
Stornoway ...	29.83	53	52	SW	6	c	5	Scilly ...	30.27	58	53	S	3	f	4
Aberdeen ...	30.10	49	47	SSW	2	cm	1	Jersey ...	30.37	50	50	SSW	3	f	3
Shields ...	30.19	52	50	S	3	cm	2	Dungeness ...	30.36	56	54	SW	3	b	1
Ardrossan ...	30.11	53	51	c	4	c	2	London ...	30.37	60	56	S	2	bm	4
Malin Head ...	29.97	53	49	S	6	O	3	Yarmouth ...	30.35	51	50	SW	3	b	2
Mullaghmore ...	30.04	55	50	SSW	6	O	5	Rocheport ...	30.43	60	57	SE	4	b	2
Belmullet ...	29.98	53	52	SW	6	or	4								

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

The reports for yesterday morning, showed that pressure was still high (30.40 ins. to 30.65 ins.) in a large anticyclone lying over Central and South-eastern Europe, whence it decreased to less than 30.2 ins. off the southwest coast of Spain, to about 29.9 ins. in the Hebrides, and to about 29.7 ins. over the White Sea and extreme north of Russia, SE<sup>6</sup> breezes were felt in the west of France, S<sup>3</sup> over the British Isles, the North Sea, Denmark and Norway, and blew fresh at the extreme western stations, though they were light elsewhere; W<sup>5</sup> winds were felt in Finland and the Baltic Provinces, while light and variable winds were reported elsewhere. The weather was fine over the greater part of the Continent, but foggy in several places, it was dull and damp over the British Isles, and somewhat showery in several parts of Northern Europe, and very rainy at Constantinople. A good deal of rain had fallen at Lisbon and in Norway, but as a rule, the falls were of a trifling character. Temperature was lowest over Central Europe, highest in the southwest, west, and south. The highest individual values were 64° at Nemours and Algiers, 63° at Oporto, 62° at Bilbao, 57° at Bordini, Barcelona, Lisbon, Corunna, and Biscaya, 55° at Langunaires, 54° at Valencia, 53° at Brest and Pembroke, 52° at Rocher Point, Scilly and Belmullet, 51° at Ardrossan, 49° in London, and 46° even at Christiansund and Bodo; the lowest were 26° at Prague, 27° at Vienna, 28° at Munich, 29° at Hammstadt, 30° at Ruda Lith (and also at Archangel), 31° at Berlin, 35° at Paris.

Little change had occurred later.

### EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

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

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

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

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



# DAILY WEATHER REPORT.

for Sunday 17<sup>th</sup> Nov<sup>r</sup> 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 12.)	SHADE TEMP.			
			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.	Amount of Rainfall.	
SCANDINAVIA.	Haparanda ...	29.87	31	Z	0	0	30.02	+ .21	30	30	- 2	Z	0	s	*	39	27	0.04
	Hernösand ...	30.01	39	N	2	0	30.19	+ .16	39	35	+ 6	N	1	c	*	41	27	—
	Stockholm ...	30.01	41	W	2	0	30.25	+ .10	37	35	- 4	WNW	4	b	*	50	36	0.04
	Wisby ...	30.05	46	N	6	b	30.23	+ .06	42	41	- 1	SW	8	b	*	46	41	—
	Bodö ...	29.87	44	WSW	4	r	30.06	+ .20	42	38	- 4	WSW	4	b	2	46	37	0.55
	Christiansund	30.23	47	WSW	9	r	30.30	+ .38	46	44	- 1	WSW	9	r	6	47	43	0.39
	Skudesnaes ...	30.47	46	NW	6	c	30.55	+ .40	46	45	- 4	Z	0	o	3	2	43	—
	Christiania Fjord (Fierder)	30.28	44	N	3	b	30.42	+ .26	43	41	+ 3	Z	0	b	2	46	40	—
	Skagen (The Scaw)	30.38	45	NNW	1	b	30.47	+ .24	42	41	- 5	NNW	1	b	1	48	41	—
	Fanö ...	30.47	43	N	4	b	30.56	+ .21	42	41	- 6	WSW	2	b	*	50	39	—
BRITISH ISLANDS.	Sumburgh Head	30.40	46	W	2	b	30.40	+ .23	47	44	+ 1	SW	3	o	4	50	44	0.01
	Stornoway ...	30.46	43	SW	3	c	30.41	+ .08	47	47	+ 8	SW	4	o	4	49	38	—
	Wick ...	30.50	43	SW	1	b	30.46	+ .10	40	39	- 1	SW	2	b	1	49	37	—
	Nairn ...	30.51	39	WNW	1	b	30.48	+ .11	37	35	- 5	Z	0	b	0	50	33	—
	Aberdeen ...	30.59	37	SSW	1	b	30.54	+ .16	37	36	- 3	SSW	1	b	1	48	32	—
	Leith ...	30.58	37	W	1	b	30.59	+ .18	31	31	- 13	Z	0	b	*	52	29	—
	Shields ...	30.58	48	N	1	b	30.62	+ .20	43	41	- 6	SW	2	f	2	52	35	—
	Spurn Head ...	30.55	48	NNE	3	b	30.64	+ .22	47	46	- 3	ENE	1	b	2	50	45	0.02
	York ...	30.60	49	NE	1	o	30.67	+ .25	41	40	- 10	N	1	f	*	52	38	0.03
	Loughborough	30.59	49	N	2	o	30.65	+ .20	45	40	- 6	Z	0	c	*	54	44	0.09
GERMANY.	Ardrossan ...	30.57	43	Z	0	b	30.59	+ .13	38	37	- 4	NE	1	c	1	53	35	—
	Malin Head ...	30.50	42	S	2	b	30.50	+ .05	45	43	- 2	SSE	4	b	3	50	38	—
	Mullaghmore ...	30.56	43	SE	2	b	30.52	+ .03	49	46	+ 6	S	4	c	3	52	40	—
	Belmullet ...	30.54	44	SSE	2	b	30.49	- .02	49	48	+ 7	SE	2	o	*	53	41	—
	Donaghadee ...	30.59	48	E	2	b	30.62	+ .14	32	32	- 10	W	2	b	0	52	31	—
	Barrow-in-Furness	30.54	48	NE	2	b	30.62	+ .17	47	46	- 2	SE	2	o	*	52	44	—
	Liverpool (Bidston)	30.58	46	NW	1	b	30.64	+ .19	47	42	- 2	SE	1	o	1	50	46	0.01
	Holyhead ...	30.58	48	ENE	2	b	30.61	+ .16	48	47	- 3	Z	0	o	0	52	44	—
	Parsonstown ...	30.56	42	Z	0	b	30.50	+ .05	47	46	+ 8	Z	0	o	*	51	35	—
	Valencia ...	30.52	53	ESE	1	c	30.51	+ .04	52	53	+ 6	SE	3	o	4	57	47	—
FRANCE AND NETHERLANDS.	Roche's Point...	30.52	51	ESE	3	c	30.55	+ .09	52	52	+ 4	SE	4	r	4	54	48	0.01
	Pembroke (St. Ann's Hd.)	30.55	52	S	2	o	30.61	+ .15	51	50	- 2	ESE	3	o	3	53	50	0.02
	Scilly ...	30.52	53	SSE	1	f	30.56	+ .10	53	53	0	SE	3	o	4	55	52	0.19
	Prawle Point...	30.57	53	Z	0	m	30.61	+ .13	53	53	0	ENE	1	m	1	53	52	—
	Jersey (St. Aubin's)	30.57	52	ESE	1	o	30.61	+ .09	52	52	0	E	2	o	2	53	50	0.04
	Hurst Castle ...	30.58	54	SW	1	o	30.62	+ .11	53	52	- 1	ENE	1	f	0	56	52	0.10
	Dungeness ...	30.50	53	W	1	m	30.61	+ .12	52	52	- 1	ENE	2	m	1	55	51	—
	London ...	30.58	52	NW	1	o	30.61	+ .11	51	50	+ 1	E	1	o	*	54	49	0.01
	Oxford ...	30.59	50	SW	1	o	30.65	+ .15	48	48	- 2	SSE	1	o	*	52	46	—
	Cambridge ...	30.59	50	Z	0	r	30.65	+ .17	49	48	0	NE	1	o	*	53	48	0.04
PENINSULA.	Yarmouth ...	30.55	52	Z	0	r	30.64	+ .18	49	48	+ 3	ENE	1	o	3	52	45	0.13
	Cuxhaven ...	30.45	41	SW	2	f	30.59	+ .13	43	42	- 1	NNW	2	c	*	47	41	—
	Berlin ...	30.50	42	WNW	1	o	30.55	+ .05	42	41	+ 6	WNW	3	c	*	43	36	0.04
	Wiesbaden ...	30.57	41	Z	0	*	30.67	+ .05	41	40	+ 4	Z	0	o	*	41	37	0.04
	Munich ...	30.66	35	Z	0	o	30.67	+ .03	38	38	+ 12	SW	4	o	*	?	26	—
	The Helder ...	30.52	49	ENE	1	f	30.65	+ .21	47	46	+ 1	ENE	1	b	1	50	46	—
	Brussels (9 a.m.)	?	52	Z	0	o	30.64	+ .10	48	?	+ 5	Z	0	f	*	51	43	?
	Cape Gris Nez	?	52	Z	0	o	?	?	51	50	+ 1	SE	1	f	0	57	46	0.04
	Paris ...	30.60	48	N	1	b	30.62	+ .06	41	41	+ 4	N	1	f	*	53	37	—
	Brest ...	?	53	Z	0	c	?	?	49	49	- 5	Z	0	m	3	57	46	0.04

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

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



# WEATHER CHARTS

for 8 a.m. on

Sunday, 17<sup>th</sup> November,

1889.

## BAROMETER, WIND AND SEA.

### EXPLANATION OF MAP.

**BAROMETER**—Isobars are drawn for each tenth of an inch.

Changes since previous morning are stated in words.

**WIND**—Arrows show the prevalent winds. They fly with the wind and

their barbs and feathers refer to force thus—

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

**SEA DISTURBANCE**—Where considerable, it is shown thus:

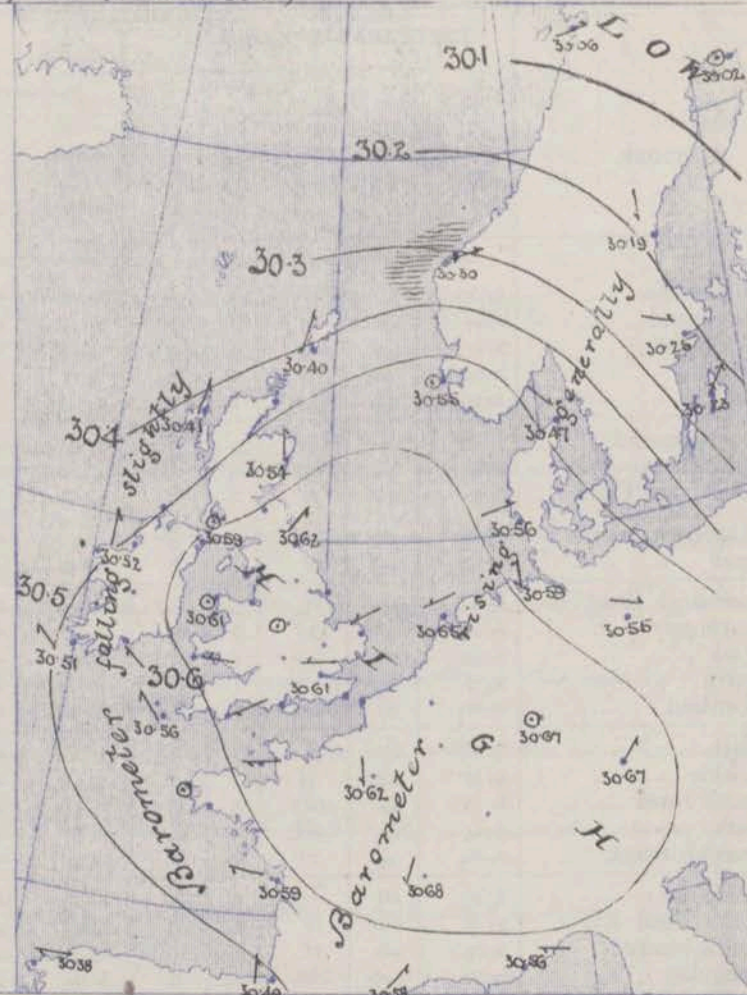
— = Rough. — = High.

### MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of November.

During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS.
Sumburgh Head .....	29.687
Stornoway .....	29.707
Wick .....	29.726
Nairn .....	29.743
Aberdeen .....	29.756
Leith .....	29.793
Shields .....	29.815
York .....	29.844
Loughborough .....	29.876
Ardrossan .....	29.796
Donaghadee .....	29.811
Holyhead .....	29.835
Liverpool .....	29.852
Parsonstown .....	29.848
Valencia .....	29.864
Roche's Point .....	29.864
Pembroke .....	29.862
Sally .....	29.898
Jersey .....	29.923
Hurst Castle .....	29.898
Dover .....	29.893
LONDON .....	29.897
Oxford .....	29.893
Cambridge .....	29.885
Yarmouth .....	29.863



## 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.

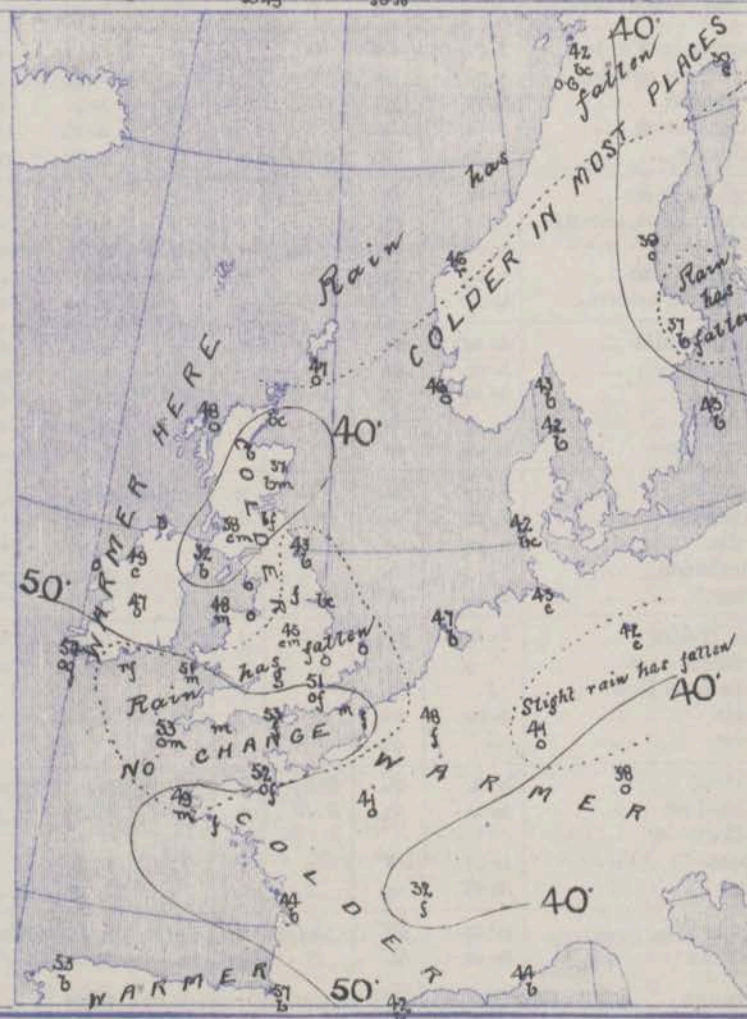
**RAINFALL**—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

### MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of November.)

STATIONS.	TEMPERATURE.				RAINFALL (Inches.)
	Daily Max.	Daily Min.	at 8 a.m.		
			Dry.	Wet.	
Sumburgh Head.....	45.3	37.4	41.5	39.8	4.24
Stornoway .....	45.7	36.7	41.0	39.9	4.60
Wick .....	45.7	35.7	40.9	39.3	2.97
Nairn .....	44.7	35.5	39.1	37.5	2.32
Aberdeen .....	46.1	36.3	40.3	38.5	3.16
Leith .....	48.2	36.7	41.2	39.6	2.11
Shields .....	47.1	38.1	41.8	40.2	2.63
York .....	47.7	36.1	40.3	39.0	2.21
Loughborough .....	48.0	36.4	40.2	38.9	2.30
Ardrossan .....	47.7	38.9	42.6	40.8	3.92
Donaghadee .....	48.2	39.2	42.9	41.7	3.13
Holyhead .....	49.7	42.8	45.5	43.8	3.71
Liverpool .....	47.7	39.5	42.1	40.4	2.87
Parsonstown .....	49.1	36.9	41.7	40.0	2.84
Valencia .....	52.4	42.7	47.2	45.2	5.50
Roche's Point .....	51.1	41.8	45.9	44.3	4.56
Pembroke .....	50.2	43.7	46.7	44.7	3.96
Sally .....	52.5	46.7	50.0	48.0	3.76
Jersey .....	51.9	44.2	47.5	45.6	4.24
Hurst Castle .....	50.5	40.3	44.6	43.6	2.98
Dover .....	49.1	40.7	44.0	42.4	3.56
LONDON .....	49.6	37.9	42.0	40.5	2.14
Oxford .....	48.6	37.6	41.0	39.7	2.30
Cambridge .....	48.8	35.7	40.3	39.5	2.02
Yarmouth .....	47.5	39.1	42.9	41.8	3.15

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





# GENERAL SITUATION AT 8 A.M.

## PRESSURE

Highest, 30.6 ins. and upwards, in a large anticyclone covering the greater part of England, the Netherlands, France, and Germany.  
 Lowest, 30.1 ins. and less, in the north of Scandinavia.  
 Gradients slight generally. Barometer falling in the extreme west and north of our islands and also in the south of France, but rising elsewhere.

## TEMPERATURE

Highest, 57° at Biarritz, 55° at Lisbon, 54° at Valencia, 53° at Seville, Ponta Point, and Hunt Carter, and 52° at Rocher Point, Jersey, and Bungeners.  
 Lowest, 30° at Haparanda, 31° at Leth, 32° at Donaghadee, 37° at Kinn and Aberdeen, and 38° at Anderson and Munich.

## WIND

Light from the E. in the Channel and Bay of Biscay; light or moderate from the SE. on our extreme west and southwest coast.  
 SW. in the north of Scotland, and also in the west of Norway, with a strong gale at Christiansund.  
 Light from the W. or NW. over Denmark, and North Germany; variable in the north of England.

## WEATHER

Fair over the greater part of Western Europe, but with fog or mist in many places.  
 Rain is falling at Rocher Point and also at Christiansund, and snow is reported at Haparanda.  
 Rain fell yesterday at many of our southern and eastern stations.

## SEA

Rough at Christiansund, but moderate to smooth elsewhere.

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

# FORECASTS

For the 24 hours ending at NOON on 18<sup>th</sup> Nov<sup>r</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:	Ther:		Wind		Wea:	Sea		Bar:	Ther:		Wind		Wea:	Sea:
		D	W	D	F					D	W	D	F		
Skudesnaes ...	30.35	49	45	NW	6	c	4	Holyhead ...	30.55	51	48	NE	3	b	2
Sumburgh Head ...	30.34	48	45	W	4	bc	4	Valencia ...	30.57	57	53	SSE	1	cm	1
Stornoway ...	30.44	49	47	SW	3	b	3	Scilly ...	30.50	54	54	L	0	f	6
Aberdeen ...	30.52	47	42	WSW	1	b	1	Jersey ...	30.56	53	51	SSE	2	0	2
Shields ...	30.53	50	46	N	1	b	2	Dungeness ...	30.51	55	54	L	0	m	1
Ardrossan ...	30.52	52	48	W	1	b	1	London ...	30.55	54	52	W	1	om	*
Malin Head ...	30.54	48	44	SW	1	0	2	Yarmouth ...	30.49	51	50	WNW	3	bf	2
Mullaghmore ...	30.55	50	46	NE	1	b	3	Rocheport ...	30.58	56	51	SE	3	m	2
Belmullet ...	30.55	53	49	SW	1	b	*								

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

The reports for yesterday morning showed that pressure was highest, 30.6 ins. and upwards, in a large anticyclone lying over the southern parts of France, Germany, and Austria, but high 30.5 ins. and upwards, in a smaller system which had appeared over Ireland. The lowest pressures, 29.7 ins. and less, were found in a large depression which was moving eastwards across the White Sea. The wind was light to fresh from the West or SW<sup>nd</sup> over the greater part of Northern, Eastern, and Central Europe, but from the NW<sup>nd</sup> in the northwest and extreme north of the United Kingdom. Over Spain, however, the wind was chiefly E<sup>ly</sup>, and in Algeria and the west of France SE<sup>ly</sup>, while in Italy it was light and variable. The weather was fine in the north of our Islands as well as in France, Southern Europe, and Algeria, but dull elsewhere, with fog over the Netherlands, Germany, Denmark, and the east and south of England. Rain was falling in the north of England and also in the west of Norway. Temperature had risen a little over England and also over the greater part of Northern and Central Europe, but fallen in most other localities; readings ranged from 65° and upwards over the central and southern parts of the Mediterranean to a little below the freezing point over Northern Russia and the southern parts of Germany and Austria. The highest individual readings were 63° at Nemours, 62° at Apatos, San Fernando, and Algiers, 61° at Barcelona, 59° at Oran, La Calle and Palermo, and 57° at Brindisi; the lowest were 26° at Munich and Buda Pesth, 28° at Prague and Cracow, 29° at Archangel and Kiev, 30° at Lemberg and Kharkov, and 32° at Haparanda, Uleaborg, Vienna and Florence.

In the course of the day the small anticyclone over Ireland moved eastward and joined the larger system lying over Central Europe. The wind shifted to the SW<sup>nd</sup> on our extreme western coasts, but elsewhere no material 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.

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

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# DAILY WEATHER REPORT.

for *Monday, 18<sup>th</sup> November, 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.				
			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.	Amount of Rainfall.		
SCANDINAVIA.	Haparanda ...	30.11	32	2	0	b	29.76	-.26	38	37	+8	W	2	0	*	?	23	0.04
	Hernösand ...	30.26	42	1	2	c	30.15	-.04	45	40	+6	W	2	0	*	?	28	-
	Stockholm ...	30.42	38	W	2	b	30.32	+0.07	34	33	?	WSW	2	0	*	50	-	-
	Wisby ...	29.96	45	W	6	b	30.37	+0.14	39	38	-4	SSW	4	0	*	46	39	-
	Bodö ...	29.89	46	SW	9	r	29.87	-.19	45	42	+3	WSW	4	0	3	46	?	0.67
	Christiansund	30.29	48	WSW	8	c	30.23	-.07	51	46	+5	WSW	8	0	6	?	46	0.04
	Skudesnaes ...	30.56	46	W	0	0	30.55	-.00	46	41	-4	W	0	0	2	48	39	-
	Christiania Fjord (Fjorder)	30.39	42	W	2	b	30.40	-.02	32	32	-11	WNW	2	0	2	45	32	-
	Skagen (The Scaw)	30.46	44	WNW	6	b	30.42	-.05	45	43	+3	WNW	7	0	5	48	41	-
	Fanö ...	30.63	45	W	4	0	30.62	+0.06	45	42	+3	W	4	0	*	48	41	-
	Sumburgh Head	30.39	48	SW	2	0	30.39	-.01	51	50	+4	SW	2	0	3	51	45	-
	Stornoway ...	30.38	51	SW	5	0	30.38	-.03	52	52	+4	SW	6	0	6	52	42	0.02
	Wick ...	30.49	46	SW	2	b	30.44	-.05	48	47	+8	W	2	0	1	49	37	-
	Nairn ...	30.48	45	W	1	bc	30.45	-.03	50	47	+13	WSW	3	0	1	52	36	-
	Aberdeen ...	30.56	38	WNW	1	b	30.53	-.01	86	35	-1	W	1	cm	1	44	32	-
	Leith ...	30.58	39	WNW	1	b	30.56	-.03	44	44	+13	SE	1	0	*	50	30	-
	Shields ...	30.61	44	SW	2	bm	30.61	-.01	45	44	+2	SSW	2	0	2	49	41	-
	Spurn Head ...	30.64	43	SSE	1	bc	30.63	-.01	49	48	+2	SE	3	0	3	50	41	0.01
	York ...	30.67	48	S	1	0	30.65	-.02	43	43	+2	SE	1	0	*	48	38	-
	Loughborough	30.66	47	ESE	1	bc	30.64	-.01	48	47	+3	ESE	1	0	*	51	45	0.01
	Ardrossan ...	30.56	50	S	1	om	30.54	-.05	49	48	+11	ESE	2	cm	1	51	37	0.01
	Malin Head ...	30.47	49	SSE	5	om	30.46	-.04	50	50	+5	SSE	4	cm	2	52	45	-
	Mullaghmore ...	30.51	54	SSW	3	ogdp	30.48	-.04	48	47	-1	W	1	0	3	57	45	-
	Belmullet ...	30.48	52	S	2	0	30.47	-.02	49	49	0	S	1	0	*	53	49	0.01
	Donaghadee ...	30.58	48	SW	2	c	30.58	-.04	52	52	+20	S	2	0	0	52	32	0.01
	Barrow-in-Furness	30.63	47	SE	3	0	30.60	-.02	47	46	0	E	2	0	*	50	43	-
	Liverpool (Bidston)	30.63	49	SE	3	0	30.61	-.03	47	47	0	SE	2	0	3	50	47	0.01
	Holyhead ...	30.60	52	W	0	ogm	30.58	-.03	50	49	+2	W	0	0	0	53	47	-
	Parsonstown ...	30.53	53	W	0	c	30.51	-.05	51	50	+4	W	0	0	*	54	47	-
	Valencia ...	30.52	55	ESE	2	c	30.49	-.02	52	51	-2	ESE	2	0	3	56	45	-
	Roche's Point...	30.55	52	SE	3	r	30.55	-.02	52	51	0	SSE	2	cm	4	53	51	0.10
	Pembroke (St. Ann's Hd.)	30.59	51	ESE	3	m	30.58	-.03	51	50	0	ESE	3	cm	3	53	50	-
	Scilly ...	30.54	54	ESE	4	of	30.52	-.04	53	53	0	ESE	3	cm	3	54	53	0.01
	Prawle Point ...	30.60	52	E	2	bc	30.58	-.03	52	51	-1	ESE	3	0	2	54	52	-
	Jersey (St. Aubin's)	30.58	54	E	3	0	30.60	-.01	50	49	-2	E	2	cm	2	56	49	-
	Hurst Castle ...	30.62	53	E	2	f	30.63	+0.01	51	50	-2	ESE	2	0	1	54	50	-
	Dungeness ...	30.61	52	ESE	3	m	30.62	+0.01	48	48	-4	ESE	3	0	2	53	48	0.04
	London ...	30.64	51	ESE	1	or	30.66	+0.05	48	47	-3	SE	1	0	*	52	47	-
	Oxford ...	30.65	50	E	1	0	30.65	0.00	48	47	0	SE	2	0	*	51	48	0.02
	Cambridge ...	30.65	50	W	0	0	30.67	+0.02	48	47	-1	S	1	0	*	52	46	-
	Yarmouth ...	30.65	50	ESE	3	od	30.67	+0.03	49	48	0	S	1	cm	2	53	47	0.03
	Cuxhaven ...	30.65	42	WNW	1	0	30.69	+0.10	44	42	+1	WNW	2	0	*	47	?	-
	Berlin ...	30.64	38	WNW	2	c	30.69	+0.14	40	39	-2	W	2	0	*	45	36	-
	Wiesbaden ...	*	*	*	*	*	30.70	+0.03	43	42	+2	E	1	0	*	45	41	-
	Munich ...	30.67	40	W	0	m	30.69	+0.02	38	33	-5	E	2	0	*	46	30	-
	The Helder ...	30.69	45	E	1	b	30.69	+0.04	43	?	-4	ESE	1	0	1	48	43	-
	Brussels (9 a.m.)	*	*	*	*	*	30.70	+0.06	43	43	-5	ESE	1	0	*	51	43	-
	Cape Gris Nez	?	48	E	2	0	?	?	45	44	-6	ESE	2	0	2	54	45	0.12
	Paris ...	30.63	49	N	1	0	30.65	+0.03	39	39	-2	N	1	0	*	50	35	-
	Brest ...	?	50	N	1	m	?	?	50	49	+1	E	2	0	2	57	46	0.04
	Lorient ...	30.53	54	ESE	1	0	30.54	-.02	49	48	+2	ESE	3	0	2	55	45	-
	Rochefort ...	30.56	53	E	2	b	30.54	-.05	44	43	0	ESE	3	0	2	63	37	-
	Belfort ...	30.59	43	SW	1	bc	30.57	-	41	38	-	SW	1	0	*	49	32	-
	Lyons ...	30.64	39	N	1	f	30.62	-.06	37	37	+5	WSW	1	0	*	42	?	-
	Nice ...	30.55	46	E	4	b	30.54	-.02	44	41	0	ESE	4	0	1	55	41	-
	Perpignan ...	30.55	53	W	0	b	30.54	-.04	45	44	+3	SW	2	0	*	62	?	-
	Biarritz ...	30.47	57	E	3	b	30.42	-.07	46	43	-11	ESE	3	0	2	64	43	-
	Corunna ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	-
	Lisbon ...	30.25	61	WNW	5	0	30.23	-.02	55	51	0	WNW	5	0	2	64	54	-

For Explanation of Columns, see bottom of p 4.

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



for 8 a.m. on Monday, 18<sup>th</sup> November

1889.

**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.

$\bullet = \text{forces } 5 \text{ to } 7$ ;  $\longrightarrow = \text{forces } 1 \text{ to } 4$ .

⊙ = dead calm.

SEA DISTURBANCE—Where considerable, is shown thus:

= Rough.  = High.

at 8.0 a.m., for the month of November.

*During the 15 Years: 1871—1885.*

[illegible]

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.

(For the month of November.)

[illegible]

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



# GENERAL SITUATION AT 8 A.M.

## PRESSURE

Highest, 30.50 in: to 30.70 in: in an anticyclone lying over Germany, France, England, and the east of Ireland.  
 Lowest, 29.76 in: at Hafnarvalla, 30.38 in: at Stornoway, 30.42 in: at Alesund, and 30.28 in: at Lulea.  
 Gradient almost nil over Germany, France and England, moderate over Scandinavia and Iceland.  
 Barometer falling slightly in most places - most in Lapland.

## TEMPERATURE

Highest, 55° at Lulea, 53° at Pelly, 52° at several of our other northern stations and at Stornoway, 50° at Holyhead, Jersey and Havre.  
 Lowest, 32° at Fander, 33° at Munich, 34° at Stockholm, 35° at Aberdeen, 37° at Lyons, 38° at Paris.  
 The low temperature recorded at Donaghadee, in the NW. of England and Central Scotland has disappeared, but that in the east of Scotland still holds.  
 The rise on our northern coast has been very decided.

## WIND

Moderate from E. and SE. over the Bay of Biscay, the Channel, and south of England, light SE over Ireland and the east and north of England, SW over the Shetlands and Hebrides, W over Scandinavia.  
 A gale is reported at Christiansund.

## WEATHER

Fair as a whole in Ireland, Spain and the south of France. Very dull elsewhere, with wet fogs or mist in many places.  
 Very slight rain has fallen at a few isolated stations.  
 Aurora has been seen at the Scotch stations.

## SEA

Rough at Stornoway, Christiansund, and the Scaw, slight or smooth elsewhere.

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

There is no indication of any but local changes, and these will probably be of a temporary character.

# FORECASTS

For the 24 hours ending at NOON on 19<sup>th</sup> Nov<sup>r</sup>

1889.

## DISTRICTS.

## FORECASTS.

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

SW<sup>ly</sup> breezes, moderate or light, some rain.  
 SE<sup>ly</sup> and Variable airs, dull, damp, foggy or hazy.  
 SE<sup>ly</sup> airs and calms; very dull, damp, hazy.

## DISTRICTS.

## FORECASTS

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

SE<sup>ly</sup> breezes, light; fair hazy.

Same as Nos 3 to 5.

SE<sup>ly</sup> and Varying breezes, light; fair as a whole.

## WARNINGS

NONE ISSUED.

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



# YESTERDAY'S 2 P.M. REPORTS.

	Bar:	Ther:		Wind		Wea:	Sea		Bar:	Ther:		Wind		Wea:	Sea
		D	W	D	F					D	W	D	F		
Skudesnaes ...	30.57	47	44	W	1	0	3		Holyhead ...	30.60	53	51	S	2	0 m 1
Sumburgh Head ...									Valencia ...						
Stornoway ...	30.38	51	51	SW	5	0	4		Scilly ...						
Aberdeen ...									Jersey ...	30.59	56	53	ENE	2	0 2
Shields ...									Dungeness ...	30.61	52	52	Z	0	m 1
Ardrossan ...									London ...						
Malin Head ...	30.48	52	49	SSW	14	50	3		Yarmouth ...						
Mullaghmore ...									Rocheport ...	30.58	61	59	SSW	2	6 2
Belmullet ...	30.47	53	51	SSW	2	0	2								

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

The reports for yesterday morning showed that pressure was highest 30.6 ins. and upwards in a large anticyclone lying over the greater part of England, France, the Netherlands and South Germany, and also in a smaller system lying over the south of Italy. The lowest pressures 29.8 ins. and less were found in a depression lying over the Baltic Provinces, in the neighbourhood of which the gradients for NW and N winds were rather steep. The wind was light from the E over the Channel, the Bay of Biscay, the Iberian Peninsula and the south of France, moderate from the SE and on our extreme west coast, and SW in the north and east of Scotland, as well as in the west of Norway, with a gale at Christiansund. Over the Baltic, however, the wind was strong from the N, with a gale at Wisly, and in Eastern Germany moderate from the NW while in the south of Russia light W breezes were reported. In Italy the wind was chiefly N, while in Algeria it was SE or S. The weather was fine and bright at some of our own northern stations, as well as over Denmark, the south of Sweden and the greater part of Southern Europe. Elsewhere, however, the sky was mostly cloudy, with fog or mist, and rain in many places, and with snow at Haparanda. Temperature had fallen several degrees over Great Britain and the east of Ireland, as well as over Denmark, the Baltic and northern Russia, but risen slightly in most other localities; readings ranged from 60° and upwards in Algeria & the extreme south of Spain to a little below the freezing point in the southeast of Scotland, the northeast of Ireland and the northern and extreme southern parts of Russia. The highest individual readings were 67° at Nemours, 63° at San Fernando and Oren, 62° at Algiers, 59° at Bilbao, Barcelona and La Coruña, 59° at Biarritz, Sangüinaria, Brindisi, and 58° at Lisbon; the lowest were 23° at Archangel, 24° at Odessa, 30° at Haparanda, Kiev and Nicolaieff, 31° at Leith, Hermandstadt and Kharkov and 32° at Uleaborg, Kuopio & Donaghadeer. In the course of the day very little change was observed either in pressure, wind or weather. Bright Aurora was, however, seen in the north of Scotland at night.

## SUMMARY OF CHANGES IN THE WEATHER OVER THE BRITISH ISLANDS AND THEIR NEIGHBOURHOOD FROM THE 10<sup>TH</sup> TO THE 16<sup>TH</sup> NOVEMBER 1892.

The weather of the past week has been generally mild and quiet, but a good deal of fog or mist has prevailed, and rain has fallen in most parts of the Kingdom.

The distribution of pressure has been almost continuously anticyclonic. At the commencement of the week a large area of high readings moved slowly eastwards across Ireland, England and the Netherlands, its central portion reaching Germany by the morning of the 12<sup>th</sup>. In the rear of the system light breezes from the E or SE set in on our more southern coasts, and SW winds in the extreme north, with foggy or misty weather in most districts, and slight rain in a few isolated places.

On the 14<sup>th</sup> some depressions began to move northwards along our extreme west coast, and increasing SE winds were therefore reported in these regions, with rain at many of our western stations. On the night of the 15<sup>th</sup>, however, the series of disturbances came to an end and a new anticyclone appeared over Ireland. The wind therefore fell light on all coasts.

At the close of the week the anticyclone in the west was moving eastwards, and becoming united with the large high pressure area which still lay over Germany. Cloudy, misty weather prevailed generally, and slight rain was falling from time to time even in the immediate neighbourhood of the anticyclonic system.

Temperature has been rather high for the time of year, especially on the 10<sup>th</sup> and 15<sup>th</sup> when the thermometer rose to 60° in some parts of England. Sharp frost was, however, experienced over England on the night of the 12<sup>th</sup>, and at some of our northern stations on the night of the 16<sup>th</sup>.

## 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, 19<sup>th</sup> November, 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 12.)	SHADE TEMP.		Amount of Rainfall.		
				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 ...	29.93	31	NW	2	0	29.91	+ .15	36	34	- 2	SW	2	0	*	39	28	-	
	Hernösand ...	30.23	37	SW	2	0	30.19	+ .04	46	43	+ 3	W	2	0	*	46	36	-	
	Stockholm ...	30.34	35	W	2	0	30.36	+ .04	35	34	+ 1	WSW	2	0	*	39	30	-	
	Wisby ...	30.35	41	SW	4	0	30.40	+ .05	42	42	+ 0	WSW	4	0	*	42	37	-	
	Bodö ...	30.03	46	WSW	8	0	29.82	- .05	46	46	+ 0	WSW	9	0	*	46	41	0.20	
	Christiansund	30.24	52	WSW	8	0	30.23	- .01	53	48	+ 5	WSW	8	0	*	54	50	-	
	Skudesnaes ...	30.37	48	SE	2	0	30.49	- .06	49	48	+ 1	S	4	0	*	?	?	-	
	Christiania Fjord (Færder)	30.45	40	W	0	0	30.41	+ .04	32	32	+ 0	NE	2	0	*	41	32	-	
	Skagen (The Scaw)	30.50	41	NW	1	0	30.49	+ .01	45	45	+ 0	NW	1	0	*	45	37	0.04	
	Fanö ...	30.63	44	W	2	0	30.64	+ .01	46	46	+ 0	W	3	0	*	48	41	-	
BRITISH ISLANDS.	Sumburgh Head	30.39	49	Z	0	0	30.35	- .04	50	49	- 1	W	2	0	*	52	47	-	
	Stornoway ...	30.36	52	SW	7	0	30.33	- .03	52	52	+ 0	SW	6	0	*	53	49	0.02	
	Wick ...	30.42	52	SW	2	0	30.41	- .01	47	46	- 1	W	2	0	*	52	45	0.05	
	Nairn ...	30.43	53	W	1	0	30.42	- .01	48	46	- 2	SSW	1	0	*	54	46	-	
	Aberdeen ...	30.48	47	SSW	1	0	30.49	- .01	42	41	+ 1	SEW	1	0	*	48	36	-	
	Leith ...	30.51	46	NE	1	0	30.54	- .03	50	47	+ 3	S	1	0	*	52	42	-	
	Shields ...	30.37	47	SSW	2	0	30.59	- .02	41	40	- 1	SSW	2	0	*	50	40	-	
	Spurn Head ...	30.63	48	SSW	3	0	30.64	+ .01	46	45	- 1	S	3	0	*	49	45	-	
	York ...	30.61	49	SSW	1	0	30.64	- .01	46	46	+ 0	SSW	1	0	*	49	42	-	
	Loughborough	30.64	50	SSW	1	0	30.67	+ .03	45	45	- 0	SE	1	0	*	51	45	-	
BRITISH ISLANDS.	Ardrossan ...	30.52	50	E	1	0	30.53	- .01	51	50	+ 1	S	2	0	*	51	37	-	
	Malin Head ...	30.44	50	S	4	0	30.44	- .02	49	48	- 1	S	4	0	*	53	45	-	
	Mullaghmore ...	30.47	53	SSW	4	0	30.46	- .01	49	47	+ 2	SSW	4	0	*	54	46	-	
	Belmullet ...	30.44	52	S	2	0	30.44	- .03	51	50	+ 1	SW	2	0	*	54	47	0.01	
	Donaghadee ...	30.54	52	WSW	2	0	30.55	- .03	51	51	- 0	SSW	3	0	*	52	51	0.03	
	Barrow-in-Furness	30.57	49	SE	3	0	30.60	+ .03	47	46	+ 1	E	2	0	*	50	44	0.05	
	Liverpool (Bidston)	30.60	48	SSW	2	0	30.62	+ .02	48	47	+ 1	SSW	2	0	*	52	42	-	
	Holyhead ...	30.58	52	SSW	2	0	30.60	+ .02	51	50	+ 1	S	2	0	*	54	46	-	
	Parsonstown ...	30.50	53	Z	0	0	30.53	+ .03	49	47	- 2	Z	0	0	*	55	48	-	
	Valencia ...	30.44	52	SE	3	0	30.51	+ .02	51	49	- 2	ENE	2	0	*	53	50	-	
BRITISH ISLANDS.	Roche's Point...	30.50	53	SE	3	0	30.54	+ .04	51	49	- 2	S	2	0	*	54	50	0.01	
	Pembroke (St. Ann's Hd.)	30.57	52	SE	3	0	30.61	+ .03	51	49	- 2	SSW	2	0	*	54	51	-	
	Scilly ...	30.52	53	SE	4	0	30.55	+ .03	51	49	- 2	SSW	4	0	*	56	50	0.01	
	Prawle Point ...	30.59	50	E	3	0	30.60	+ .01	49	48	- 1	ENE	3	0	*	52	48	-	
	Jersey (St. Aubin's)	30.57	52	E	2	0	30.61	+ .04	45	43	- 2	ENE	3	0	*	58	44	-	
	Hurst Castle ...	30.63	51	SE	3	0	30.64	+ .01	46	45	- 1	ENE	3	0	*	54	45	-	
	Dungeness ...	30.63	47	SE	2	0	30.62	- .01	43	42	- 1	E	2	0	*	48	42	-	
	London ...	30.67	48	SW	1	0	30.67	+ .01	43	41	- 2	E	1	0	*	52	43	-	
	Oxford ...	30.66	49	SE	1	0	30.67	+ .02	45	43	- 2	E	1	0	*	51	44	-	
	Cambridge ...	30.67	49	Z	0	0	30.68	+ .01	45	44	- 1	E	1	0	*	50	44	-	
GERMANY.	Yarmouth ...	30.66	48	S	1	0	30.68	+ .02	46	44	- 2	SE	4	0	*	50	44	-	
	Cuxhaven ...	30.67	49	W	3	0	30.71	+ .04	43	42	- 1	W	3	0	*	48	41	-	
	Berlin ...	30.70	52	WSW	3	0	30.70	+ .01	42	40	+ 2	WSW	3	0	*	43	39	-	
	Wiesbaden ...	*	*	*	*	*	30.73	+ .03	37	35	- 2	E	1	0	*	43	36	-	
GERMANY.	Munich ...	30.69	34	NE	3	0	30.71	+ .02	32	31	- 1	NE	3	0	*	34	32	-	
	The Helder ...	30.72	43	SE	1	0	30.72	+ .03	38	37	- 1	SE	1	0	*	46	37	-	
	Brussels (9 a.m.)	*	*	*	*	*	30.70	- .02	36	36	+ 0	E	1	0	*	44	36	-	
	Cape Gris Nez	?	44	SE	2	0	?	?	46	45	+ 1	SE	1	0	*	54	43	-	
FRANCE AND NETHERLANDS.	Paris ...	30.63	44	E	2	0	30.64	- .01	41	40	+ 1	E	2	0	*	45	?	-	
	Brest ...	?	54	E	1	0	?	?	46	45	- 1	Z	0	0	*	39	45	-	
	Lorient ...	30.52	52	E	3	0	30.53	- .01	45	42	- 3	SSW	1	0	*	57	41	-	
	Rocheport ...	30.53	44	E	5	0	30.54	- .01	39	39	+ 0	E	4	0	*	57	34	-	
FRANCE AND NETHERLANDS.	Belfort ...	30.55	40	NE	1	0	30.60	+ .05	37	36	- 1	E	1	0	*	61	35	-	
	Lyons ...	30.63	37	N	2	0	30.69	+ .06	33	32	- 1	S	1	0	*	46	33	-	
	Nice ...	30.53	49	E	1	0	30.58	+ .05	45	39	+ 6	E	4	0	*	57	41	-	
	Perpignan ...	30.51	53	NE	2	0	30.57	+ .06	42	40	- 2	SE	2	0	*	60	39	-	
PENIN- SULA.	Biarritz ...	30.41	55	SE	3	0	30.46	+ .05	47	43	+ 4	SE	2	0	*	63	41	-	
	Corunna ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	-	
PENIN- SULA.	Lisbon ...	30.25	60	NE	5	0	30.26	- .01	54	51	- 3	NE	4	0	*	66	54	-	

For Explanation of Columns, see bottom of p 4.

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



# WEATHER CHARTS

for 8 a.m. on

Tuesday, 19<sup>th</sup> November

1889.

## BAROMETER, WIND AND SEA.

### EXPLANATION OF MAP.

**BAROMETER**—Isobars are drawn for each tenth of an inch.

Changes since previous morning are stated in words.

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

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

**SEA DISTURBANCE**—Where considerable, is shown thus:

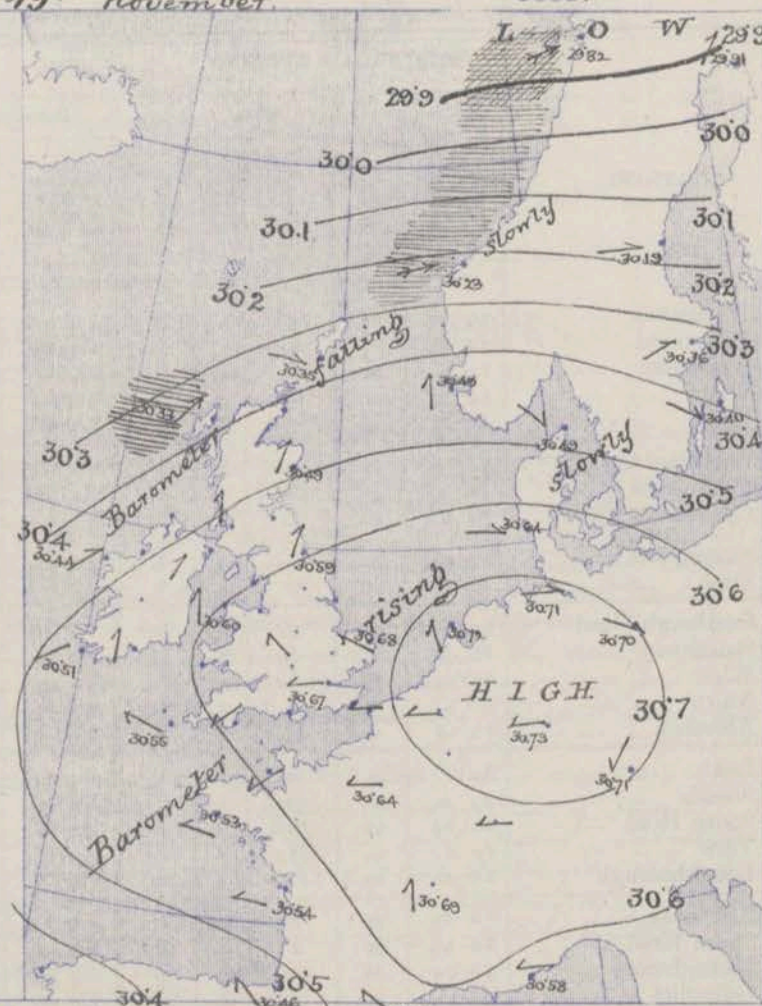
— Rough. — High.

## MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of November.

During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS.
Sumburgh Head .....	29.687
Stornoway .....	29.707
Wick .....	29.726
Nairn .....	29.743
Aberdeen .....	29.756
Leith .....	29.793
Shields .....	29.815
York .....	29.844
Loughborough .....	29.876
Ardrossan .....	29.795
Donaghadee .....	29.811
Holyhead .....	29.835
Liverpool .....	29.852
Parsonstown .....	29.848
Valencia .....	29.864
Roche's Point .....	29.864
Pembroke .....	29.862
Scilly .....	29.898
Jersey .....	29.923
Hurst Castle .....	29.898
Dover .....	29.893
LONDON .....	29.897
Oxford .....	29.893
Cambridge .....	29.885
Yarmouth .....	29.863



## 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.

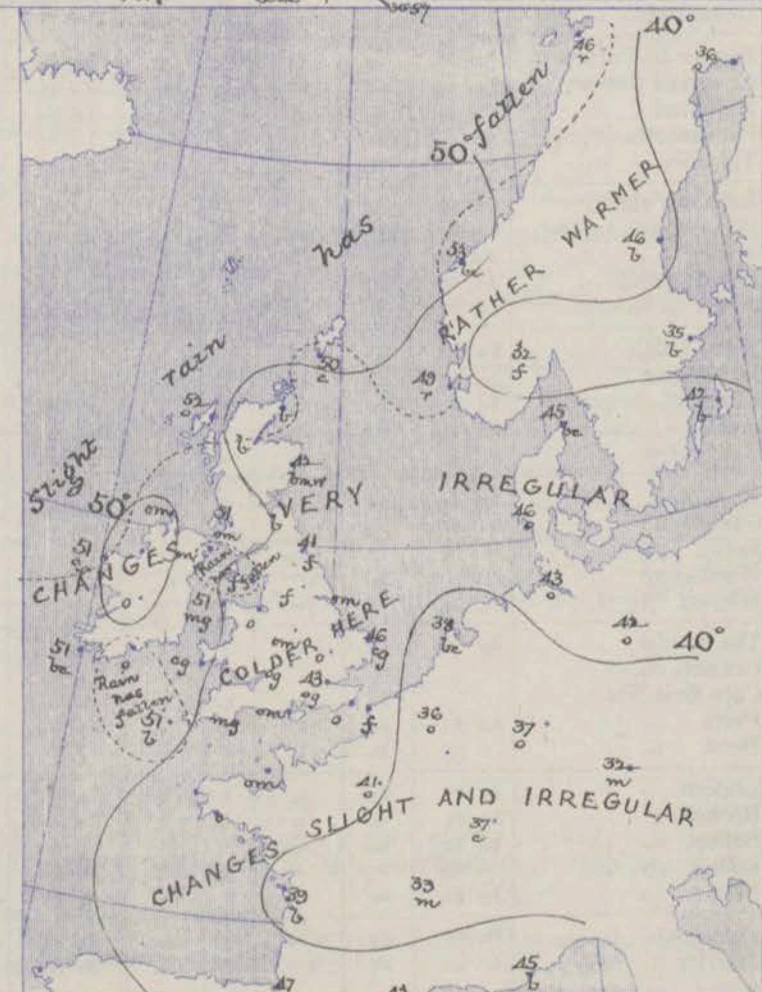
**RAINFALL**—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

### MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of November.)

STATIONS.	TEMPERATURE.				RAINFALL (Inches.)
	Daily Max.	Daily Min.	at 8 a.m.		
			Dry.	Wet.	
Sumburgh Head.....	45.3	37.4	41.5	39.8	4.24
Stornoway .....	45.7	36.7	41.0	39.9	4.60
Wick .....	45.7	35.7	40.9	39.3	2.97
Nairn .....	44.7	35.5	39.1	37.5	2.32
Aberdeen .....	46.1	36.3	40.3	38.5	3.16
Leith.....	48.2	36.7	41.2	39.6	2.11
Shields .....	47.1	38.1	41.8	40.2	2.63
York .....	47.7	36.1	40.3	39.0	2.21
Loughborough .....	48.0	36.4	40.2	38.9	2.30
Ardrossan .....	47.7	38.9	42.6	40.8	3.92
Donaghadee.....	48.2	39.2	42.9	41.7	3.13
Holyhead .....	49.7	42.8	45.5	43.8	3.71
Liverpool .....	47.7	39.5	42.1	40.4	2.87
Parsonstown .....	49.1	36.9	41.7	40.0	2.84
Valencia .....	52.4	42.7	47.2	45.2	5.50
Roche's Point .....	51.1	41.8	45.9	44.3	4.56
Pembroke.....	50.2	43.7	46.7	44.7	3.96
Scilly .....	52.5	46.7	50.0	48.0	3.76
Jersey .....	51.9	44.2	47.5	45.6	4.24
Hurst Castle .....	50.5	40.3	44.6	43.6	2.98
Dover .....	49.1	40.7	44.0	42.4	3.56
LONDON .....	49.6	37.9	42.0	40.5	2.14
Oxford .....	48.6	37.6	41.0	39.7	2.30
Cambridge .....	48.8	35.7	40.3	39.5	2.02
Yarmouth .....	47.5	39.1	42.9	41.8	3.15

**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, 30.50 in. to 30.73 in., in an anticyclone lying over Germany, France, the Bay of Biscay, England, and Ireland.  
 Lowest, 29.9 in.; and less, over Lapland, 30.23 in.; at Stornoway and Lisbon, and 30.46 in. at B.arity.

Gradient moderate in the north, slight generally elsewhere.

Barometer rising very slightly, except in the extreme northwest and north.

## TEMPERATURE

Highest, 54° at Lisbon, 53° at Christiansund, 52° at Stornoway, 51° at Anderson, Bilmullet, Valence, and Kelly.

Lowest, 32° at Faerø and Munich, 33° at Lyons, 35° at Stockholm, 36° at Haparanda, 37° at Westbaden, 42° at Aberdeen.

It rose to 58° at Jersey, 54° at several of our western stations and Kairi, and 52° in London yesterday afternoon.

## WIND

Light to moderate from E. over England, the Channel and Bay of Biscay, and from NE. at Lisbon;  
 from S. in Ireland and Scotland, and from W. in the Shetlands.

A gale from the SW. is blowing over the northern half of Norway.

## WEATHER

Fine and bright in Sweden, Scotland, at several of our western stations, and in the southwest and south of France, cloudy  
 or dull elsewhere, gloomy or foggy over England and the Channel.

Rainfall has been very slight, and confined to the extreme western and northern stations.

## SEA

High on the northwestern coast of Norway, rough at Stornoway, slight or smooth on our own and the French coasts generally.

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

There is no indication of any important change.

## FORECASTS

For the 24 hours ending at NOON on 20<sup>th</sup> Nov<sup>r</sup>

1889.

### DISTRICTS.

### FORECASTS.

0 SCOTLAND  
NORTH

SW<sup>ly</sup> breezes, moderate; slight rain.

1 SCOTLAND  
EAST

S<sup>ly</sup> and SW<sup>ly</sup> breezes, light; fair, foggy.

2 ENGLAND  
N.E.

3 ENGLAND  
EAST

4 MIDLAND  
COUNTIES

Varying E<sup>ly</sup> airs and calms; gloomy, foggy.

5 ENGLAND  
SOUTH

### DISTRICTS.

### FORECASTS

6 SCOTLAND  
WEST

S<sup>ly</sup> breezes, light; fair.

7 ENGLAND  
N.W.

8 ENGLAND  
S.W.

Same as Nos 3 to 5.



9 IRELAND  
NORTH

10 IRELAND  
SOUTH

S<sup>ly</sup> breezes, light or moderate; fair, local fogs.

### WARNINGS

NONE ISSUED.

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



# YESTERDAY'S 2 P.M. REPORTS.

	Bar.	Ther.		Wind		Wea.	Sea		Bar.	Ther.		Wind		Wea.	Sea	
		D	W	D	F					D	W	D	F			
Skudesnaes ...									Holyhead ...	30.57	53	51	SSW	2	c	1
Sumburgh Head ...	30.40	50	49	SW	1	0	3		Valencia ...	30.46	53	52	SE	3	om	5
Stornoway ...	30.48	53	53	SW	6	0	6		Scilly ...	30.51	55	53	SSW	2	cm	4
Aberdeen ...	30.48	46	44	W	1	em	1		Jersey ...	30.58	55	52	SSW	3	b	3
Shields ...	30.56	47	45	SSW	3	em	2		Dungeness ...	30.62	47	46	SSW	1	m	3
Ardrossan ...	30.52	51	50	SSW	1	0	1		London ...	30.64	51	49	SSW	1	om	2
Maha Head ...	30.43	53	51	S	4	bc	2		Yarmouth ...	30.66	50	48	SSW	2	bc	2
Mullaghmore ...	30.48	51	50	SW	1	bc	3		Rochefort ...	30.52	55	51	SSW	4	b	2
Belmullet ...	30.45	52	52	SW	2	bc	2									

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

The reports for yesterday morning showed that pressure was highest, 30.7 ins. and upwards, in a large anticyclone the central portion of which lay over the Netherlands and North Germany, but high 30.3 ins. and upwards, in a new system which had appeared over Northern Russia. The lowest readings, 29.8 ins. and less, were found in a large depression which lay over the north of Scandinavia, but a smaller disturbance, with readings below 30.0 ins., was reported over the extreme south of Russia. The wind was SE<sup>4</sup> over Ireland, England, and the west of France, SW<sup>4</sup> in the north of Scotland, W<sup>4</sup> in Scandinavia, Denmark, and North Germany, and NW<sup>4</sup> over Poland, Austria, and Eastern Germany. Over the central parts of Russia and France, however, and also over nearly the whole of Southern Europe and the Mediterranean variable breezes were reported. In force the wind was light or moderate generally, but at Christiansund and the Scaw there was a gale from the West. The weather was fine over North Germany and the Baltic, as well as in Spain, Italy, ~~and~~ the west and south of France and Eastern Algeria. Elsewhere, however, the sky was cloudy or overcast, with fog or mist in many places, rain at Stornoway and Constantinople, and snow at Kieps. Temperature had risen several degrees over the northern parts of the United Kingdom and to a less extent over the northern parts of Scandinavia and Russia, as well as in Austria, the south of Russia and the north of Italy; elsewhere, however, the change had been mostly in a downward direction. Readings ranged from a little above 69° in Algeria and the south of Spain to a little below the freezing point over the central parts of Russia and Germany. The highest individual readings were 63° at Oren, 62° at San Fernando and Algiers, 61° at Nemours, 61° at Malta, 59° at Palma, and 57° at Bellas, Barcelona, Brindisi and La Calle; the lowest were 28° at St. Petersburg and Moscow, 29° at Bismar, 32° at Tander, Charkov, and Hague, 33° at Munich, and 34° at Kieps, Stockholm, Kiev, Breslau and Hamantadt. In the course of the day no 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 WEDNESDAY 20<sup>TH</sup> NOVEMBER. 1889.

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

STATIONS.		YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
		Barometer at 32° F. and Sea Level.	Temp. in Shade.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Weather.	Sea. (0 to 2.)	SHADE TEMP.		Amount of Rainfall.	
				Dir.	Force. (0 to 12.)		Reading at 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 ...	29.71	42	SW	6	0	29.85	-0.06	36	34	0	Z	0	0	*	43	28	—	
	Hernösand ...	30.11	50	SW	4	0	30.18	-0.01	51	46	+5	NW	4	0	*	52	37	—	
	Stockholm ...	30.30	38	WSW	2	f	30.38	+0.02	35	35	0	WSW	2	0	*	41	30	—	
	Wisby ...	30.30	45	NW	4	0	30.40	0.00	42	41	0	NW	4	0	*	45	39	—	
	Bodö ...	29.78	46	SW	8	T	30.06	+0.24	44	42	-2	WSW	6	0	3	46	41	0.63	
	Christiansund	30.25	52	W	9	0	30.28	+0.05	53	48	0	WSW	8	0	6	52	48	—	
	Skudesnaes ...	30.52	49	Z	0	0	30.58	+0.09	49	48	0	S	2	0	3	50	48	0.08	
	Christiania Fjord (Færder)	30.42	38	N	2	f	30.46	+0.05	41	40	+9	WSW	3	0	2	41	32	—	
	Skagen (The Scaw)	30.45	46	WNW	2	0	30.52	+0.03	45	45	0	NW	3	0	3	48	43	—	
	Fanö ...	30.63	46	W	4	C	30.67	+0.03	46	45	0	W	2	0	*	48	45	—	
BRITISH ISLANDS.	Sumburgh Head	30.37	50	SW	2	0	30.38	+0.03	49	48	-1	Z	0	0	3	52	47	—	
	Stornoway ...	30.34	52	SW	6	0	30.34	+0.01	51	50	-1	SW	6	0	5	52	49	—	
	Wick ...	30.41	49	SW	2	0	30.42	+0.01	49	46	0	SW	2	0	1	52	48	—	
	Nairn ...	30.43	48	Z	0	0	30.44	+0.02	44	42	-4	Z	0	0	1	53	42	—	
	Aberdeen ...	30.51	48	S	2	0	30.51	+0.02	41	40	-1	SW	1	0	1	52	38	—	
	Leith ...	30.52	50	W	1	C	30.55	+0.01	49	48	-1	Z	0	0	*	57	47	—	
	Shields ...	30.60	45	SW	2	f	30.59	0.00	42	40	+2	SW	2	0	2	50	39	—	
	Spurn Head ...	30.62	46	SE	3	0	30.63	-0.01	41	38	-5	SW	2	0	3	46	40	—	
	York ...	30.64	44	SE	2	0	30.64	0.00	41	39	-5	S	1	0	*	50	40	—	
	Loughborough	30.63	44	ENE	1	0	30.64	-0.02	41	39	-4	SE	1	0	*	46	40	—	
GERMANY.	Ardrossan ...	30.53	51	S	2	0	30.55	+0.02	49	48	-2	SE	2	0	2	57	48	0.01	
	Malin Head ...	30.46	50	S	5	0	30.45	+0.01	45	44	-4	S	5	0	2	53	45	—	
	Mullaghmore ...	30.49	50	ENE	1	0	30.49	+0.03	48	46	-1	S	2	0	2	54	46	—	
	Belmullet ...	30.44	50	S	2	0	30.45	+0.01	47	46	-4	SE	2	0	*	51	47	—	
	Donaghadee ...	30.54	52	SW	2	C	30.56	+0.01	49	47	-4	SW	4	0	2	53	44	0.01	
	Barrow-in-Furness	30.58	47	SE	3	0	30.59	-0.01	42	39	-5	SE	3	0	*	50	41	—	
	Liverpool (Bidston)	30.62	46	SE	1	0	30.61	-0.01	41	38	-7	SE	1	0	2	50	40	—	
	Holyhead ...	30.58	51	S	2	0	30.58	-0.02	45	43	-6	S	2	0	2	52	45	—	
	Parsonstown ...	30.51	47	Z	0	0	30.51	-0.02	47	46	-2	Z	0	0	*	56	39	—	
	Valencia ...	30.51	52	S	2	C	30.46	-0.05	51	49	0	SE	2	0	3	53	49	—	
FRANCE AND NETHERLANDS.	Roche's Point...	30.55	52	SE	3	C	30.50	-0.04	50	47	-1	SE	3	0	4	54	48	—	
	Pembroke (St. Ann's Hd.)	30.60	50	SE	3	0	30.57	-0.04	49	45	-2	SE	3	0	2	51	44	—	
	Scilly ...	30.52	50	SE	4	0	30.52	-0.03	50	46	-1	SE	4	0	4	53	48	—	
	Prawle Point ...	30.58	48	E	2	0	30.59	-0.01	48	46	-1	SE	2	0	1	50	45	—	
	Jersey (St. Aubin's)	30.58	46	E	2	0	30.62	+0.01	44	42	-1	E	3	0	3	47	42	—	
	Hurst Castle ...	30.61	47	E	4	0	30.61	-0.01	48	47	+2	E	3	0	2	51	45	—	
	Dungeness ...	30.61	42	SE	3	0	30.65	+0.03	42	40	-1	SE	2	0	1	44	41	—	
	London ...	30.66	42	E	1	0	30.67	0.00	42	40	-1	WSW	1	0	*	45	41	—	
	Oxford ...	30.64	42	SE	1	0	30.64	-0.02	42	40	-2	SE	1	0	*	43	41	—	
	Cambridge ...	30.68	44	E	1	0	30.67	-0.01	40	39	-5	Z	0	0	*	47	38	—	
PENINSULA.	Yarmouth ...	30.65	44	SE	3	C	30.65	-0.03	42	40	-4	SW	1	0	2	46	41	—	
	Cuxhaven ...	30.69	41	WSW	3	0	30.73	+0.02	42	41	-1	SW	2	0	*	44	41	—	
	Berlin ...	30.71	43	WNW	3	0	30.73	+0.02	39	37	-3	WNW	2	0	*	45	37	—	
	Wiesbaden ...	30.71	43	W	3	0	30.76	+0.03	32	31	-5	E	1	0	*	37	32	—	
	Munich ...	30.71	31	NW	2	0	30.74	+0.03	28	28	-4	SW	3	0	*	34	28	—	
	The Helder ...	30.69	39	SE	1	C	30.71	-0.01	32	32	-6	S	1	0	1	41	32	—	
	Brussels (9 a.m.)	?	?	SE	1	*	30.71	+0.01	31	31	-5	Z	0	0	*	40	31	—	
	Cape Gris Nez	?	?	SE	1	*	?	?	37	36	-9	S	0	0	*	54	?	—	
	Paris ...	30.66	37	SE	2	0	30.68	+0.04	36	35	-5	E	2	0	*	37	35	—	
	Brest ...	?	47	E	3	0	?	?	44	44	-2	SE	3	0	2	59	48	0.08	
FRANCE AND NETHERLANDS.	Lorient ...	30.53	45	SE	2	0	30.56	+0.03	39	39	-6	E	3	0	2	52	37	—	
	Rochefort ...	30.56	50	E	4	0	30.59	+0.03	39	38	0	E	4	0	2	57	34	—	
	Belfort ...	30.58	34	N	1	C	30.68	+0.08	32	30	-5	SE	1	0	*	41	29	—	
	Lyons ...	30.68	35	E	1	0	30.73	+0.04	32	32	-1	S	1	0	*	42	32	—	
	Nice ...	30.57	51	E	1	0	30.58	0.00	30	41	+5	E	2	0	1	61	39	—	
	Perpignan ...	30.56	56	NW	2	0	30.60	+0.03	?	?	?	E	?	?	*	61	39	—	
PENINSULA.	Biarritz ...	30.46	55	E	3	0	30.49	+0.03	54	48	+7	SE	3	0	1	63	45	—	
	Corunna ...	30.29	61	NW	4	0	30.29	?	54	57	?	NW	3	0	*	61	54	—	

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

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



# WEATHER CHARTS

for 8 a.m. on

Wednesday, 20<sup>th</sup> November.

1889.

## BAROMETER, WIND AND SEA.

### EXPLANATION OF MAP

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Changes since previous morning are stated in words.

**WIND**—Arrows show the prevalent winds. They fly with the wind and

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→ = forces above 10; → = forces 8 to 10;

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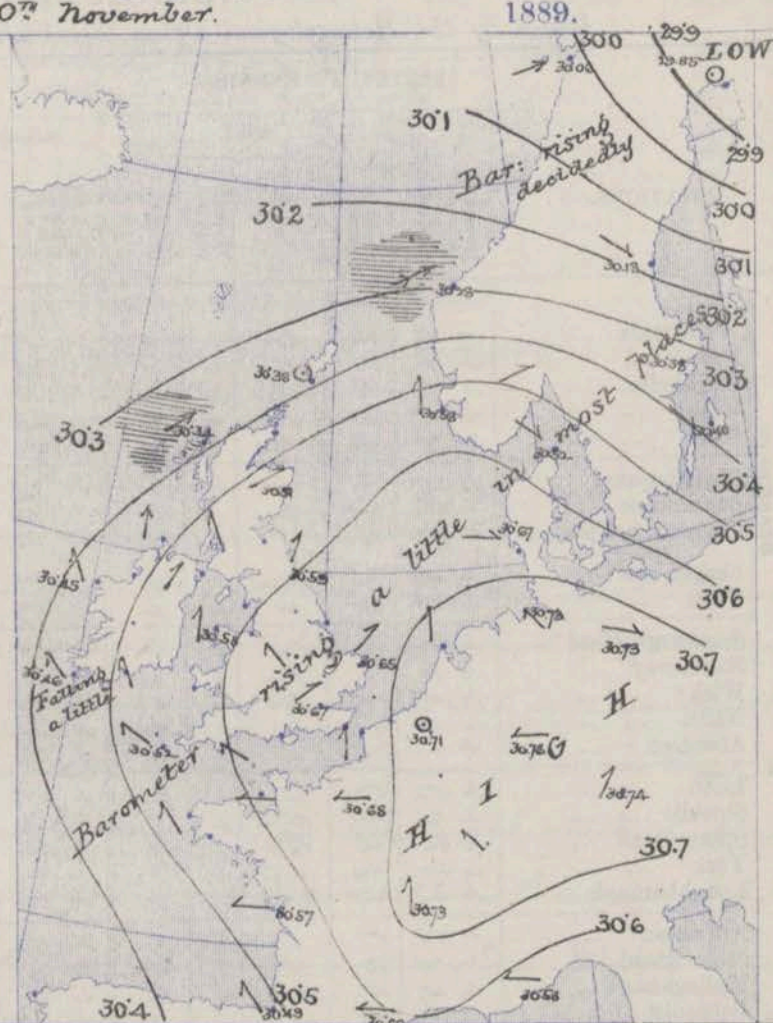
— Rough. — High.

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

During the 15 Years: 1871—1885.

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

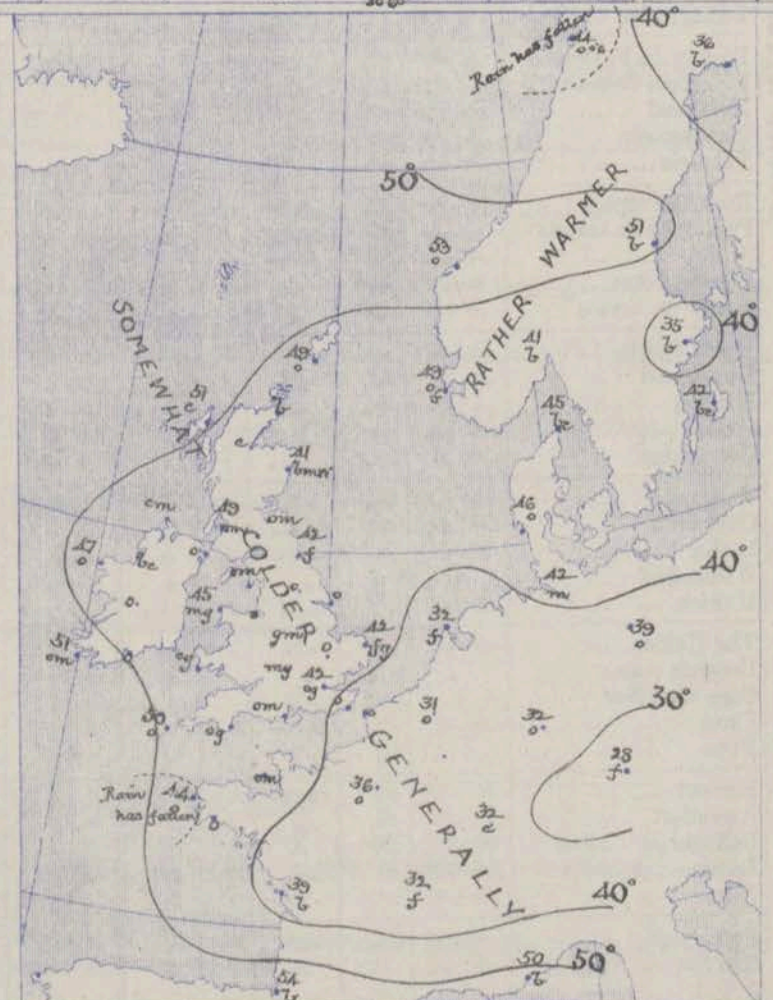
**RAINFALL**—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

### MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of November.)

STATIONS.	TEMPERATURE.				RAINFALL (Inches.)
	Daily Max.	Daily Min.	at 8 a.m.		
			Dry.	Wet.	
Sumburgh Head.....	45.3	37.4	41.5	39.8	4.24
Stornoway .....	45.7	36.7	41.0	39.9	4.60
Wick .....	45.7	35.7	40.9	39.3	2.97
Nairn .....	44.7	35.5	39.1	37.5	2.32
Aberdeen .....	46.1	36.3	40.3	38.5	3.16
Leith .....	48.2	36.7	41.2	39.6	2.11
Shields .....	47.1	38.1	41.8	40.2	2.63
York .....	47.7	36.1	40.3	39.0	2.21
Loughborough .....	48.0	36.4	40.2	38.9	2.30
Ardrossan .....	47.7	38.9	42.6	40.8	3.92
Donaghadee .....	48.2	39.2	42.9	41.7	3.13
Holyhead .....	49.7	42.8	45.5	43.8	3.71
Liverpool .....	47.7	39.6	42.1	40.4	2.87
Parsonstown .....	49.1	36.9	41.7	40.0	2.84
Valencia .....	52.4	42.7	47.2	45.2	5.50
Roche's Point .....	51.1	41.8	45.9	44.3	4.56
Pembroke .....	50.2	43.7	46.7	44.7	3.96
Scilly .....	52.5	46.7	50.0	48.0	3.76
Jersey .....	51.9	44.2	47.5	45.6	4.24
Hurst Castle .....	50.5	40.3	44.6	43.6	2.98
Dover .....	49.1	40.7	44.0	42.4	3.68
LONDON .....	49.6	37.9	42.0	40.5	2.14
Oxford .....	48.6	37.6	41.0	39.7	2.30
Cambridge .....	48.8	35.7	40.3	39.5	2.02
Yarmouth .....	47.5	39.1	42.9	41.8	3.15

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, 30.50 in: to 30.76 in: in an anticyclone lying over Germany, France, England, and the eastern parts of Ireland and Scotland.  
 Lowest, 29.6 in: and less, over the north of Finland, 30.4 in: and less, off the north of Scotland, and the extreme west of Ireland.  
 Gradient, slight generally—especially in the east and south.  
 Barometer falling a little in the south of Ireland, not changing decidedly on our other coasts.

### TEMPERATURE

Highest, 54° at Biarritz, 53° at Christiansund, 51° at Helsingør, Stenway and Valencia, 50° at Sully and Nice, 49° at Androsund.  
 Lowest, 28° at Muenich, 31° at Rhusu, 32° at Olyon, Belfort, Minskaden and the Helder, 36° at Paris, and 39° at Berlin.  
 In London the reading is 42° and the daily range has been only three degrees.

### WIND

Nearly calm over our inland countries, light or moderate from the E. over the Channel and Bay of Biscay, from SE. and S. in Ireland, and from SSW in Scotland.  
 SW winds strong to a gale in force, still blow in the northwest of Norway.

### WEATHER

Fine in several parts of Sweden, Scotland, Ireland, and the east and south of France, dull, but dry elsewhere, with fog or haze in many places.

### SEA

Rather rough in the far north, moderate in the extreme west and south-west, slight or smooth elsewhere.

### PROBABLE CHANGES IN SYSTEM NOW PREVALENT

There is still no indication of any decided change.

## FORECASTS

For the 24 hours ending at NOON on 21<sup>st</sup> Nov<sup>r</sup> 1889.

#### DISTRICTS.

#### FORECASTS.

- |   |                  |   |   |
|---|------------------|---|---|
| 0 | SCOTLAND NORTH   | } | SW <sup>ly</sup> breezes, light or moderate; fair as a whole. |
| 1 | SCOTLAND EAST    |   |   |
| 2 | ENGLAND N.E.     |   |   |
| 3 | ENGLAND EAST     | } | S <sup>ly</sup> airs and calms; dull, fog at times.           |
| 4 | MIDLAND COUNTIES |   |   |
| 5 | ENGLAND SOUTH    |   |   |

Calms and varying E<sup>ly</sup> airs; gloomy, foggy at times, dry.



#### DISTRICTS.

#### FORECASTS

- |    |               |   |   |
|----|---------------|---|---|
| 6  | SCOTLAND WEST | } | S <sup>ly</sup> breezes, light; fair, dull. |
| 7  | ENGLAND N.W.  |   |   |
| 8  | ENGLAND S.W.  | } | SE <sup>ly</sup> breezes, light; fair.      |
| 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.	Ther.		Wind		Wea.	Sea		Bar.	Ther.		Wind		Wea.	Sea.
		D	W	D	F					D	W	D	F		
Skudesnaes ...	30.51	49	48	2	0	of	3		Holyhead ...	30.58	52	51	2	on g	1
Sumburgh Head ...	30.36	50	49	ENE	1	of	2		Valencia ...	30.49	53	51	SE	5	bc m
Stornoway ...	30.34	52	51	SW	6	c	5		Scilly ...	30.53	51	48	ENE	4	0
Aberdeen ...	30.49	51	48	SW	1	b	1		Jersey ...	30.58	46	43	E	3	og m
Shields ...	30.57	50	48	SW	2	f	2		Dungeness ...	30.61	42	41	E	3	0
Ardrossan ...	30.51	51	50	2	2	0	2		London ...	30.64	45	42	E	2	og m
Malin Head ...	30.46	52	49	2	4	bm	2		Yarmouth ...	30.65	45	43	ENE	4	eg
Mullaghmore ...	30.47	52	48	SW	5	0	3		Rochefort ...	30.55	56	52	E	3	cl
Belmullet ...	30.44	51	50	SW	3	0	*								

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

The reports for yesterday morning showed that pressure was still highest, 30.7 ins: and upwards, in an anticyclone the central portion of which lay over Holland and Germany, but high, 30.4 ins: and upwards, over nearly the whole of Western and Central Europe. The lowest readings, 29.9 ins: and less, were found in a depression lying over the north of Scandinavia, and moderate gradients for W<sup>ly</sup> winds prevailed over the greater part of Northern Europe. The wind was light from the NE<sup>ly</sup> over Italy and Spain, from the E<sup>ly</sup> over France and the English Channel, from the SE<sup>ly</sup> over England, and from the S<sup>ly</sup> and SW<sup>ly</sup> over the eastern and northern parts of the United Kingdom. Over Scandinavia, Denmark, and North Germany, however, W<sup>ly</sup> breezes were reported, with gales in the west of Norway, while over the Baltic and Russia the wind was light from the NW<sup>ly</sup>. In Algeria the wind was chiefly S<sup>ly</sup> or SE<sup>ly</sup>. The weather was fine in the east of Scotland as well as over Sweden and the greater part of Southern Europe, but overcast in most other regions, with fog or mist in many places and rain in Poland and Galicia. Temperature had changed very irregularly, but the general tendency was for a slight fall; readings ranged from 60° and upwards in Algeria and the extreme south of Spain to the freezing point or a little below over the northern and central parts of Russia and some parts of <sup>Austria and</sup> Germany. The highest individual readings were 67° at Nemours, 64° at Oron, 62° at Algiers and Malta, 61° at San Fernando, 58° at Bilbao, 57° at Oporto and Brindisi, and 56° at Palermo and Laballe; the lowest were 25° at Moscow, 26° at Münster, 30° at Ulsaborg, Kiev, and Hammstadt, 32° at Kuopio, Tander, Mornick, and Ruda-lesch, and 33° at Charkov, Simoga, and Lyons.

In the course of the day, scarcely any 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 *Thursday, 21<sup>st</sup> November, 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 2.)	SHADE TEMP.		Amount of Rainfall.		
			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.)		Weather.	Max.		Min.	
SCANDINAVIA.																		
Haparanda ...	30.10	36	2	0	bc	29.95	+ .10	40	39	+ .4	WNW	2	bc	*	41	30	0.04	
Hernösand ...	30.32	53	NW	4	bc	30.31	+ .13	48	42	- .6	Z	0	b	*	54	18	-	
Stockholm ...	30.39	39	Z	0	b	30.44	+ .06	41	40	+ .6	W	2	0	*	46	34	-	
Wisby ...	30.38	44	SW	1	b	30.48	+ .08	44	43	+ .2	NW	4	b	*	46	39	-	
Bodö ...	29.96	48	SW	1	T	30.05	- .01	47	44	+ .3	WSW	3	0	5	43	41	0.55	
Christiansund	30.35	52	WSW	5	0	30.31	+ .03	49	47	- .4	W	5	c	5	?	46	-	
Skudesnaes ...	30.61	48	WSW	4	0	30.51	- .07	46	42	- .3	S	6	0	5	?	45	-	
Christiania Fjord (Færder)	30.49	42	W	3	b	30.49	+ .03	31	31	- .10	W	2	f	2	43	30	-	
Skagen (The Scaw)	30.57	46	WNW	6	0	30.58	+ .06	44	41	- .1	W	3	0	3	48	?	-	
Fanö ...	30.70	45	SW	2	0	30.66	- .02	35	35	- .11	S	4	b	*	48	?	-	
Sumburgh Head	30.40	49	Z	0	0	30.25	- .13	47	44	- .2	Z	0	0	3	51	45	-	
Stornoway ...	30.37	50	SW	5	0	30.13	- .21	51	50	0	SW	3	0	6	51	47	-	
Wick ...	30.41	49	SW	2	b	30.27	- .15	47	46	0	S	3	bc	1	52	45	-	
Nairn ...	30.44	45	Z	0	bc	30.27	- .17	47	45	+ .3	Z	0	0	1	54	38	-	
Aberdeen ...	30.48	46	SSE	2	c	30.36	- .13	43	40	+ .2	SW	2	cm	3	51	39	-	
Leith ...	30.48	45	W	1	c	30.36	- .19	45	43	- .4	SW	3	c	*	49	38	-	
Shields ...	30.53	41	SSW	2	0	30.45	- .14	42	40	0	S	3	om	2	42	34	-	
Spurn Head ...	30.58	42	S	3	0	30.51	- .12	39	37	- .2	SSW	4	om	3	43	37	-	
York ...	30.59	42	SW	1	0	30.51	- .13	39	38	- .2	S	2	0	*	45	38	-	
Loughborough	30.60	44	SSE	1	0	30.52	- .12	38	37	- .3	SSE	2	ogm	*	45	37	-	
Ardrossan ...	30.50	47	ESE	2	om	30.35	- .20	48	47	- .1	SE	4	om	2	49	43	-	
Malin Head ...	30.42	46	SSE	4	om	30.21	- .24	47	45	+ .2	SSE	4	bm	2	48	44	-	
Mullaghmore ...	30.41	48	SE	4	0	30.19	- .20	50	47	+ .2	SE	5	b	3	51	47	-	
Belmullet ...	30.36	47	S	4	0	30.14	- .31	48	45	+ .1	SSE	3	0	*	50	47	-	
Donaghadee ...	30.51	49	SSW	3	0	30.36	- .20	48	44	+ .1	SSW	5	0	3	53	47	0.01	
Barrow-in-Furness	30.53	41	SE	2	0	30.42	- .17	41	39	- .1	ESE	4	0	*	45	40	-	
Liverpool (Bidston)	30.57	44	S	1	0	30.45	- .16	38	37	- .3	SE	3	b	3	46	38	-	
Holyhead ...	30.54	48	ESE	2	og	30.41	- .17	46	44	+ .1	ESE	3	og	2	48	41	-	
Parsonstown ...	30.44	47	Z	0	0	30.27	- .24	48	46	+ .1	SE	1	0	*	49	46	-	
Valencia ...	30.35	52	SE	3	og	30.18	- .28	52	51	+ .1	SE	6	0	6	53	50	-	
Roche's Point...	30.42	52	SSE	5	0	30.30	- .20	52	50	+ .2	S	5	0	4	52	50	0.08	
Pembroke (St. Ann's Hd.)	30.50	50	SE	4	0	30.39	- .18	49	48	0	SE	5	odg	4	50	47	-	
Scilly ...	30.44	50	ESE	5	0	30.33	- .19	51	50	+ .1	SE	5	om	4	53	48	-	
Prawle Point ...	30.54	47	ESE	4	0	30.45	- .14	48	48	0	E	4	0	3	48	44	-	
Jersey (St. Aubin's)	30.57	44	E	3	om	30.48	- .14	45	44	+ .1	SSE	4	c	3	45	40	-	
Hurst Castle ...	30.60	45	Z	3	0	30.51	- .12	47	46	- .1	E	3	om	2	48	46	-	
Dungeness ...	30.62	41	SSE	3	0	30.52	- .13	39	37	- .3	SSE	2	0	1	42	37	-	
London ...	30.63	42	SE	1	og	30.54	- .13	39	38	- .3	ESE	1	og	*	44	38	-	
Oxford ...	30.62	41	SE	1	0	30.54	- .10	38	37	- .4	SE	1	og	*	45	38	-	
Cambridge ...	30.64	40	Z	0	0	30.55	- .12	38	37	- .2	Z	0	0	*	45	37	-	
Yarmouth ...	30.64	40	WNW	1	c	30.55	- .10	40	39	- .2	SW	1	b	2	42	38	-	
Cuxhaven ...	30.74	41	SSW	2	b	30.66	- .07	38	32	- .9	SSE	2	0	*	?	32	-	
Berlin ...	30.76	42	WNW	2	0	30.73	0.00	43	42	+ .4	SE	1	0	*	43	39	-	
Wiesbaden ...	*	*	*	*	*	30.69	- .07	33	30	+ .1	E	1	0	*	34	30	-	
Munich ...	30.73	35	NE	3	f	30.67	- .07	27	27	- .1	E	3	0	*	34	27	-	
FRANCE AND NETHERLANDS.																		
The Helder ...	30.69	32	S	1	f	30.62	+ .09	31	31	- .1	SSE	1	0	1	32	30	-	
Brussels (9 a.m.)	?	*	*	*	*	30.62	- .09	29	?	- .2	SE	1	*	*	34	29	-	
Cape Gris Nez	?	36	SE	1	m	?	?	31	31	- .6	SE	1	0	0	37	30	-	
Paris ...	30.65	33	ESE	2	0	30.58	- .10	30	30	- .6	E	2	*	*	36	?	-	
Brest ...	?	47	SE	3	b	?	?	47	44	+ .3	ESE	4	0	4	?	43	-	
Lorient ...	30.50	43	ESE	3	m	30.41	- .15	41	40	+ .2	E	4	b	2	45	37	-	
Rochefort ...	30.56	50	E	4	b	30.49	- .08	36	35	- .3	E	4	b	2	57	30	-	
Belfort ...	30.61	34	E	1	c	30.58	- .10	31	36	- .1	N	2	c	*	39	26	-	
Lyons ...	30.68	36	NNE	1	f	30.63	- .10	30	30	- .2	ESE	1	0	*	37	30	-	
Nice ...	30.55	52	ESE	4	b	30.53	- .05	48	47	- .2	ESE	4	0	1	63	46	-	
Perpignan ...	30.56	48	SE	1	b	30.52	- .08	43	43	?	Z	0	0	*	60	38	-	
Biarritz ...	30.45	57	E	3	b	30.39	- .10	58	48	+ .4	SW	4	0	2	63	48	-	
PENIN- SULA.																		
Corunna ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
Lisbon ...	30.31	57	NE	3	f	30.33	+ .04	54	53	0	NNE	3	0	?	61	54	0.43	

For Explanation of Columns, see bottom of p 4

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



# WEATHER CHARTS

for 8 a.m. on

Thursday, 21<sup>st</sup> November.

1889.

## BAROMETER, WIND AND SEA.

### EXPLANATION OF MAP.

**BAROMETER**—Isobars are drawn for each tenth of an inch.

Changes since previous morning are stated in words.

**WIND**—Arrows show the prevalent winds. They fly with the wind and

their barbs and feathers refer to force thus—

→ = forces above 10; → = forces 8 to 10;

→ = forces 5 to 7; → = forces 1 to 4.

○ = dead calm.

**SEA DISTURBANCE**—Where considerable, is shown thus:

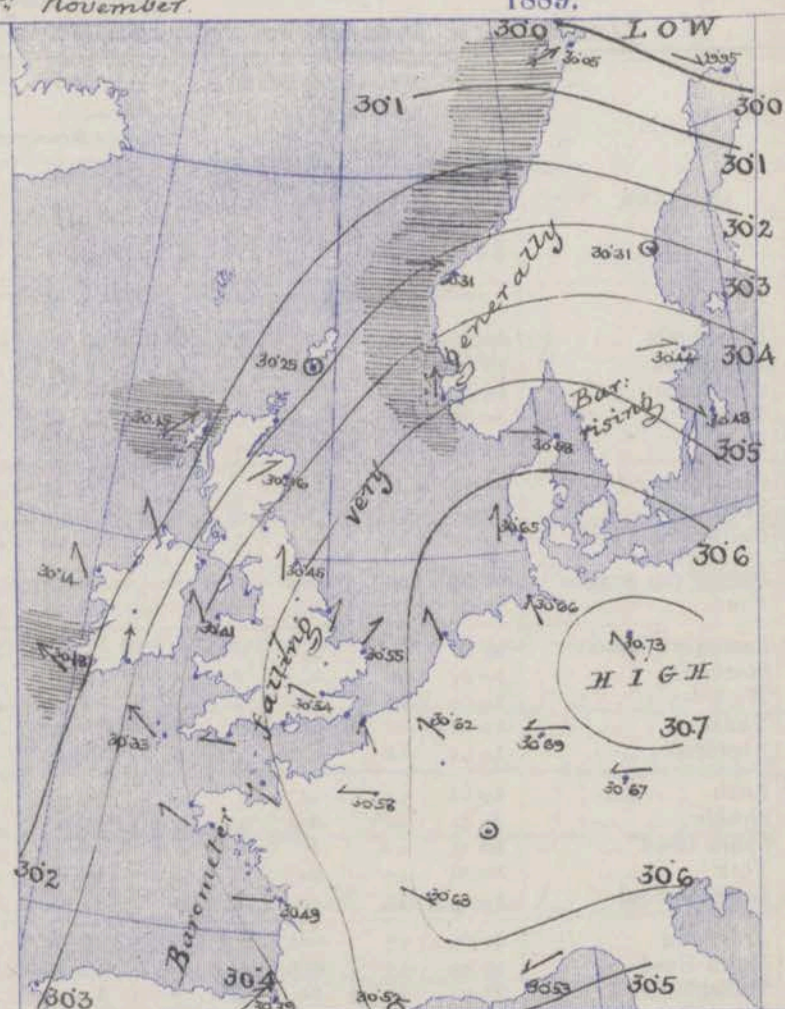
— = Rough. — = High.

## MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of November.

During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS.
Sumburgh Head .....	29.687
Stornoway .....	29.707
Wick .....	29.726
Nairn .....	29.743
Aberdeen .....	29.756
Leith .....	29.793
Shields .....	29.815
York .....	29.844
Loughborough .....	29.876
Ardrossan .....	29.795
Donaghadee .....	29.811
Holyhead .....	29.835
Liverpool .....	29.852
Parsonstown .....	29.848
Valencia .....	29.864
Roche's Point .....	29.864
Pembroke .....	29.862
Scilly .....	29.898
Jersey .....	29.923
Hurst Castle .....	29.898
Dover .....	29.893
LONDON .....	29.897
Oxford .....	29.893
Cambridge .....	29.885
Yarmouth .....	29.863



## 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.

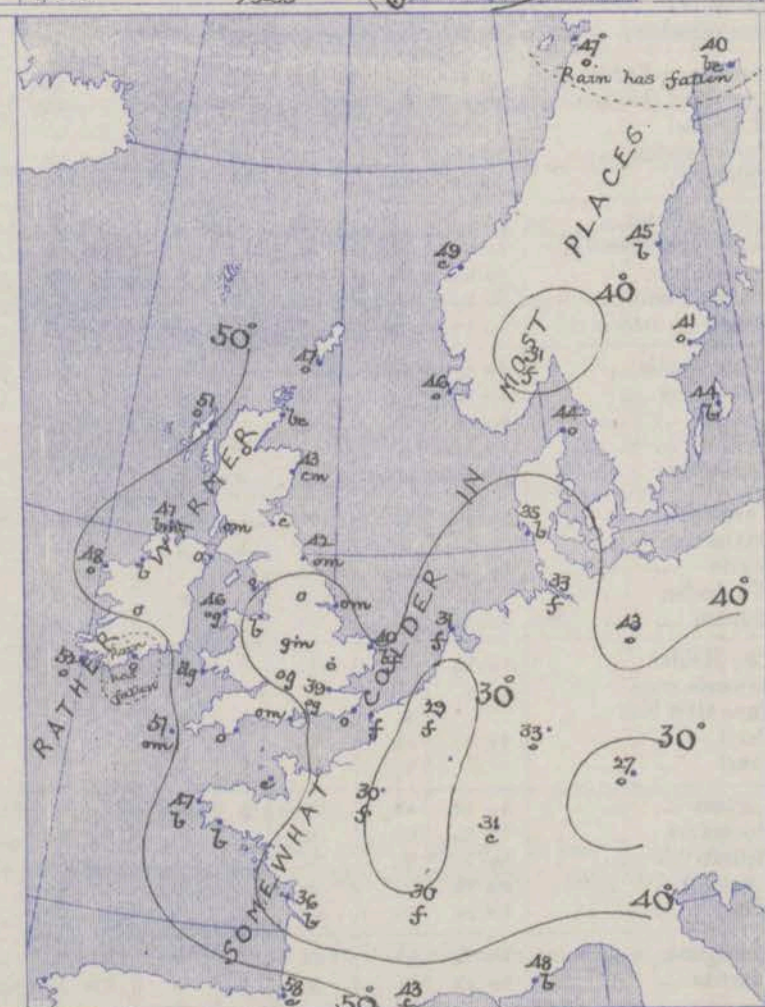
**RAINFALL**—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

### MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of November.)

STATIONS.	TEMPERATURE.				RAINFALL. (Inches.)
	Daily Max.	Daily Min.	at 8 a.m.		
			Dry.	Wet.	
Sumburgh Head.....	45.3	37.4	41.5	39.8	4.24
Stornoway .....	45.7	36.7	41.0	39.9	4.60
Wick .....	45.7	35.7	40.9	39.3	2.97
Nairn .....	44.7	35.5	39.1	37.5	2.32
Aberdeen .....	46.1	36.3	40.3	38.5	3.16
Leith .....	48.2	36.7	41.2	39.6	2.11
Shields .....	47.1	38.1	41.8	40.2	2.63
York .....	47.7	36.1	40.3	39.0	2.21
Loughborough .....	48.0	36.4	40.2	38.9	2.30
Ardrossan .....	47.7	38.9	42.6	40.8	3.92
Donaghadee .....	48.2	39.2	42.9	41.7	3.13
Holyhead .....	49.7	42.8	45.5	43.8	3.71
Liverpool .....	47.7	39.5	42.1	40.4	2.87
Parsonstown .....	49.1	36.9	41.7	40.0	2.84
Valencia .....	52.4	42.7	47.2	45.2	5.50
Roche's Point .....	51.1	41.8	45.9	44.3	4.56
Pembroke .....	50.2	43.7	46.7	44.7	3.96
Scilly .....	52.5	46.7	50.0	48.0	3.76
Jersey .....	51.9	44.2	47.5	45.6	4.24
Hurst Castle .....	50.5	40.3	44.6	43.6	2.98
Dover .....	49.1	40.7	44.0	42.4	3.56
LONDON .....	49.6	37.9	42.0	40.5	2.14
Oxford .....	48.6	37.6	41.0	39.7	2.30
Cambridge .....	48.8	35.7	40.3	39.5	2.02
Yarmouth .....	47.5	39.1	42.9	41.8	3.15

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: to 30.7 in: in an anticyclone lying over Germany, Denmark, France, and the east of England.  
 Lowest 30.0 in: and less, at Haparanda, 30.2 in: and less, over the west of our Islands, and about 30.3 in: over the extreme southwest of Spain.  
 Gradient moderate over Ireland, Scotland and the north of Scandinavia, slight elsewhere.  
 Barometer rising over the Baltic and Barents, falling elsewhere, most in the west of Ireland.

## TEMPERATURE

Highest 58° at Biarritz, 54° at Lisbon, 52° at Algiers, and Valencia, and 51° at Seville and Stornoway.  
 Lowest 27° at Munich, 23° at Bremen, 30° at Berlin, 31° at the Helder, 33° at Wiesbaden and Cuxhaven, and 38° at Oxford, Cambridge, and Loughboro'.  
 Its tendency is to rise in the east and north, and to fall elsewhere (temporarily).

## WIND

Moderate E<sup>s</sup> over the Bay of Biscay and Channel — Strong SE<sup>s</sup> to S<sup>s</sup> in Ireland.  
 Light SE<sup>s</sup> over the inland part of England — Light SW<sup>s</sup> to S<sup>s</sup> on our eastern coast.  
 Variable airs prevail over Central Europe — Moderate ENE<sup>s</sup> at Nice.

## WEATHER

Fine and bright in the west and south of France, foggy over Central France and the Netherlands — dull and gloomy over our Islands.  
 Rain has fallen — slightly in the east of Ireland, but more in Lapland.

## SEA

Rough at Valencia and Stornoway as well as off the northwest of Norway, moderate on our southern coast and at Brest, slight or smooth elsewhere.

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The anticyclone which has prevailed for so long appears to be giving way on its western side, and to be moving eastwards.

S<sup>s</sup> and SW<sup>s</sup> winds are likely to become more general shortly, with milder weather, and with rain in the west and northwest.

## FORECASTS

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

### DISTRICTS.

### FORECASTS.

- |   |                  |  |
|---|------------------|--|
| 0 | SCOTLAND NORTH   | S <sup>s</sup> and SW <sup>s</sup> breezes, freshening; milder, some rain.   |
| 1 | SCOTLAND EAST    |  |
| 2 | ENGLAND N.E.     | SW <sup>s</sup> and S <sup>s</sup> breezes, light; fair generally.           |
| 3 | ENGLAND EAST     |  |
| 4 | MIDLAND COUNTIES | E <sup>s</sup> and SE <sup>s</sup> breezes, light; gloomy and foggy to fair. |
| 5 | ENGLAND SOUTH    |  |

### DISTRICTS.

### FORECASTS

- |    |               |   |
|----|---------------|---|
| 6  | SCOTLAND WEST | S <sup>s</sup> winds, increasing in force; some rain.                       |
| 7  | ENGLAND N.W.  |   |
| 8  | ENGLAND S.W.  | SE <sup>s</sup> and S <sup>s</sup> winds, strong and increasing; some rain. |
| 9  | IRELAND NORTH |   |
| 10 | IRELAND SOUTH |   |

### WARNINGS

NONE ISSUED.

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



# YESTERDAY'S 2 P.M. REPORTS.

	Bar:		Ther:		Wind		Wea:	Sea		Bar:		Ther:		Wind		Wea:	Sea
	D	W	D	F	D	F				D	W	D	F	D	F		
Skudesnaes ...	30.60	49	48	SE	6	0	f	4		Holyhead ...	30.55	48	45	S	1	o.g	1
Sumburgh Head ...	30.40	50	49	SE	0	0	c	3		Valencia ...	30.39	51	48	SE	4	o.m	4
Stornoway ...	30.39	51	50	SE	6	0	c	5		Seilly ...	30.47	50	47	SE	4	c	4
Aberdeen ...	30.45	49	47	SE	2	6 m	2			Jersey ...	30.60	41	40	SE	3	f	3
Shields ...	30.55	46	39	SE	3	0 m	2			Dungeness ...	30.63	41	39	S	3	0	2
Ardrossan ...	30.50	48	47	SE	2	0	2			London ...	30.65	44	41	SE	1	o.g m	2
Malin Head ...	30.46	48	46	SE	3	0	2			Yarmouth ...	30.64	41	39	W	2	c	3
Mullaghnore ...	30.45	49	46	SE	4	0 g m	3			Rochefort ...	30.56	55	51	SE	3	0	2
Belmullet ...	30.39	49	47	S	4	0	2										

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

The report for yesterday morning showed that pressure was highest, 30.7 ins. and upwards, in a large anticyclone the central portion of which lay over Holland, Germany, and the east of France, but high, 30.5 ins. and upwards, over nearly the whole of Central, Western, and Southern Europe. The lowest reading, 29.8 ins. and less, were found in a large depression lying over the White Sea and the northeast of Finland, and moderate gradients for W. and NW. winds were prevalent over Northern Europe generally. The wind was light to moderate from the NE. in Italy, from the E. over Spain, France, and the extreme south of England, from SE. on our western coasts, and from S. or SW. in the north and east of our Islands. Over Scandinavia, Denmark, the Baltic, Eastern Germany, Austria, and the west and south of Russia, however, the wind was W. or NW., with gales at Christiansund, while over Northern and Central Russia it was SE. Over Western Germany and Algeria variable breezes were reported. The weather was fine in the east of Scotland, as well as in Sweden, Finland, Italy, Algeria, and the south of France, but dull in most other countries, with fog or mist in many places, even at St. Petersburg, Rostock, and Hamburg, and snow at Archangel. Temperature had risen a few degrees over Scandinavia, Finland, the Baltic, and the south of Russia, as well as in Spain and the south of France but fallen elsewhere — several degrees over the northern and central parts of Russia; readings ranged from between 55° and 65° on the coasts of the Iberian Peninsula and the southern shores of the Mediterranean to 32° or a little below over Austria, Western Germany, and Central France, to several degrees below the freezing point over Central Russia, and to a few degrees below zero in the neighbourhood of the White Sea. The highest individual readings were 64° at San Fernando and Oron, 60° at Bilbao, Algiers and Malta, 59° at Opatz, 58° at Barcelona, 57° at Alexandria, and 56° at Tangier and La Palme; the lowest were -6° F. at Archangel, +9° at Moscow, 28° at Munster, Vienna, and Munich, 30° at Prague, 31° at Rouen, Lyons, and Baden, and 32° at Wiesbaden, Lyons and Turin. In the course of the day the barometer began to fall with some decision in the extreme west of our Islands, and the wind there began to freshen from the SE. No other change of importance was observed over Western Europe.

### EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

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

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

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

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



# DAILY WEATHER REPORT.

for Friday, 22<sup>nd</sup> November, 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 ...	30.07	43	SW	2	0	29.96	+0.01	35	34	-5	SW	2	b	*	43	32	-
	Hernösand ...	30.18	37	Z	0	b	30.18	-0.13	30	29	-15	Z	0	b	*	55	?	-
	Stockholm ...	30.48	41	W	4	0	30.38	-0.06	41	38	0	W	4	0	*	46	36	-
	Wisby ...	30.48	43	SW	4	0	30.45	-0.03	41	39	-3	W	4	0	*	46	41	-
	Bodö ...	30.11	46	SW	8	r	29.89	-0.16	45	43	-2	SW	8	r	5	48	41	0.39
	Christiansund	30.24	47	W	2	bc	29.99	-0.32	42	39	-7	ESE	3	b	4	?	41	-
	Skudesnaes ...	30.43	45	SSE	7	0	30.27	-0.24	46	45	0	SSE	8	0	5	46	45	-
	Christiania Fjord (Færder)	30.46	44	WSW	5	m	30.33	-0.16	44	41	+13	SW	5	0	3	?	?	-
	Skagen (The Scaw)	30.50	42	SW	4	0	30.42	-0.16	40	38	-4	SW	3	0	2	?	?	-
	Fanö ...	30.53	36	S	3	0	30.45	-0.20	37	37	+2	S	4	m	*	41	?	-
BRITISH ISLANDS.	Sumburgh Head	30.13	47	SSW	3	0	29.86	-0.39	50	49	+3	SW	3	0	4	50	47	-
	Stornoway ...	29.97	50	SW	8	0 u	29.88	-0.25	46	46	-5	SW	4	0	4	53	45	0.50
	Wick ...	30.13	48	S	4	b	29.94	-0.33	47	46	0	S	2	d	1	50	45	-
	Nairn ...	30.14	45	SW	2	b	29.95	-0.32	47	46	0	SW	1	r	1	52	45	0.12
	Aberdeen ...	30.25	45	SSW	2	og	30.04	-0.32	49	47	+6	S	3	ogm	4	49	43	0.03
	Leith ...	30.28	46	SW	2	c	30.05	-0.31	53	50	+8	S	4	bc	*	53	44	-
	Shields ...	30.35	41	S	3	om	30.18	-0.27	41	40	-1	S	3	om	2	42	39	-
	Spurn Head ...	30.42	38	S	4	0	30.32	-0.19	37	36	-2	SW	5	0	4	44	35	-
	York ...	30.42	41	S	2	0	30.28	-0.23	38	38	-1	S	2	0	*	43	37	-
	Loughborough	30.45	42	S	3	0	30.35	-0.17	41	41	+3	SE	2	ogm	*	43	36	-
GERMANY.	Ardrossan ...	30.24	48	ESE	3	om	30.00	-0.35	52	51	+4	SSE	5	r m	5	52	48	0.06
	Malin Head ...	30.01	51	S	6	og	29.98	-0.23	48	47	+1	WSW	1	of	2	54	42	0.19
	Mullaghmore ...	30.02	53	SE	7	c	29.98	-0.21	49	48	-1	W	2	og	3	56	49	0.26
	Belmullet ...	29.94	52	S	6	0	30.00	-0.14	46	45	-2	Z	0	of	*	55	45	0.29
	Donaghadee ...	30.22	51	SSW	3	r	30.03	-0.33	53	53	+5	S	6	0	4	53	47	0.02
	Barrow-in-Furness	30.33	44	E	4	0	30.17	-0.25	43	42	+2	ESE	5	0	*	45	40	-
	Liverpool (Bidston)	30.35	45	SE	3	0	30.22	-0.23	42	41	+4	SE	4	bc	4	45	38	-
	Holyhead ...	30.29	46	S	2	b	30.15	-0.26	52	52	+6	S	5	ogm	5	53	44	-
	Parsonstown ...	30.12	52	SE	2	0	30.00	-0.27	54	53	+6	Z	0	r	*	55	47	0.31
	Valencia ...	30.02	53	SSE	7	og	30.05	-0.13	50	49	-2	W	1	om	1	54	49	0.31
FRANCE AND NETHERLANDS.	Roche's Point...	30.15	53	S	6	0	30.04	-0.26	54	54	+2	S	7	r	5	52	42	0.30
	Pembroke (St. Ann's Hd.)	30.26	52	SE	5	b	30.20	-0.19	49	49	0	S	6	cm	5	54	48	-
	Scilly ...	30.25	53	SSE	6	0	30.23	-0.10	55	54	+4	S	6	om	6	55	50	-
	Prawle Point ...	30.39	50	E	4	b	30.34	-0.11	52	52	+4	S	4	bcm	3	52	47	-
	Jersey (St. Aubin's)	30.41	50	SE	3	b	30.43	-0.05	48	47	+3	SSE	3	f	3	50	44	-
	Hurst Castle ...	30.45	46	ESE	4	bc	30.41	-0.10	53	52	+6	SSW	3	omuo	2	53	44	0.01
	Dungeness ...	30.50	39	ESE	2	m	30.41	-0.11	50	49	+11	SSW	4	0	3	50	38	-
	London ...	30.49	38	ESE	1	ogm	30.40	-0.14	40	40	+1	SW	1	b f	*	42	35	-
	Oxford ...	30.45	38	SE	1	0	30.38	-0.16	44	43	+6	S	1	ogm	*	44	36	-
	Cambridge ...	30.43	44	SE	1	0	30.38	-0.17	42	41	+4	SW	1	0	*	42	33	-
PENINSULA.	Yarmouth ...	30.49	40	Z	0	bc	30.39	-0.16	41	40	+1	SW	3	b f	2	41	36	-
	Cuxhaven ...	30.59	31	SSW	1	f	30.51	-0.15	26	26	-7	SSW	2	m	*	33	25	-
	Berlin ...	30.67	39	SE	2	b	30.61	-0.12	30	30	-13	SSE	3	b	*	46	28	-
	Wiesbaden ...	*	*	*	*	*	30.64	-0.05	31	30	-2	Z	0	0	*	34	30	-
	Munich ...	30.65	27	E	4	0	30.64	-0.03	24	24	-3	E	4	f	*	30	?	-
	The Helder ...	30.55	31	SSE	1	f	30.43	-0.19	28	28	-9	SSE	1	f	1	34	28	-
	Brussels (a.m.)	*	*	*	*	*	30.50	-0.12	33	31	+4	SSW	2	b f	*	33	?	-
	Cape Gris Nez	?	31	SE	1	b	?	?	39	38	+8	S	3	m	3	36	30	-
	Paris ...	30.52	34	E	1	b	30.52	-0.06	27	27	-3	S	1	of	*	45	27	-
	Brest ...	?	52	S	5	0	?	?	52	50	+5	SSE	4	0	3	59	41	0.04
GERMANY.	Lorient ...	30.39	46	SE	3	m	30.41	0.00	48	48	+7	SE	3	f	2	48	41	-
	Rochefort ...	30.46	50	ESE	3	b	30.50	+0.01	47	45	+11	SE	3	b	2	55	?	-
	Belfort ...	30.52	25	N	1	f	30.58	0.00	25	20	-6	E	2	*	31	22	-	
	Lyons ...	30.60	32	W	1	f	30.64	+0.01	28	28	-2	SSW	1	*	36	23	-	
	Nice ...	30.53	51	E	2	b	30.57	+0.01	46	38	-2	E	4	b f	1	61	45	-
	Perpignan ...	30.50	48	WSW	2	b	30.56	+0.04	41	41	-2	Z	0	0	*	58	40	-
	Biarritz ...	30.41	57	ESE	3	b	30.44	+0.05	58	50	0	S	3	b	2	64	50	-
	Corunna ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	-
	Lisbon ...	30.34	61	NE	3	b	30.38	+0.05	52	51	-2	NNE	5	bc	2	64	52	-

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

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



## 1889.



### EXPLANATION OF MAP

Changes since previous morning are stated in words.

→ = forces above 10; → = forces 8 to 10;

→ = forces 5 t  
⊙ = dead calm.

SEA DISTURBANCE—Where considerable, is shown thus :

 = Rough,  = High.

at 8.0 a.m. for the month of November.

*During the 15 Years: 1871—1885.*

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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.

(For the month of November.)

A hand-drawn map of Europe and North Africa, showing isotherms and weather notes. The map is drawn on a grid. Isotherms are labeled with temperatures in degrees Fahrenheit (°F) and degrees Celsius (°C). Weather notes include "Rain has fallen", "COLDER", "WARMER", "SLIGHTLY COLDER", "Rain", "RATH", and "SOMEWHAT COLDER". The map shows the following isotherms and weather notes:

- 40° isotherm:** Passes through the British Isles, labeled "COLDER" and "40°".
- 30° isotherm:** Passes through the Mediterranean, labeled "COLDER" and "30°".
- 20° isotherm:** Passes through the Mediterranean, labeled "SOMEWHAT COLDER" and "20°".
- 10° isotherm:** Passes through the Mediterranean, labeled "WARMER" and "10°".
- 0° isotherm:** Passes through the British Isles, labeled "SLIGHTLY COLDER" and "0°".
- 10° isotherm:** Passes through the British Isles, labeled "Rain" and "-10°".
- 20° isotherm:** Passes through the British Isles, labeled "RATH" and "-20°".

Other labels on the map include "Rain has fallen", "COLDER", "WARMER", "SLIGHTLY COLDER", "Rain", "RATH", and "SOMEWHAT COLDER".

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, 30.4 in: to 30.6 in: and more in an anticyclone lying over Central Europe, France, and the southeast of England.</p> <p>Lowest, 29.9 in: and less, in a V shaped depression lying over the north of Scotland and west of Norway.</p> <p>Gradients rather steep over some parts of our western and northern coasts, moderate over England, slight over France and Germany.</p> <p>Barometer, after falling generally, beginning to rise again in the southwest and south.</p>
TEMPERATURE	<p>Highest, 58° at Birmm, 55° at Selly, 54° at Rocher Point, 53° at Hurst Castle and Barmouth, 50° at Lumburg H. and Dungeness.</p> <p>Lowest, 24° at Alnmouth, 25° at Belfast, 26° at Cuthbert, 27° at Paris, 28° at Lyons, 30° at Berlin and Herionand.</p> <p>In London, after sinking to 35° during the night the thermometer had risen again to 40° at 8 am, and was still rising quickly.</p>
WIND	<p>S<sup>4</sup> to SW<sup>4</sup> over the North Sea and British Isles; light over the greater part of England, strong to gale over the Irish Sea and at Skudermass.</p> <p>In the west of Ireland, after blowing hard from the S<sup>2</sup> it had veered quickly to the NW<sup>4</sup> and fallen very light.</p>
WEATHER	<p>Dull, hazy, and damp over England, unsettled in the west and northwest, with rain in places. The rainfall in the past 24 hours has varied between 0.3 in: and 0.5 in: over the greater part of our extreme western and northwestern districts.</p>
SEA	<p>Rough on our west and southwest coasts, moderate in the north, slight or smooth in the south and east.</p>


## PROBABLE CHANGES IN SYSTEM NOW PREVALENT


The "V" shaped depression in the northwest is now passing off, and it is probable that the strong S<sup>3</sup> wind in the west, will fall light shortly, and veer towards W. The present increase of temperature over England is likely to prove very temporary.

## FORECASTS

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

DISTRICTS.	FORECASTS.	DISTRICTS.	FORECASTS
0 SCOTLAND NORTH	SW <sup>2</sup> to W <sup>2</sup> winds, light; changeable, some rain	6 SCOTLAND WEST	Wind falling light and shifting W <sup>2</sup> to S <sup>2</sup> ; some rain then finer and colder.
1 SCOTLAND EAST	Wind veering W <sup>2</sup> to S <sup>2</sup> ; mild at first, colder later.	7 ENGLAND N.W.	
2 ENGLAND N.E.		8 ENGLAND S.W.	
3 ENGLAND EAST		9 IRELAND NORTH	NW <sup>2</sup> and W <sup>2</sup> breezes, becoming colder and foggy, uncertain later.
4 MIDLAND COUNTIES	S <sup>2</sup> to W <sup>2</sup> winds, mild and damp at first, colder later, foggy.	10 IRELAND SOUTH	
5 ENGLAND SOUTH		WARNINGS	The SOUTH CONE which was hoisted yesterday in districts 9 and 10 has been lowered again this morning

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

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



# YESTERDAY'S 2 P.M. REPORTS.

	Bar:	Ther:		Wind		Wea:	Sea		Bar:		Ther:		Wind		Wea:	Sea
		D	W	D	F						D	W	D	F		
Skudesnaes ...	30.48	46	42	SE	6	0	5		Holyhead ...	30.84	49	47	S	3	o g m	2
Sumburgh Head ...	30.20	48	46	SW	1	0	3		Valencia ...	30.07	53	52	SE	7	o m	6
Stornoway ...	30.08	51	50	SW	7	0	6		Scilly ...	30.27	53	52	SE	6	o m	5
Aberdeen ...	30.30	45	43	S	2	o g m	3		Jersey ...	30.42	49	46	SE	3	o	3
Shields ...	30.38	42	39	S	3	o m	2		Dungeness ...	30.52	41	39	SE	3	o	1
Ardrossan ...	30.27	47	46	SE	3	0	2		London ...	30.50	41	40	SE	1	o f	4
Malin Head ...	30.08	51	47	S	6	0	3		Yarmouth ...	30.50	41	39	SW	2	c	2
Mullaghmore ...	30.09	53	49	SE	6	6c	5		Rochefort ...	30.47	54	50	E	4	6c	2
Belmullet ...	30.02	53	51	S	4	6c	*									

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

The reports for yesterday morning showed that pressure was highest, 30.7 ins. and upwards, in a large anticyclone the central portion of which lay over eastern Germany and Austria and lowest, 30.0 ins. and less, in a large depression lying over Finmark and Lapland. Another depression was apparently lying at a considerable distance to the westward of our Islands. The wind was light or moderate from NE. in Italy, and from the E. over Spain, France, and the English Channel, but fresh from the SE. on our western coast, and light from the S. or SW. over the North Sea and the eastern coasts of Great Britain. Over Scandinavia, Russia and eastern Germany W. or NW. breezes were reported, with a gale at Rode, while over Western Germany and also in Algeria the wind was very variable. The weather was fine in Sweden as well as in the east of Scotland, the north of Ireland, France, Italy and Algeria. Elsewhere, however, the sky was cloudy or overcast with mist or fog in many places, and with rain at Constantinople. Temperature had risen slightly in Ireland and Scotland as well as in Lapland and the extreme north of Russia, but fallen elsewhere; readings ranged from a little above 60° over Western Algeria and the extreme south of Spain to a little below 32° over Central France, Western Germany and the north of Italy, to several degrees below the freezing point over Northern Russia. The highest individual readings were 64° at Oron, 63° at Abatuz, 62° at Oporto, Nemours, and Algiers, 61° at San Fernando, 60° at Palma, 58° at Biarritz and Bilbao, and 57° at Corunna and Brindisi; the lowest were 11° at Archangel, 2° at Munster and Munich, 29° at Rouen, 30° at Le Mans, Paris, Limoges, and Lyons, and 31° at Gaarder, Helder, Cape Fin Key, Belfort and Florence.

In the course of the day the depression to the westward of our Islands advanced somewhat nearer to our shores, and occasioned an increase of wind on our extreme western coasts. In the west of Ireland the wind rose at night to a fresh or strong gale from the SE. No important change was observed over the eastern part of the United Kingdom.

### EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

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

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

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

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



# DAILY WEATHER REPORT.

for *Saturday, 23<sup>rd</sup> November, 1889*  
 Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.

Issue of the "Standard" Light, 55, Pall Mall Street, London. R. H. SCOTT, Secretary.																			
STATIONS.		YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
		Barometer at 32° F. and Sea Level.	Temp. in Shade.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Sea. (0 to 9.)	SHADE TEMP.		Amount of Rainfall.		
				Dir.	Force. (0 to 12.)		Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Dir.	Force. (0 to 12.)		Weather.	Max.		Min.	
SCANDINAVIA.	Haparanda ...	29.75	36	S	4	0	29.50	- .46	37	37	+ 2	S	4	7	#	37	32	-	
	Hernösand ...	29.94	36	Z	0	6	29.73	- .45	40	38	+ 10	SW	2	0	#	7	27	-	
	Stockholm ...	30.21	38	WSW	2	0	30.05	- .33	35	34	- 6	WSW	2	0	#	48	?	-	
	Wisby ...	30.33	42	W	6	60	30.14	- .31	40	39	- 1	SSW	4	6	#	45	37	-	
	Bodö ...																		
	Christiansund																		
	Skudesnaes ...	30.05	48	SEE	9	0	29.99	- .28	48	46	+ 2	W	4	0	5	48	46	0.12	
	Christiania Fjord (Færdier)	30.21	44	SSW	5	6	29.91	- .42	47	47	+ 3	SSW	8	m	5	?	?	0.08	
	Skagen (The Scaw)	30.21	38	SW	3	0	30.04	- .38	46	46	+ 6	WSW	3	7	3	48	37	-	
	Fanö ...	30.29	43	SW	4	0	30.21	- .24	46	46	+ 9	SW	4	7	#	48	34	-	
BRITISH ISLANDS.	Sumburgh Head	29.87	47	Z	0	0	29.84	- .02	45	44	- 5	W	4	60	4	50	44	0.12	
	Stornoway ...	29.88	46	SW	4	0	29.99	+ .11	42	42	- 4	SW	4	0	4	48	40	0.20	
	Wick ...	29.90	45	S	2	0	30.03	+ .09	40	38	- 7	S	3	6	2	48	38	-	
	Nairn ...	29.94	45	SW	1	0	30.06	+ .11	41	39	- 6	W	2	60	1	48	40	0.01	
	Aberdeen ...	29.98	45	WNW	4	0999	30.11	+ .07	39	37	- 10	SW	1	6	3	51	37	0.16	
	Leith ...	30.04	49	WSW	2	0	30.18	+ .13	43	41	- 10	W	1	60	#	56	42	0.07	
	Shields ...	30.05	53	S	4	0	30.21	+ .03	46	44	+ 5	Z	0	60	2	53	39	0.10	
	Spurn Head ...	30.20	49	SSW	4	60	30.23	- .09	46	45	+ 9	N	3	60	3	49	36	0.02	
	York ...	30.16	53	S	3	0	30.23	- .05	44	43	+ 6	WNW	1	0	#	53	37	0.01	
	Loughborough	30.25	53	SW	4	C	30.26	- .09	45	45	+ 4	WNW	1	0	#	54	41	0.04	
BRITISH ISLANDS.	Ardrossan ...	30.04	48	S	2	0m	30.19	+ .19	47	45	- 5	W	4	60	3	52	46	0.94	
	Malin Head ...	30.01	47	SW	4	0p	30.18	+ .20	46	42	- 2	W	4	6	3	48	44	0.06	
	Mullaghmore ...	30.06	47	SSW	2	0m	30.25	+ .27	43	41	- 6	SW	3	6	3	50	41	0.05	
	Belmullet ...	30.08	49	SW	2	0	30.25	+ .25	44	43	- 2	SW	1	6	#	50	43	0.05	
	Donaghadee ...	30.08	48	SW	3	0	30.26	+ .23	39	39	- 14	W	3	6	1	53	37	0.33	
	Barrow-in-Furness	30.06	49	E	3	7	30.23	+ .06	47	47	+ 4	NW	2	6	#	52	42	0.18	
	Liverpool (Bidston)	30.11	57	SSW	4	C	30.28	+ .06	44	43	+ 2	W	1	0	3	58	42	0.69	
	Holyhead ...	30.12	47	NW	5	mtg	30.28	+ .13	46	46	- 6	WNW	1	60	2	55	44	0.56	
	Parsonstown ...	30.13	48	Z	0	7	30.31	+ .31	36	35	- 18	Z	0	6	#	54	36	0.22	
	Valencia ...	30.16	50	WSW	1	0m	30.33	+ .28	41	40	- 9	NW	1	6	1	51	39	-	
GERMANY.	Roche's Point...	30.18	47	NW	3	7	30.33	+ .29	43	41	- 11	N	1	6	4	54	41	0.60	
	Pembroke (St. Ann's Hd.)	30.14	54	S	6	7	30.30	+ .10	46	45	- 3	N	2	60	2	56	45	0.35	
	Scilly ...	30.14	55	S	6	0	30.25	+ .02	50	48	- 5	NNE	5	7	5	57	48	0.33	
	Prawle Point ...	30.29	54	S	4	6	30.26	- .08	54	54	+ 2	S	2	6	2	56	52	0.01	
	Jersey (St. Aubin's)	30.40	51	SE	4	6m	30.31	- .12	51	50	+ 3	SE	3	09m	3	51	46	-	
	Hurst Castle ...	30.34	52	SSW	4	m	30.29	- .12	54	53	+ 1	SW	4	00	2	54	50	-	
	Dungeness ...	30.40	50	SW	4	C	30.29	- .12	52	51	+ 2	SW	4	6	3	52	47	-	
	London ...	30.34	49	SSW	2	0	30.27	- .13	49	49	+ 9	S	1	0	#	52	40	-	
	Oxford ...	30.29	49	S	4	C	30.27	- .11	48	46	+ 4	NW	3	09a	#	53	44	-	
	Cambridge ...	30.32	50	S	1	0	30.25	- .13	49	48	+ 7	Z	0	0	#	51	40	-	
FRANCE AND NETHERLANDS.	Yarmouth ...	30.36	46	SW	2	6	30.23	- .16	48	48	+ 7	SW	3	60	2	48	39	-	
	Cuxhaven ...	30.44	32	SSW	2	6	30.34	- .17	39	32	+ 7	SW	3	6	#	38	?	-	
	Berlin ...	30.50	34	SEE	3	6	30.43	- .18	26	26	- 4	SSW	2	6	#	39	?	-	
	Wiesbaden ...	*	*	*	*	*	30.53	- .11	28	28	- 3	Z	0	0	#	32	23	-	
	Munich ...	?	28	E	2	7	30.54	- .10	22	22	- 2	SE	1	6	#	32	?	-	
	The Helder ...	30.37	46	SSW	2	C	30.30	- .13	35	35	+ 7	S	1	6	1	48	28	-	
	Brussels (9 a.m.)	*	*	*	*	*	30.39	- .11	38	36	+ 5	SSW	2	6	#	45	?	-	
	Cape Gris Nez	?	45	SSW	4	m	?	?	46	45	+ 7	S	3	m	2	46	30	-	
	Paris ...	30.49	40	SSW	2	m	30.42	- .10	31	31	+ 4	SSW	1	6	#	?	?	-	
	Brest ...	?	55	S	6	0	?	?	55	54	+ 3	SE	2	0	4	?	45	-	
PENIN-SULA.	Lorient ...	30.38	55	SE	1	m	30.28	- .13	52	52	+ 4	SE	2	6	4	54	46	-	
	Rochefort ...	30.47	51	E	3	6	30.40	- .10	45	44	- 2	SE	4	6	2	59	39	-	
	Belfort ...	30.49	28	E	1	60	30.45	- .13	23	21	- 2	E	1	6	#	40	19	-	
	Lyons ...	30.65	35	N	1	6	30.56	- .08	23	23	- 5	ENE	1	6	#	45	23	-	
	Nice ...	30.55	50	SSW	2	6	30.53	- .04	45	42	- 1	ENE	4	6	1	59	43	-	
	Perpignan ...	30.53	53	NE	3	0	30.50	- .06	49	48	+ 8	E	1	0	#	61	?	-	
	Biarritz ...	30.41	59	SSW	3	6	30.34	- .10	57	51	- 1	S	3	0	2	68	54	-	
	Corunna ...	*	*	*	*	*	30.36	- .02	53	52	+ 1	ENE	3	6	4	66	52	-	
	Lisbon ...	30.34	61	E	3	60	30.36	- .02	53	52	+ 1	ENE	3	6	4	66	52	-	

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

\* Printed too late for insertion in Charts on p. 2.



# WEATHER CHARTS

for 8 a.m. on

Saturday, 23<sup>rd</sup> November

1889.

## BAROMETER, WIND AND SEA.

### EXPLANATION OF MAP.

**BAROMETER**—Isobars are drawn for each tenth of an inch.

Changes since previous morning are stated in words.

**WIND**—Arrows show the prevalent winds. They fly with the wind and

their barbs and feathers refer to force thus—

→ = forces above 10; → = forces 8 to 10;

→ = forces 5 to 7; → = forces 1 to 4.

○ = dead calm.

**SEA DISTURBANCE**—Where considerable, is shown thus:

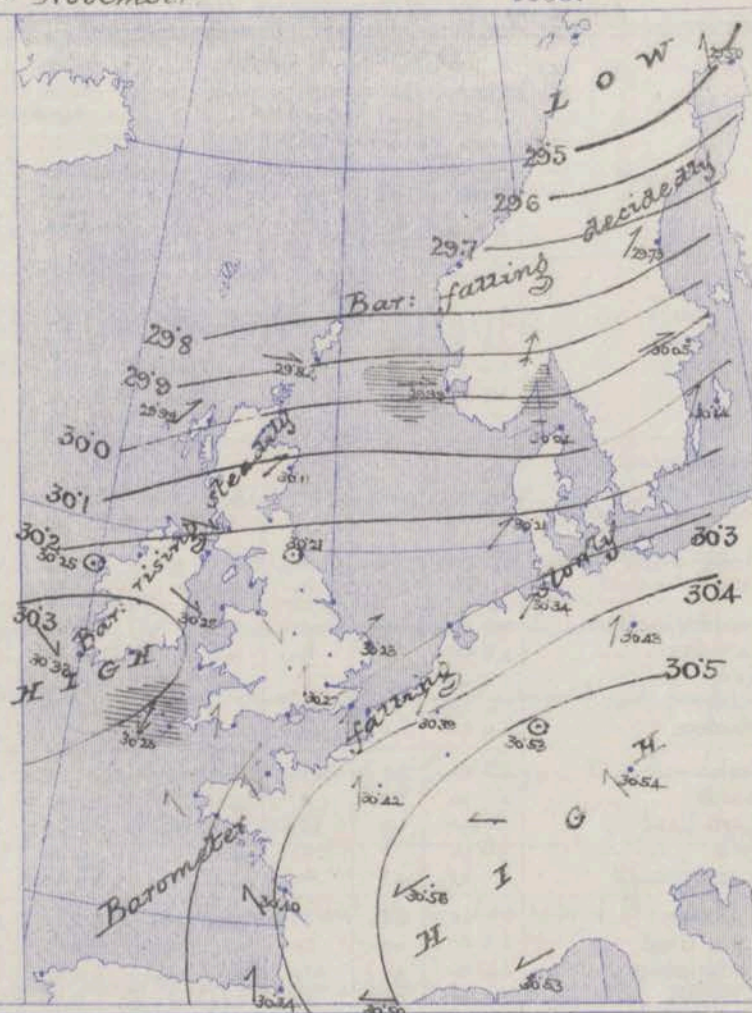
— = Rough. — = High.

## MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of November.

During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS.
	in.
Sumburgh Head .....	29.687
Stornoway .....	29.707
Wick .....	29.726
Nairn .....	29.743
Aberdeen .....	29.756
Leith .....	29.793
Shields .....	29.815
York .....	29.844
Loughborough .....	29.876
Ardrossan .....	29.795
Donaghadee .....	29.811
Holyhead .....	29.835
Liverpool .....	29.852
Parsonstown .....	29.848
Valencia .....	29.864
Roche's Point .....	29.864
Pembroke .....	29.862
Scilly .....	29.898
Jersey .....	29.923
Hurst Castle .....	29.898
Dover .....	29.893
LONDON .....	29.897
Oxford .....	29.893
Cambridge .....	29.885
Yarmouth .....	29.863



## 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.

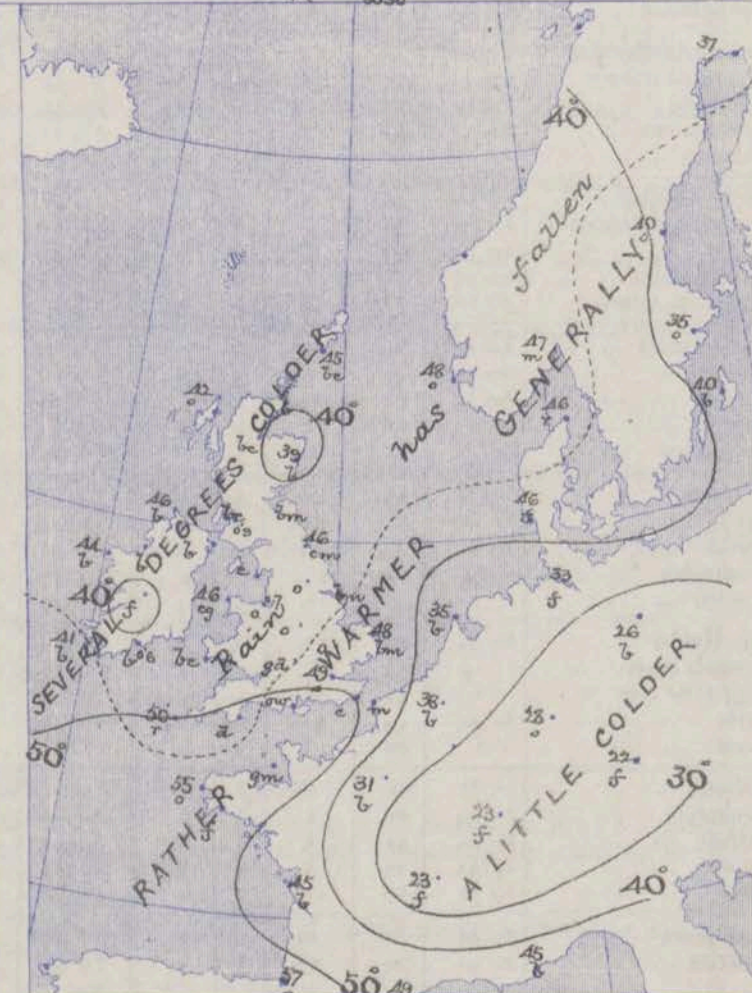
**RAINFALL**—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

### MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of November.)

STATIONS.	TEMPERATURE.				RAINFALL. (Inches.)
	Daily Max.	Daily Min.	at 8 a.m.		
			Dry.	Wet.	
Sumburgh Head.....	45.3	37.4	41.5	39.8	4.24
Stornoway .....	45.7	36.7	41.0	39.9	4.60
Wick .....	45.7	35.7	40.9	39.3	2.97
Nairn .....	44.7	35.5	39.1	37.5	2.32
Aberdeen .....	46.1	36.3	40.3	38.5	3.16
Leith .....	48.2	36.7	41.2	39.6	2.11
Shields .....	47.1	38.1	41.8	40.2	2.63
York .....	47.7	36.1	40.3	39.0	2.21
Loughborough .....	48.0	36.4	40.2	38.9	2.30
Ardrossan .....	47.7	38.9	42.6	40.8	3.92
Donaghadee.....	48.2	39.2	42.9	41.7	3.13
Holyhead .....	49.7	42.8	45.5	43.8	3.71
Liverpool .....	47.7	39.5	42.1	40.4	2.87
Parsonstown .....	49.1	36.9	41.7	40.0	2.84
Valencia .....	52.4	42.7	47.2	45.2	5.50
Roche's Point .....	51.1	41.8	45.9	44.3	4.56
Pembroke .....	50.2	43.7	48.7	44.7	3.96
Scilly .....	52.5	46.7	50.0	48.0	3.76
Jersey .....	51.9	44.2	47.5	45.6	4.24
Hurst Castle .....	50.5	40.3	44.6	43.6	2.98
Dover .....	49.1	40.7	44.0	42.4	3.56
LONDON .....	49.6	37.9	42.0	40.5	2.14
Oxford .....	48.6	37.6	41.0	39.7	2.30
Cambridge .....	48.8	35.7	40.3	39.5	2.02
Yarmouth .....	47.5	39.1	42.9	41.8	3.15

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





# GENERAL SITUATION AT 8 A.M.

## PRESSURE

Highest, 30.3 ins. to 30.5 ins. and more, in an anticyclone over France and Germany—30.3 ins. and more, in a new anticyclone over the south of Ireland and about Bristol.  
 Lowest, 29.7 ins. to 29.5 ins. and less, in a depression over the north of Scandinavia.  
 Gradient, somewhat steep in far north, moderate or slight elsewhere.  
 Barometer rising in east and north-west, falling elsewhere, most over Sweden and the Baltic.

## TEMPERATURE

Highest, 57° at Bournemouth, 54° at Hawke Point and Hurst Castle, 52° at (Dungeness), 49° at Cambridge and in London.  
 Lowest, (1) 22° at Abneth, 23° at Dover, 26° at Berlin, 28° at Wiesbaden, 31° at Paris, (2) 36° at Larne, and 41° at Valencia.  
 It is falling decidedly in the west and the fall is spreading eastwards.

## WIND

Moderate W<sup>3</sup> and SW<sup>3</sup> in Ireland, — SW<sup>4</sup> over Scandinavia and Denmark.  
 Moderate S<sup>3</sup> to SE<sup>3</sup> over France — light SW<sup>4</sup> in the southeast of England.  
 Very light N<sup>4</sup> and NW<sup>4</sup> on the west and south-west coasts of England and over the south of Ireland.

## WEATHER

Fine generally (but foggy in places) over Germany, France, Ireland and some parts of Scotland — dull in England with slight rain in places. Unsettled over Scandinavia and apparently rainy.  
 Rain has been rather heavy on our north-west coasts.

## SEA

Rather rough at Celtic, moderate at our northern stations, slight or smooth elsewhere.

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

It appears probable that as the depression in the north passes off the new anticyclone in the west will spread over the whole of the United Kingdom bringing with it quiet foggy weather, and low temperatures. The change may be preceded by slight rain over the eastern half of England today.

## FORECASTS

For the 24 hours ending at NOON on 24<sup>th</sup> NOV<sup>r</sup>

1889.

### DISTRICTS.

### FORECASTS.

- |   |                  |   |
|---|------------------|---|
| 0 | SCOTLAND NORTH   | W <sup>4</sup> winds, fresh; rain at times.                               |
| 1 | SCOTLAND EAST    | W <sup>4</sup> and NW <sup>4</sup> breezes, light, colder becoming foggy. |
| 2 | ENGLAND N.E.     |   |
| 3 | ENGLAND EAST     | Wind shifting to NW. or N. light, colder, becoming foggy again.           |
| 4 | MIDLAND COUNTIES |   |
| 5 | ENGLAND SOUTH    |   |

### DISTRICTS.

### FORECASTS

- |    |               |  |
|----|---------------|--|
| 6  | SCOTLAND WEST | NW <sup>4</sup> or N <sup>4</sup> breezes, very light; colder, local fogs. |
| 7  | ENGLAND N.W.  |  |
| 8  | ENGLAND S.W.  |  |
| 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:	Ther:		Wind		Wea:	Sea		Bar:	Ther:		Wind		Wea:	Sea
		D	W	D	F					D	W	D	F		
Skudesnaes ...	30.17	46	45	SSW	9	o f	6	Holyhead ...	30.10	55	54	SSW	5	agm	5
Sumburgh Head ...	29.91	49	47	WSE	1	0	4	Valencia ...	30.11	51	50	W	0	om	0
Stornoway ...	29.90	48	47	SW	3	0	3	Scilly ...	30.18	56	55	S	6	0	6
Aberdeen ...	29.96	50	49	S	2	ogm	3	Jersey ...	30.42	49	49	SE	3	0	3
Shields ...	30.07	51	48	S	4	m	2	Dungeness ...	30.40	50	49	SW	4	0	3
Ardrossan ...	30.00	51	50	NW	3	r	2	London ...	30.38	53	51	SSW	3	om	2
Malin Head ...	30.00	48	47	WSW	2	0	2	Yarmouth ...	30.38	44	43	SW	2	bc f	2
Mullaghmore ...	30.04	49	47	SSW	3	om	2	Rocheport ...	30.50	57	54	SSW	3	6	2
Belmullet ...	30.04	50	48	SW	2	0	2								

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

The reports for yesterday morning showed that pressure was highest 30.7 ins and upwards, in a large anticyclone the central portion of which lay over Austria and lowest, 29.9 ins and less, in the extreme northern parts of Scandinavia and Russia and to the northward of the British Islands. A trough containing several "V" shaped secondary depressions lay over our extreme western coasts. The wind was light from the W<sup>nd</sup> in the west of Ireland, but moderate to strong from the S<sup>nd</sup> in nearly all other parts of Western Europe. Over Russia and the Baltic, however, moderate W<sup>nd</sup> or NW<sup>nd</sup> breezes were reported, while in Italy the wind was NE<sup>ly</sup> and in Spain E<sup>ly</sup>. Over Central Europe however, and also in Algeria light variable breezes were reported. The weather was fine in nearly all the more central and southern countries as well as in Algeria and the north of Sweden, but cloudy or overcast elsewhere, with fog or mist in many places. Rain was falling in some parts of Ireland and Scotland and also at Rome and Moscow. Temperatures had risen a few degrees in our Islands and also over Northern and Central Russia, but fallen elsewhere, readings ranged from 55° and upwards over the central and southern parts of the Mediterranean and the coasts of the Iberian Peninsula to a few degrees below the freezing point over Germany, Austria, and Central France. The highest individual readings were 60° at Bilbao, Palma, Oran and Malta, 59° at Nemours, 58° at Biarritz, 57° at Barcelona, Brindisi and Algiers, and 56° at Ly-Calle; the lowest were 23° at Aberdeen, 24° at Brunich, 25° at Belfast, 26° at Copenhagen, 27° at Paris, 28° at Lyons and Stockholm, and 30° at Harisand and Berlin.

In the course of the day the "V" shaped depression over our west coasts moved somewhat to the eastward, and heavy rain fell at several of our western and northern stations. No decided change in the weather was observed at our eastern stations.

### EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

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

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

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

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



# DAILY WEATHER REPORT.

for Sunday 24<sup>th</sup> NOVEMBER 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.		
			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 ...	29.36	37	2	0	b	29.63	+ .13	35	33	- 2	SW	2	c	*		39	?	—
	Hernösand ...	29.75	38	2	0	b	29.82	+ .09	40	35	0	WSW	4	bc	*		45	36	—
	Stockholm ...	30.02	43	SW	2	b	30.07	+ .02	39	38	- 2	Z	0	b	*		45	?	—
	Wisby ...	30.12	44	SW	4	0	30.12	- .02	38	36	- 2	SSW	4	b	*		45	37	—
	Bodö ...	29.48	36	W	6	0	29.36	- .02	34	32	- 9	E	4	0	2		43	34	0.20
	Christiansund	29.78	44	WSW	8	r	29.48	- .24	47	41	+ 5	SW	4	c	5		47	41	0.63
	Skudesnaes ...	30.02	40	S	4	c	29.90	+ .09	47	43	- 1	S	5	0	5		48	46	—
	Christiania Fjord (Færder)	30.06	47	W	5	b	29.99	+ .08	46	44	- 1	SSW	5	b	4		50	43	—
	Skagen (The Scaw)	30.07	42	W	1	b	30.07	+ .03	40	40	- 6	WSW	2	b	2		48	36	0.08
	Fanö ...	30.23	43	SW	1	0	30.10	- .11	42	42	- 4	S	1	f	*		46	43	0.04
BRITISH ISLANDS.	Sumburgh Head	29.89	47	WSW	4	bc	29.45	- .39	48	47	+ 3	SW	6	0	6		49	46	—
	Stornoway ...	29.86	48	SW	6	bc	29.47	- .62	48	47	+ 6	SW	4	0	4		49	44	0.10
	Wick ...	29.94	47	S	5	b	29.53	- .50	46	45	+ 6	SW	5	bc	3		47	38	—
	Nairn ...	30.00	44	W	3	b	29.61	- .45	46	43	+ 5	SW	3	b	2		48	40	—
	Aberdeen ...	30.09	39	SW	1	b	29.71	- .40	41	41	+ 2	S	4	cgn	4		45	39	—
	Leith ...	30.15	46	W	1	b	29.78	- .40	46	43	+ 3	W	2	c	*		49	41	—
	Shields ...	30.23	42	W	1	bc	29.91	- .30	40	39	- 6	SW	2	bc	2		50	35	—
	Spurn Head ...	30.25	46	WSW	1	b	29.96	- .27	48	47	+ 2	SSW	3	omw	3		48	44	0.02
	York ...	30.26	42	Z	0	f	29.94	- .29	41	41	- 4	SE	1	f	*		52	34	0.05
	Loughborough	30.28	46	NNW	1	0	30.00	- .26	48	48	+ 3	SSE	1	ogm	*		50	44	0.02
BRITISH ISLANDS.	Ardrossan ...	30.16	48	S	5	b	29.77	- .42	47	46	0	SSW	5	ap	4		50	46	0.01
	Malin Head ...	30.09	43	S	5	b	29.66	- .52	45	44	- 1	S	6	og	4		49	41	0.01
	Mullaghmore ...	30.12	45	SSW	5	b	29.72	- .53	47	46	+ 4	SSW	6	og	5		49	41	0.05
	Belmullet ...	30.10	48	SW	4	bc	29.67	- .58	50	50	+ 6	SW	4	0	*		50	43	0.05
	Donaghadee ...	30.20	39	WNW	3	b	29.84	- .42	43	43	+ 4	WSW	2	bc	0		52	37	—
	Barrow-in-Furness	30.21	44	NE	2	b	29.88	- .35	45	44	- 2	S	4	bc	*		49	38	—
	Liverpool (Bldston)	30.27	45	W	1	bc	29.96	- .32	44	43	0	SSW	1	0	2		49	38	—
	Holyhead ...	30.25	45	Z	0	b	29.94	- .34	47	45	+ 1	SW	3	cr	2		52	40	—
	Parsonstown ...	30.22	39	Z	0	f	29.86	- .45	43	42	+ 7	SE	1	c	*		50	33	—
	Valencia ...	30.22	48	SSE	3	b	29.80	- .47	52	51	+ 11	S	6	rmw	5		54	39	0.01
BRITISH ISLANDS.	Roche's Point...	30.25	43	ENE	1	b	29.93	- .40	50	50	+ 7	SW	5	rmw	4		52	38	0.05
	Pembroke (St. Ann's Hd.)	30.25	47	ENE	3	c	30.00	- .30	48	47	+ 2	W	3	bc	2		49	46	0.03
	Scilly ...	30.14	50	NE	5	r	30.06	- .19	49	46	- 1	WSW	4	c	5		53	48	0.66
	Prawle Point...	30.20	53	E	2	r	29.97	- .29	51	51	- 3	NW	1	cg	1		53	50	0.23
	Jersey (St. Aubin's)	30.25	51	ESE	3	omw	29.93	- .38	53	52	+ 2	SSE	4	omw	3		53	48	0.21
	Hurst Castle ...	30.25	53	SE	3	0	29.99	- .30	52	52	- 2	ESE	3	bc	2		55	51	0.12
	Dungeness ...	30.26	52	SW	3	0	30.05	- .24	50	49	- 2	SSW	5	0	3		56	49	—
	London ...	30.27	51	SE	1	ofr	30.02	- .25	50	50	+ 1	SE	1	fag	*		56	45	0.14
	Oxford ...	30.24	46	Z	0	0	30.00	- .27	49	48	+ 1	S	1	ogr	*		49	46	0.05
	Cambridge ...	30.26	47	Z	0	r	30.00	- .25	48	48	- 1	S	1	r	*		49	47	0.04
GERMANY.	Yarmouth ...	30.26	48	Z	0	f	30.03	- .20	45	45	- 3	SW	1	f	2		49	44	0.03
	Cuxhaven ...	30.29	39	SW	2	0	30.20	- .14	40	40	+ 7	SSW	3	fsw	*		42	33	—
	Berlin ...	30.36	33	S	2	b	30.28	- .15	30	29	+ 4	SSE	1	b	*		36	26	—
	Wiesbaden ...	*	*	*	*	*	30.38	- .15	29	28	+ 1	E	1	0	*		36	27	—
	Munich ...	30.47	26	NE	1	f	30.39	- .15	19	19	- 3	SE	2	b	*		32	18	—
	The Helder ...	30.27	46	SSW	1	f	30.10	- .20	38	37	+ 3	S	1	c	1		48	34	—
	Brussels (0 a.m.)	*	*	*	*	*	30.16	- .23	42	40	+ 4	SSW	1	b	*		49	38	—
	Cape Gris Nez	*	46	S	3	b	?	?	44	42	- 2	S	2	0	3		52	43	—
	Paris ...	30.34	40	S	1	b	30.22	- .20	37	36	+ 6	S	2	b	*		49	34	—
	Brest ...	30.13	54	SSE	5	r	30.08	?	53	51	- 2	NW	7	0	7		57	43	0.28
FRANCE AND NETHERLANDS.	Lorient ...	30.21	54	SSE	2	r	30.10	- .18	53	52	+ 1	NNW	6	r	7		55	50	0.20
	Rochefort ...	30.34	54	SSE	4	0	30.31	- .09	54	52	+ 9	WSW	5	c	2		57	45	—
	Belfort ...	30.35	30	E	1	b	30.29	- .16	23	21	0	E	1	f	*		41	20	—
	Lyons ...	30.44	40	ESE	1	b	30.39	- .17	34	33	+ 11	SSE	1	b	*		47	23	—
	Nice ...	30.46	48	ESE	1	b	30.42	- .11	42	41	- 3	E	4	b	1		55	41	—
	Perpignan ...	30.38	54	SW	1	0	30.38	- .12	39	39	- 10	SW	1	b	*		61	37	—
	Biarritz ...	30.29	58	SW	4	bc	30.38	+ .04	57	?	0	NW	4	r	1		66	52	0.04
	Corunna ...	30.31	*	ENE	1	0	30.37	+ .12	53	52	- 6	W	1	c	5		63	50	0.32
	Lisbon ...	30.31	59	ENE	1	0	30.34	- .02	59	53	+ 6	NNE	2	0	2		62	52	—
	PENIN- SULA.																		

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

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



# WEATHER CHARTS

for 8 a.m. on

Sunday, 24<sup>th</sup> November,

1889.

## BAROMETER, WIND AND SEA.

### EXPLANATION OF MAP.

**BAROMETER**—Isobars are drawn for each tenth of an inch.

Changes since previous morning are stated in words.

**WIND**—Arrows shew the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—

→ = forces above 10; → = forces 8 to 10;

→ = forces 5 to 7; → = forces 1 to 4.

⊙ = dead calm.

**SEA DISTURBANCE**—Where considerable, is shewn thus:

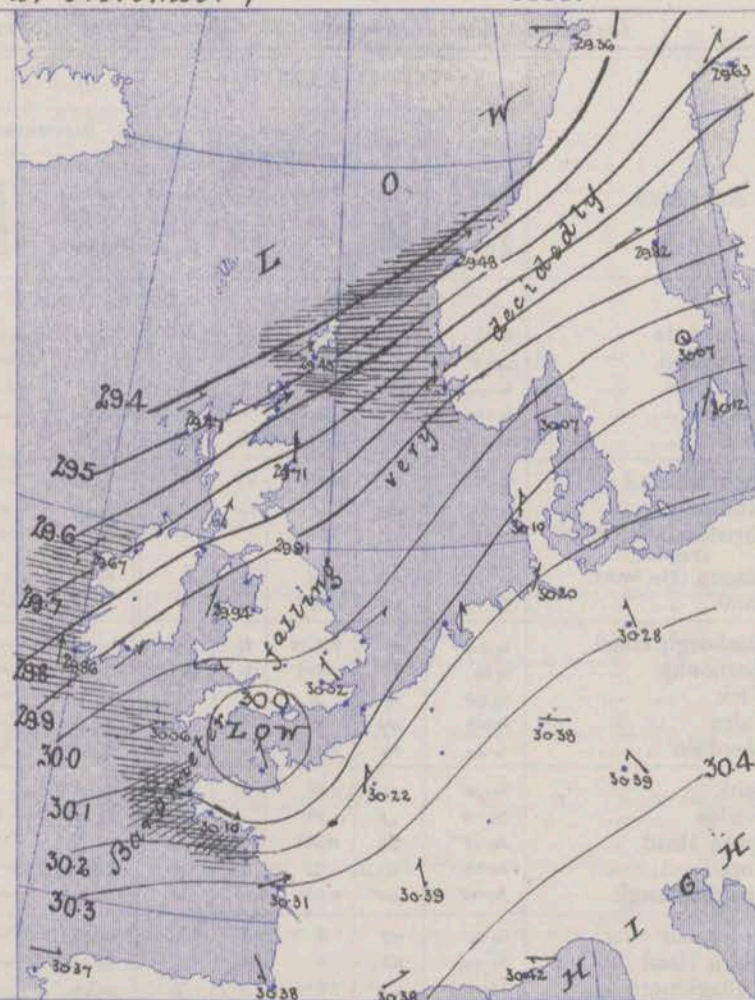
▨ = Rough. ▨ = High.

## MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of November.

During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS.
Sumburgh Head .....	29.687
Stornoway .....	29.707
Wick .....	29.726
Nairn .....	29.743
Aberdeen .....	29.756
Leith .....	29.793
Shields .....	29.815
York .....	29.844
Loughborough .....	29.876
Ardrossan .....	29.795
Donaghadee .....	29.811
Holyhead .....	29.835
Liverpool .....	29.852
Parsonstown .....	29.848
Valencia .....	29.864
Roche's Point .....	29.864
Pembroke .....	29.862
Silly .....	29.898
Jersey .....	29.923
Hurst Castle .....	29.898
Dover .....	29.893
LONDON .....	29.897
Oxford .....	29.893
Cambridge .....	29.885
Yarmouth .....	29.863



## 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.

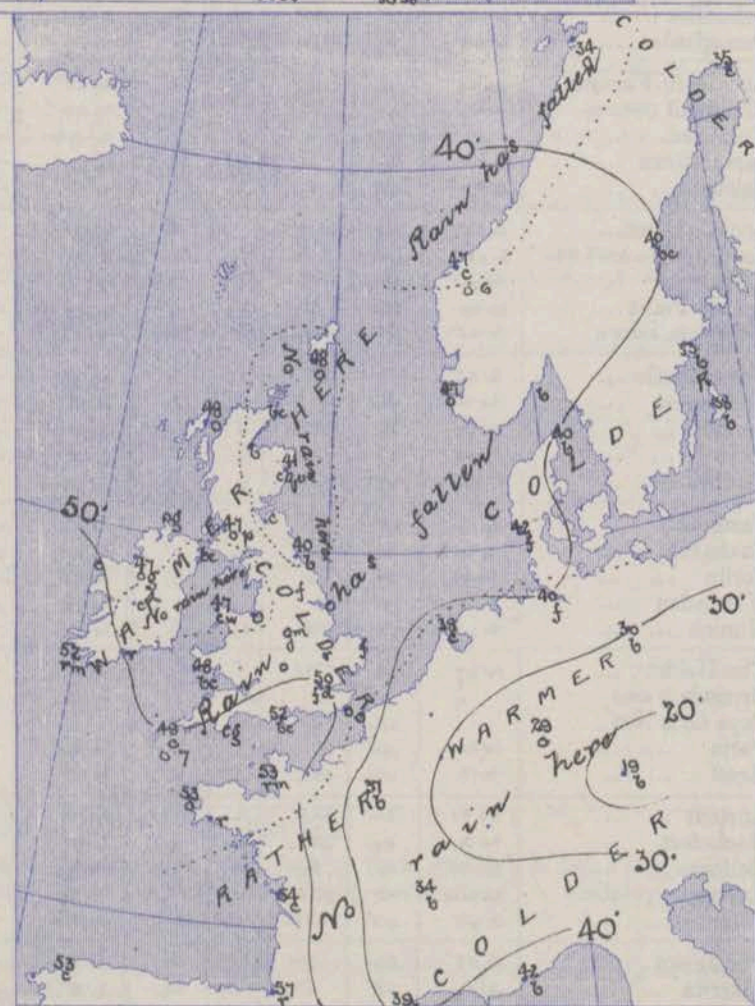
**RAINFALL**—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

### MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of November.)

STATIONS.	TEMPERATURE.				RAINFALL (Inches.)
	Daily Max.	Daily Min.	at 8 a.m.		
			Dry.	Wet.	
Sumburgh Head.....	45.3	37.4	41.5	39.8	4.24
Stornoway .....	45.7	36.7	41.0	39.9	4.60
Wick .....	45.7	35.7	40.9	39.3	2.97
Nairn .....	44.7	35.5	39.1	37.5	2.32
Aberdeen .....	46.1	36.3	40.3	38.5	3.16
Leith .....	48.2	36.7	41.2	39.6	2.11
Shields .....	47.1	38.1	41.8	40.2	2.63
York .....	47.7	36.1	40.3	39.0	2.21
Loughborough .....	48.0	36.4	40.2	38.9	2.30
Ardrossan .....	47.7	38.9	42.6	40.8	3.92
Donaghadee.....	48.2	39.2	42.9	41.7	3.13
Holyhead .....	49.7	42.8	45.5	43.8	3.71
Liverpool .....	47.7	39.6	42.1	40.4	2.87
Parsonstown .....	49.1	36.9	41.7	40.0	2.84
Valencia .....	52.4	42.7	47.2	45.2	5.50
Roche's Point .....	51.1	41.8	45.9	44.3	4.56
Pembroke.....	50.2	43.7	46.7	44.7	3.96
Silly .....	52.5	46.7	50.0	48.0	3.76
Jersey .....	51.9	44.2	47.5	45.6	4.24
Hurst Castle .....	50.5	40.3	44.6	43.6	2.98
Dover .....	49.1	40.7	44.0	42.4	3.56
LONDON .....	49.6	37.9	42.0	40.5	2.14
Oxford .....	48.6	37.6	41.0	39.7	2.30
Cambridge .....	48.8	35.7	40.3	39.5	2.02
Yarmouth .....	47.5	39.1	42.9	41.8	3.15

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





# GENERAL SITUATION AT 8 A.M.

## PRESSURE

Highest, 30.4 in. and upwards, over Spain and the south of France.  
Lowest, 29.4 in. and less, in a large area lying to the northward of our Islands and the westward of Norway.  
A shallow depression with reading below 30.0 in. is lying over the English Channel.  
Gradients rather steep over the western and northern parts of our Islands and Scandinavia, but slight elsewhere.  
Barometer falling at all but the Swedish stations, — quickly in the west and north of our Islands.

## TEMPERATURE

Highest, 59° at Dublin, 57° at Biarritz, 54° at Koolhauf, 53° at Jersey, Fleet, and Alcock, and 52° at Valencia and Hunt Castle.  
Lowest, 19° at Munich, 23° at Koolhauf, 29° at Koolhauf, 30° at Berlin, 33° at Stockholm, and 34° at Porto and Lyons.  
During yesterday the thermometers rose to between 50° and 55° in many parts of England and Ireland.

## WIND

S or SW, over Scandinavia, Denmark, and the greater part of the British Kingdom, strong in force in the east and north, with gales on the Norwegian coast.  
Light SE at some of the Channel stations; strong from W. or NW. in the west of France.

## WEATHER

Fine in the northeast of Great Britain, as well as in Sweden, Germany and France.  
Foggy in Denmark, North Germany, and the southeast of England; cloudy elsewhere with rain in the south of Ireland, as well as at some of the Channel stations.  
Rain fell yesterday, in most parts of England and Ireland, the largest amount being 0.7 in. at Seilly.

## SEA

High off the northwest of France and rough or rather so on all our extreme southern, eastern, and northwestern coasts.

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

## FORECASTS

For the 24 hours ending at NOON on 25<sup>th</sup> Nov<sup>r</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

### FORECASTS

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.	Ther.		Wind		Wea.	Sea		Bar.		Ther.		Wind		Wea.	Sea.
		D	W	D	F						D	W	D	F		
Skudesnaes ...	30.08	48	44	W	4	c	5		Holyhead ...	30.28	49	46	Z	0	b	0
Sumburgh Head ...	29.93	48	47	W	4	bc	4		Valencia ...	30.28	52	48	SSE	1	b	2
Stornoway ...	29.98	49	48	S	5	bc	4		Scilly ...	30.20	50	48	NE	6	r	5
Aberdeen ...	30.14	45	41	S	1	b	2		Jersey ...	30.28	49	49	SE	3	f	3
Shields ...	30.23	48	45	W	2	bc	2		Dungeness ...	30.28	54	52	N	3	bc	2
Ardrossan ...	30.20	49	47	SW	3	b	3		London ...	30.26	56	54	SW	2	og	*
Malin Head ...	30.16	48	45	SSW	4	b	3		Yarmouth ...	30.36	49	49	W	1	f	2
Mullaghmore ...	30.21	49	45	SSW	4	b	3		Rochefort ...	30.37	57	54	SE	4	bc	2
Belmullet ...	30.21	50	46	WSW	2	bc	4									

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

The reports for yesterday morning showed that pressure was highest, 30.6 in: and upwards, in a large anticyclone the central portion of which lay over Austria, but high 30.3 in: and upwards, in a new system which had appeared over the south of Ireland. The lowest readings, 29.4 in: and less, were found in a large and rather deep depression, the centre of which lay off the northwest of Norway. The wind was SW or W over the greater part of Northern and Central Europe, including the northern parts of the United Kingdom and also the southeast of England; on the Norwegian coast a fresh gale was reported. The weather was dull and unsettled in Scandinavia and Russia as well as in the south of England, with rain in many places. Elsewhere conditions were mostly fine, but a good deal of fog prevailed over Denmark, Germany, the east of France and the north of Italy. Temperature had risen somewhat over England and the eastern shores of the North Sea, but fallen in most other localities; readings ranged from 55° and upwards on the coasts of the Iberian Peninsula, Algeria, and the south of Italy to several degrees below the freezing point over South Germany and the east of France. The highest individual readings were 62° at Palermo, 59° at Corunna and San Fernando, 58° at Bilbao, Algiers and Oran, and 57° at Biscaya, Barcelona, Brindisi, La Palme, and Epay, and 56° at Nemours, the lowest were 22° at Munich, 23° at Belfast and Lyons, 26° at Berlin, 28° at Wiesbaden, 29° at Turin, 30° at Lwiniemunde, Kempahwarzen, Breslau, Cassel, Vienna and Budapest.

In the course of the day a small shallow depression advanced eastwards along the English Channel, and occasioned some rain in the south and southeast of England. Towards night a larger disturbance began to appear off the extreme northwest of our Islands, and increasing SW winds set in over the north of Ireland and the west 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, 25<sup>th</sup> November, 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 <sup>rd</sup> P. and Sea Level.	Temp. in Shade.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Sea. (0 to 12.)	SHADE TEMP.		Amount of Rainfall.		
			Dir.	Force. (0 to 12.)		Reading at 3 <sup>rd</sup> P. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Dir.	Force. (0 to 12.)		Weather.	Max.		Min.	
SCANDINAVIA.	Haparanda ...	29.36	37	Sw	4	bc	29.29	- .36	36	34	+ 1	Sw	4	bc	*	37	30	-
	Hernösand ...	29.54	37	SSW	6	b	29.34	- .48	40	39	0	SSW	6	0	*	45	34	-
	Stockholm ...	29.84	34	SSW	2	0	29.50	- .57	43	41	+ 10	S	4	0	+	45	32	-
	Wisby ...	29.93	44	Sw	4	r	29.58	- .54	40	39	+ 2	S	6	b	+	45	36	0.12
	Bodö ...	29.10	44	Sw	8	0	28.95	- .41	44	40	+ 10	E	4	0	2	45	32	0.59
	Christiansund	29.21	46	SW	4	c	28.89	- .59	46	44	- 1	WNW	6	0	5	50	45	-
	Skudesnaes ...	29.46	48	S	8	0	28.94	- .96	48	46	+ 1	SSE	8	0	5	48	46	0.08
	Christiania Fjord (Færder)	29.21	46	SSE	5	c	29.21	- .78	45	44	- 1	SSE	6	0	5	?	41	0.08
	Skagen (The Scaw)	29.58	44	SW	4	0	29.25	- .82	44	43	+ 4	SSW	6	0	5	45	39	0.08
	Fanö ...	29.68	43	S	4	0	29.27	- .83	46	45	+ 4	SW	6	c	*	46	41	0.04
BRITISH ISLANDS.	Sumburgh Head	29.21	47	SW	3	r	29.00	- .45	38	37	- 10	N	3	bc	5	48	35	0.52
	Stornoway ...	29.21	45	W	4	r	29.34	- .13	36	35	- 12	NW	5	chp	5	48	34	0.52
	Wick ...	29.20	48	SW	5	r	29.15	- .38	38	37	- 8	NW	3	ohp	3	48	35	0.25
	Nairn ...	29.25	49	W	3	c	29.20	- .41	37	36	- 9	WNW	5	r	3	51	35	0.12
	Aberdeen ...	29.35	46	W	4	oq	29.14	- .57	37	34	- 4	W	5	bq	4	47	37	0.24
	Leith ...	29.32	46	SW	5	c	29.23	- .55	38	34	- 8	W	2	b	*	50	36	-
	Shields ...	29.52	45	S	3	0	29.24	- .67	37	35	- 3	W	3	b	2	47	36	0.07
	Spurn Head ...	29.60	48	SSW	4	0	29.27	- .69	45	41	- 3	W	6	b	5	50	44	0.05
	York ...	29.53	48	S	1	0	29.30	- .64	39	37	- 2	W	1	b	*	49	38	0.13
	Loughborough	29.64	49	S	3	c	29.42	- .58	42	40	- 6	WNW	4	bc	*	52	42	0.18
BRITISH ISLANDS.	Ardrossan ...	29.32	49	S	4	r	29.34	- .63	41	39	- 6	WNW	3	b	2	49	39	0.38
	Malin Head ...	29.31	47	W	4	or	29.45	- .21	39	39	- 6	NW	7	oqhp	5	48	39	0.08
	Mullaghmore ...	29.37	48	W	4	r	29.61	- .11	42	39	- 5	NW	7	cqpp	6	49	39	0.36
	Belmullet ...	29.40	49	WNW	1	bc	29.70	+ .03	44	41	- 6	NW	5	c	*	50	42	0.41
	Donaghadee ...	29.34	48	SSW	4	r	29.45	- .39	40	39	- 3	NW	4	bc	3	49	38	0.22
	Barrow-in-Furness	29.47	45	SSE	6	0	29.32	- .56	43	40	- 2	WNW	7	op	*	49	41	0.19
	Liverpool (Bidston)	29.43	45	SE	3	0	29.41	- .55	43	38	- 1	W	7	c	5	50	43	0.09
	Holyhead ...	29.46	49	SSW	6	qtm	29.50	- .44	44	41	- 3	NW	8	cqppm	7	52	43	0.62
	Parsonstown ...	29.28	51	Z	0	r	29.68	- .18	37	37	+ 6	SW	1	c	*	52	36	0.52
	Valencia ...	29.48	51	NW	5	oq	29.83	- .03	46	43	- 6	NW	4	oq	4	54	44	0.51
BRITISH ISLANDS.	Roche's Point...	29.37	50	WNW	4	c	29.78	- .15	44	42	- 6	WNW	3	bc	4	52	41	0.75
	Pembroke (St. Ann's Hd.)	29.40	50	SSW	8	r	29.69	- .31	46	45	- 2	WNW	7	bq	7	53	45	0.48
	Scilly ...	29.62	52	SSW	7	r	29.79	- .27	49	45	0	NW	6	bq	6	54	48	1.01
	Prawle Point...	29.69	50	SW	7	r	29.70	- .27	43	41	- 8	WNW	6	bcp	4	52	41	0.34
	Jersey (St. Aubin's)	29.93	53	WNW	5	c	29.70	- .23	52	46	- 1	WNW	7	cqmu	5	56	50	0.52
	Hurst Castle ...	29.75	53	SW	6	0	29.61	- .38	47	45	- 5	WNW	6	bqpp	4	54	40	0.51
	Dungeness ...	29.77	51	W	6	op	29.42	- .63	49	48	- 1	NW	4	c	3	52	48	0.51
	London ...	29.74	50	S	2	0	29.45	- .57	45	44	- 5	NW	4	r	*	53	44	0.24
	Oxford ...	29.88	49	S	3	r	29.50	- .50	44	40	- 5	W	3	b	*	53	43	0.33
	Cambridge ...	29.67	49	SW	1	r	29.43	- .57	44	41	- 4	W	3	bc	*	53	43	0.02
GERMANY.	Yarmouth ...	29.72	48	SSW	3	oq	29.30	- .73	45	44	0	WNW	6	cq	4	50	44	0.22
	Cuxhaven ...	29.93	44	S	4	0	29.50	- .70	46	44	+ 6	S	5	bc	*	47	?	0.08
	Berlin ...	30.04	35	S	2	b	29.32	- .46	37	35	+ 7	S	3	c	*	39	?	-
	Wiesbaden ...	*	*	*	*	*	29.82	- .56	35	32	+ 6	Z	0	0	*	36	28	-
	Munich ...	30.21	26	E	1	b	30.00	- .39	24	24	+ 5	SE	2	b	*	32	19	-
FRANCE AND NETHERLANDS.	The Helder ...	29.69	45	S	3	0	29.23	- .87	47	46	+ 9	SSW	7	r	4	48	37	0.12
	Brussels (9 a.m.)	*	*	*	*	*	29.48	- .68	47	46	+ 5	S	5	r	*	50	?	0.24
	Cape Gris Nez	?	51	SSW	5	r	?	?	49	47	+ 5	WNW	7	r	7	54	?	0.32
	Paris ...	30.04	51	SSW	4	0	29.64	- .58	48	47	+ 11	SW	5	0	*	52	?	0.16
	Brest ...	?	54	W	8	r	?	?	53	52	0	NW	6	0	7	59	43	0.12
	Lorient ...	29.99	57	WNW	6	0	29.82	- .28	51	50	- 2	WNW	5	0	7	55	50	0.67
FRANCE AND NETHERLANDS.	Rochefort ...	30.24	53	WNW	5	bc	29.73	- .38	54	53	0	WNW	5	c	3	57	46	0.63
	Belfort ...	30.08	36	NW	1	bc	29.86	- .43	33	30	+ 10	NW	1	f	*	46	23	-
	Lyons ...	30.28	45	WNW	1	b	30.02	- .37	47	45	+ 13	S	4	bc	*	50	?	-
	Nice ...	30.30	48	E	2	b	30.17	- .23	43	39	+ 1	ESE	4	b	1	55	41	-
	Perpignan ...	30.32	47	Z	0	b	30.09	- .29	41	41	+ 2	SW	1	c	*	61	39	-
	Biarritz ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
PENIN- SULA.	Corunna ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Lisbon ...	30.32	58	N	3	b	30.31	- .03	52	52	- 7	Z	0	c	?	61	52	-

For Explanation of Columns, see bottom of p 4.

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



# WEATHER CHARTS

for 8 a.m. on Monday, 25<sup>th</sup> November, 1889.

## BAROMETER, WIND AND SEA.

### EXPLANATION OF MAP.

**BAROMETER**—Isobars are drawn for each tenth of an inch.

Changes since previous morning are stated in words.

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

→ = forces above 10; → = forces 8 to 10;

→ = forces 5 to 7; → = forces 1 to 4.

○ = dead calm.

**SEA DISTURBANCE**—Where considerable, is shown thus:

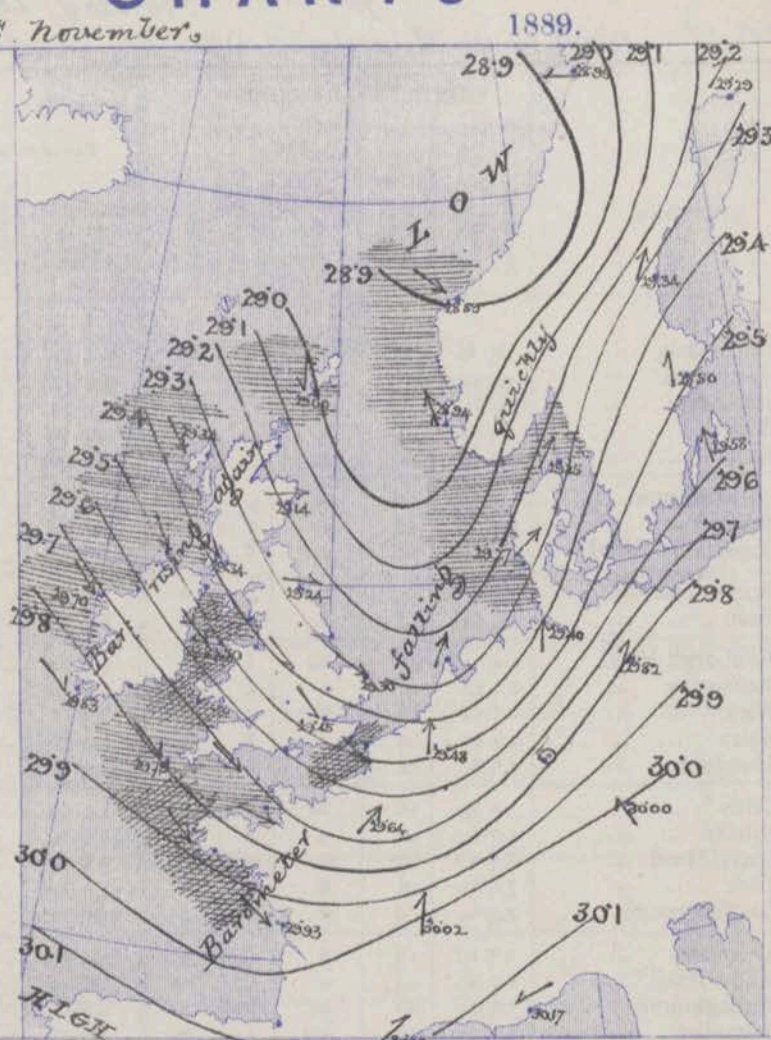
— = Rough. — = High.

## MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of November.

During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS.
Sumburgh Head .....	29.687
Stornoway .....	29.707
Wick .....	29.726
Nairn .....	29.743
Aberdeen .....	29.756
Leith .....	29.793
Shields .....	29.815
York .....	29.844
Loughborough .....	29.870
Ardrossan .....	29.795
Donaghadee .....	29.811
Holyhead .....	29.835
Liverpool .....	29.852
Parsonstown .....	29.848
Valencia .....	29.864
Roche's Point .....	29.864
Pembroke .....	29.862
Seilly .....	29.898
Jersey .....	29.923
Hurst Castle .....	29.898
Dover .....	29.893
LONDON .....	29.897
Oxford .....	29.893
Cambridge .....	29.885
Yarmouth .....	29.863



## 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.

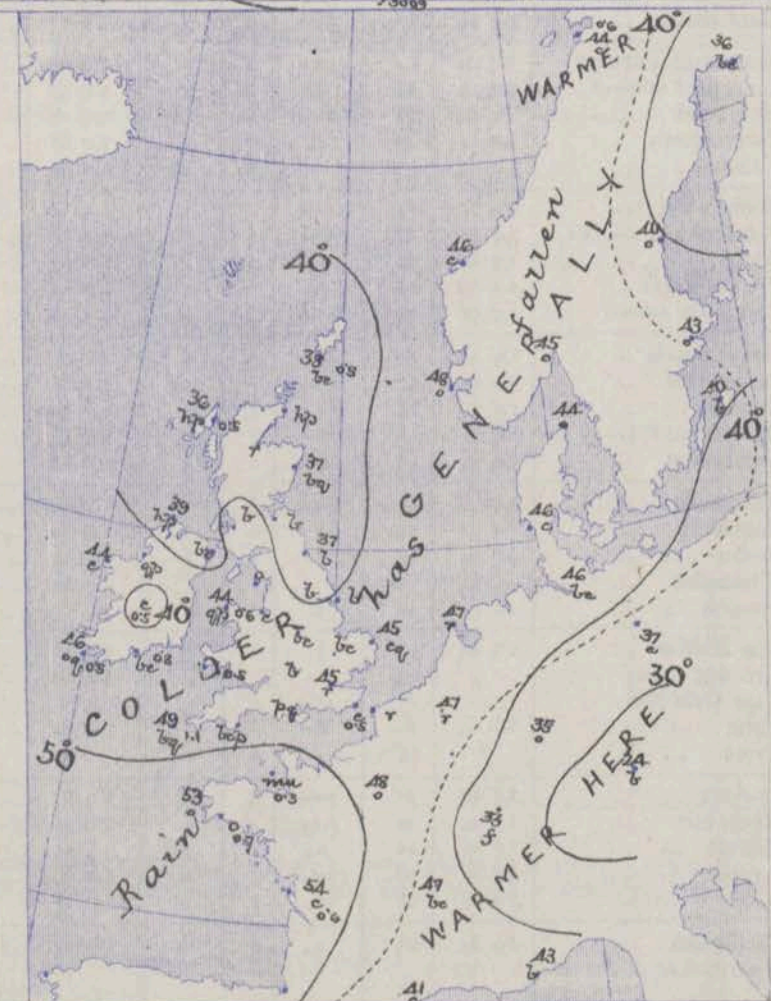
**RAINFALL**—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

### MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of November.)

STATIONS.	TEMPERATURE.				RAINFALL. (Inches.)
	Daily Max.	Daily Min.	at 8 a.m.		
			Dry.	Wet.	
Sumburgh Head.....	45.3	37.4	41.5	39.8	4.24
Stornoway .....	45.7	36.7	41.0	39.9	4.60
Wick .....	45.7	35.7	40.9	39.3	2.97
Nairn .....	44.7	35.5	39.1	37.5	2.32
Aberdeen .....	46.1	36.3	40.3	38.5	3.16
Leith .....	48.2	36.7	41.2	39.6	2.11
Shields .....	47.1	38.1	41.8	40.2	2.63
York .....	47.7	36.1	40.3	39.0	2.21
Loughborough .....	48.0	36.4	40.2	38.9	2.30
Ardrossan .....	47.7	38.9	42.6	40.8	3.92
Donaghadee .....	48.2	30.2	42.9	41.7	3.13
Holyhead.....	49.7	42.8	45.5	43.8	3.71
Liverpool .....	47.7	39.5	42.1	40.4	2.87
Parsonstown .....	49.1	36.9	41.7	40.0	2.84
Valencia .....	52.4	42.7	47.2	45.2	5.50
Roche's Point .....	51.1	41.8	45.9	44.3	4.56
Pembroke.....	50.2	43.7	46.7	44.7	3.96
Seilly .....	52.5	46.7	50.0	48.0	3.76
Jersey .....	51.9	44.2	47.5	45.6	4.24
Hurst Castle .....	50.5	40.3	44.6	43.6	2.98
Dover .....	49.1	40.7	44.0	42.4	3.56
LONDON .....	49.6	37.9	42.0	40.5	2.14
Oxford .....	48.6	37.6	41.0	39.7	2.30
Cambridge .....	48.8	35.7	40.3	39.5	2.02
Yarmouth .....	47.5	39.1	42.9	41.8	3.15

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, 29.9 to 30.1 in. over South Germany and the south of France — 30.1 in. to 30.3 in. over the Spanish Peninsula — 29.8 in. at Valencia.  
 Lowest, 28.9 in. and less, in a depression off the northwest of Norway, 29.0 in. to 29.2 in. in a V shaped secondary lying over the North Sea.  
 Gradient steep for NW winds over our Islands and for SW winds over Denmark, the Netherlands and Germany.  
 Barometer now rising except in the extreme east and northeast; rise is not rapid and appears to be checked at Valencia.

## TEMPERATURE

Highest, 54° at Rochefort, 53° at Lisbon and Brest, 52° at Jersey, 48° at St. Petersburg, 47° at the Heligoland.  
 Lowest, (1) 24° at Munich, 35° at Belfast, 35° at Gibraltar, 36° at Copenhagen, 37° at Berlin, (2) 36° at St. Petersburg, 37° at London, 37° at Amsterdam, 37° at Antwerp, 38° at Hamburg, 38° at Berlin, 38° at St. Petersburg.  
 In London the thermometer fell quickly from 53° to 44° after the wind shifted to NW early this morning.

## WIND

NW throughout our Islands and the Channel — strong in most places and blowing a moderate gale on several parts of our western and southern coasts.  
 SW to S strong to a moderate gale in France and on the eastern shores of the North Sea.  
 It is reported to have blown a strong gale from SW over the eastern half of the Channel early this morning.

## WEATHER

Very variable and unsettled — Squally and showery, with clear intervals in several parts of the British Islands, dull over France and the Netherlands, with rain in places.  
 The rainfall measured this morning exceeded an inch at Sicily and exceeded half an inch on our south and southwest coasts and over Brittany.

## SEA

High on many parts of the Irish and English Channels, rough in the north, rather so in the east.

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The recovery in pressure seems to be checked already at Valencia; the NW wind is therefore likely to decrease in strength gradually, as the day advances, except perhaps in the north and east of Scotland and the northeast of England, where it will probably be strong for a time. In Ireland the wind is likely to fall light and to back again before long.

## FORECASTS

For the 24 hours ending at NOON on 26<sup>th</sup> Nov<sup>r</sup> 1889.

### DISTRICTS.

### FORECASTS.

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

NW winds, strong, then lighter; fair, colder.  
 NW winds, falling light; some showers, colder tonight, and perhaps foggy.

### DISTRICTS.

### FORECASTS

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

NW winds, subsiding gradually, with finer weather, afterwards backing and becoming warmer.

### WARNINGS

NO NE ISSUED.

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



# YESTERDAY'S 2 P.M. REPORTS.

	Bar:	Ther:		Wind		Wea:	Sea		Bar:	Ther:		Wind		Wea:	Sea:
		D	W	D	F					D	W	D	F		
Skudesnaes ...	29.71	47	44	S	8	0	5	Holyhead ...	29.68	50	48	SSW	5	0	5
Sumburgh Head								Valencia ...							
Stornoway ...	29.84	48	47	SW	2	0	3	Scilly ...							
Aberdeen ...								Jersey ...	30.01	53	49	W	5	0	4
Shields ...								Dungeness ...	29.83	50	50	SSW	6	0	5
Ardrossan ...								London ...							
Malin Head ...	29.85	47	46	S	5	0	3	Yarmouth ...							
Mullaghmore								Rocheport ...	30.30	57	52	W	5	0	3
Behaulet ...	29.44	49	48	WNW	1	1	*								

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

The reports for yesterday morning showed that pressure was highest, 30.4 ins. to 30.5 ins. in a large anticyclone which covered nearly the whole of Southern and Eastern Europe, and lowest, 29.4 ins. and less, in a large depression which lay to the northward of our Islands and the westward of Norway. A shallow local disturbance, with readings below 30.0 ins. was lying over the English Channel. The wind was SW<sup>2</sup> over the greater part of northwestern Europe, and strong in force in the extreme west and north, with gales in the west of Norway. Over Russia, however, and also in the west of France the wind was W<sup>2</sup>, while in Germany it was light from the SE<sup>2</sup>, in Italy and Spain variable breezes were reported, while in Algeria the wind varied between S. and SE. The weather was fine in the northeast of St. Britain, as well as in Scandinavia, Finland, Germany, Spain and the east and south of France. Elsewhere, however, the sky was cloudy or overcast, with fog in Denmark, south Germany, the southeast of England and the north of Italy, rain in the south of Ireland and at some of the Channel stations, and snow at Archangel and Kiev. Temperature had risen a few degrees in the west and north of our Islands and also in France, but fallen in most other localities; readings ranged from 50° and upwards on the coasts of the Iberian Peninsula, Algeria and the south of Italy, to a little below the freezing point over Germany, Austria and central Russia. The highest individual readings were 60° at Algiers, 59° at Lisbon, 57° at Biarritz, Langunneire, Brindisi and La Gaule, and 54° at Rocheport and Palermo, the lowest were 19° at Munich, 23° at Belfort, 27° at Breslau and Laracow, 28° at Munster, Warsaw, Prague and Vienna, and 29° at Wiesbaden, Turin and Pesaro.

In the course of the day a trough of V shaped secondary disturbances advanced eastward over the United Kingdom, occasioning heavy rain at many of our western stations, and a fresh to strong gale from the SW<sup>2</sup> on our south and southwest coasts.

### SUMMARY OF CHANGES IN THE WEATHER OVER THE BRITISH ISLANDS AND THEIR NEIGHBOURHOOD FROM THE 17<sup>TH</sup> TO THE 23<sup>RD</sup> NOVEMBER 1889.

The large anticyclonic system which lay over western and central Europe on the 17<sup>th</sup>, has moved slowly to the eastward during the week, and has given way considerably on its western side. SW<sup>2</sup> and S<sup>2</sup> breezes have gradually spread over the Kingdom from the westward, and on Thursday night these increased to a force varying from a strong breeze to a moderate gale on our western coasts and subsequently brought large quantities of rain to our northwestern and western coasts. Temperature has been high for the time of year (except at the Scotch stations, during a short interval early in the week) and much cloud has been prevalent, with fog and haze at times in most districts.

On Saturday the conditions were becoming more complex, a large low pressure area was spreading over the United Kingdom and Norway from the NW<sup>2</sup>, but a small depression which had been developed off the mouth of the Channel was moving eastwards slowly, and showing signs of filling up, so that while the SW<sup>2</sup> winds of the larger disturbance were felt over all the northern and western parts of the Kingdom, N<sup>2</sup> to E<sup>2</sup> and SE<sup>2</sup> winds were reported in the south of England, with fog and cold 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).

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# DAILY WEATHER REPORT.

for Tuesday, 26<sup>th</sup> November, 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 8.)	SHADE TEMP.				
				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.	Amount of Rainfall.		
SCANDINAVIA.	Haparanda ...	29.16	39	SW	4	O	28.95	- .34	37	37	+ 1	SSW	6	T	*	39	30	0.16	
	Hernösand ...	29.05	42	S	8	O	28.71	- .63	42	40	+ 2	SSW	8	C	*	43	37	0.08	
	Stockholm ...	29.15	43	SSW	8	O	29.01	- .49	40	37	- 3	SSW	6	C	+	45	32	0.04	
	Wisby ...	29.25	44	SW	6	O	29.18	- .40	42	40	+ 2	SW	6	bc	*	45	37	0.04	
	Bodö ...	28.75	43	SE	4	O	28.52	- .43	44	39	0	E	6	O	3	?	41	0.02	
	Christiansund	28.70	39	W	3	C	28.58	- .31	39	38	- 7	WNW	7	T	5	?	37	0.32	
	Skudesnaes ...	28.68	39	NW	2	T	28.98	+ .04	38	37	- 10	W	8	T	6	?	36	0.98	
	Christiania Fjord (Færder)	28.68	46	SSW	7	O	28.82	- .39	43	37	- 2	WSW	9	C	6	46	41	-	
	Skagen (The Scaw)	28.79	43	SW	5	O	29.05	- .20	36	36	- 8	W	7	T	6	46	36	0.20	
	Faßö ...	29.13	38	WNW	6	T	29.30	+ .03	39	36	- 7	WNW	3	C	*	46	36	0.32	
BRITISH ISLANDS.	Sumburgh Head	29.14	33	N	6	O	29.16	+ .16	32	32	- 6	WNW	6	S	6	39	28	0.09	
	Stornoway ...	29.49	35	N	4	bczp	29.47	+ .13	31	31	- 5	N	4	bc	4	38	28	0.10	
	Wick ...	29.34	33	NW	5	C	29.34	+ .19	30	30	- 8	NW	3	C	2	40	29	0.20	
	Nairn ...	29.46	33	WNW	3	C	29.45	+ .25	30	29	- 7	W	1	O	1	37	29	0.14	
	Aberdeen ...	29.40	33	WNW	6	bczp	29.43	+ .29	29	28	- 8	W	3	bc	4	38	29	0.15	
	Leith ...	29.51	37	W	2	bc	29.47	+ .24	33	32	- 5	W	1	bm	*	44	31	-	
	Shields ...	29.49	36	WNW	1	b	29.51	+ .27	34	32	- 3	W	3	C	2	44	31	-	
	Spurn Head ...	29.49	43	W	6	b	29.57	+ .30	38	37	- 7	WSW	5	bc	4	46	35	0.01	
	York ...	29.54	37	W	2	b	29.58	+ .28	35	33	- 4	WSW	1	C	*	45	32	0.01	
	Loughborough	29.65	36	WNW	3	b	29.68	+ .26	34	33	- 8	W	1	C	*	45	34	0.10	
BRITISH ISLANDS.	Ardrossan ...	29.56	38	WNW	4	b	29.51	+ .17	36	35	- 5	W	4	cqpr	3	43	33	0.14	
	Malin Head ...	29.62	39	WNW	5	bczp	29.60	+ .15	39	37	0	NW	7	cqph	5	43	33	0.02	
	Mullaghmore ...	29.71	43	NW	6	bczp	29.71	+ .10	40	36	- 2	WNW	7	cqth	6	44	36	0.11	
	Belmullet ...	29.77	41	NW	2	oph	29.79	+ .09	40	38	- 4	NW	2	C	*	45	38	0.18	
	Donaghadee ...	29.66	37	NW	4	b	29.63	+ .18	35	34	- 5	WNW	3	b	f	43	32	0.01	
	Barrow-in-Furness	29.58	42	NW	3	O	29.54	+ .22	37	36	- 6	NW	5	ohvt	*	45	35	0.19	
	Liverpool (Bidston)	29.64	41	WNW	5	O	29.61	+ .20	35	34	- 8	WNW	5	ohvt	4	45	35	0.37	
	Holyhead ...	29.69	43	WNW	6	Cq	29.66	+ .16	41	39	- 3	WNW	6	Cq	6	46	40	0.01	
	Parsonstown ...	29.77	39	W	0	O	29.78	+ .10	36	35	- 1	SW	1	bc	*	45	34	-	
	Valencia ...	29.86	45	WNW	2	Op	29.87	+ .04	46	44	0	WNW	2	O	2	50	43	0.17	
BRITISH ISLANDS.	Roche's Point...	29.84	44	WNW	3	bc	29.84	+ .06	42	40	- 2	WNW	3	bc	4	46	40	0.05	
	Pembroke (St. Ann's Hd.)	29.79	46	WNW	6	C	29.76	+ .09	45	43	- 1	WNW	6	bczp	5	47	44	0.06	
	Scilly ...	29.85	50	NW	6	O	29.85	+ .06	49	46	0	NW	6	C	6	50	46	0.05	
	Prawle Point...	29.85	43	WNW	4	bc	29.82	+ .12	40	39	- 3	WNW	3	b	2	47	39	-	
	Jersey (St. Aubin's)	29.87	49	WNW	4	C	29.84	+ .14	46	43	- 6	WNW	4	cqpm	3	52	43	0.14	
	Hurst Castle ...	29.78	44	WNW	5	b	29.78	+ .17	39	38	- 8	WNW	4	b	3	47	37	-	
	Dungeness ...	29.68	42	NW	4	b	29.74	+ .32	33	32	- 16	NW	3	bc	3	49	33	-	
	London ...	29.69	41	NW	3	b	29.73	+ .28	32	31	- 13	WSW	1	b	*	47	30	0.02	
	Oxford ...	29.75	36	WSW	3	b	29.73	+ .23	33	32	- 11	WSW	2	b	*	46	32	-	
	Cambridge ...	29.65	38	W	4	b	29.67	+ .24	32	31	- 12	SW	1	bc	*	48	30	-	
GERMANY.	Yarmouth ...	29.54	40	WNW	4	bc	29.63	+ .33	33	32	- 12	W	3	b	4	45	31	0.02	
	Cuxhaven ...	29.23	39	WSW	6	T	29.49	- .01	36	35	- 10	?	6	S	*	?	35	0.28	
	Berlin ...	29.46	41	SW	5	T	29.65	- .17	36	35	- 1	SW	3	bc	*	43	34	-	
	Wiesbaden ...	*	*	*	*	*	29.80	- .02	33	32	- 2	W	1	C	*	48	32	0.08	
	Munich ...	29.80	36	SSW	2	O	29.88	- .12	34	33	+ 10	SW	4	C	*	46	31	0.12	
FRANCE AND NETHERLANDS.	The Helder ...	29.47	42	W	7	K	29.58	+ .35	41	37	- 6	W	4	S	3	48	39	0.20	
	Brussels (8 a.m.)	*	*	*	*	*	29.75	+ .27	35	34	- 12	SW	2	b	*	49	35	0.24	
	Cape Gris Nez	?	44	NW	5	bc	?	?	42	38	- 7	NW	5	b	5	54	41	0.08	
	Paris ...	29.83	45	W	2	O	29.85	+ .21	37	36	- 11	S	1	C	*	50	36	0.20	
	Brest ...	?	51	NW	5	O	?	?	50	50	- 3	WNW	5	C	5	59	41	0.04	
	Lorient ...	29.93	50	WNW	4	bc	29.91	+ .09	46	46	- 5	WNW	3	T	4	54	45	0.12	
	Rochefort ...	30.12	53	NW	5	O	29.89	- .04	55	52	+ 1	W	5	C	3	55	46	0.35	
	Belfort ...	29.76	43	NW	2	T	29.91	+ .05	40	34	+ 7	W	1	C	*	50	28	0.35	
	Lyons ...	29.95	49	SSW	2	O	29.99	- .03	41	39	- 6	W	1	C	*	52	40	0.04	
	Nice ...	30.00	51	NW	2	C	29.72	- .45	50	43	+ 7	W	4	C	4	59	43	-	
PENINSULA.	Perpignan ...	30.05	48	W	1	b	29.98	- .11	52	48	+ 11	WSW	3	C	*	57	?	-	
	Biarritz ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
PENINSULA.	Corunna ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
	Lisbon ...	30.29	37	W	3	O	30.31	- .00	55	53	+ 3	N	3	O	?	61	?	-	

For Explanation of Columns, see bottom of p 4.

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



# WEATHER CHARTS

for 8 a.m. on

Tuesday, 26<sup>th</sup> November,

1889.

## BAROMETER, WIND AND SEA.

### EXPLANATION OF MAP.

**BAROMETER**—Isobars are drawn for each tenth of an inch.

Changes since previous morning are stated in words.

**WIND**—Arrows shew the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—

→ = forces above 10; →→ = forces 8 to 10;

→→ = forces 5 to 7; → = forces 1 to 4.

⊙ = dead calm.

**SEA DISTURBANCE**—Where considerable, is shown thus:

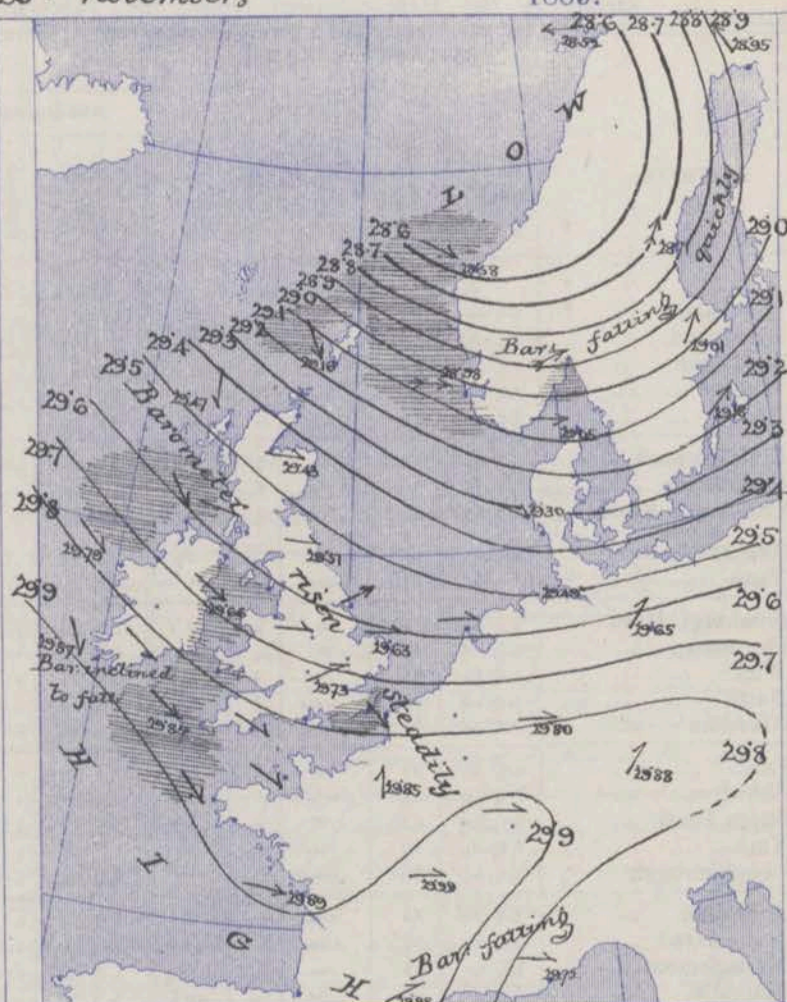
☼ = Rough. ☼ = High.

## MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of November.

During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS.
Sumburgh Head .....	29.687
Stornoway .....	29.707
Wick .....	29.726
Nairn .....	29.743
Aberdeen .....	29.756
Leith .....	29.793
Shields .....	29.815
York .....	29.844
Loughborough .....	29.876
Ardrossan .....	29.795
Donaghadee .....	29.811
Holyhead .....	29.835
Liverpool .....	29.852
Parsonstown .....	29.848
Valencia .....	29.864
Roche's Point .....	29.864
Pembroke .....	29.862
Scilly .....	29.898
Jersey .....	29.923
Hurst Castle .....	29.898
Dover .....	29.893
LONDON .....	29.897
Oxford .....	29.893
Cambridge .....	29.885
Yarmouth .....	29.863



## 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.

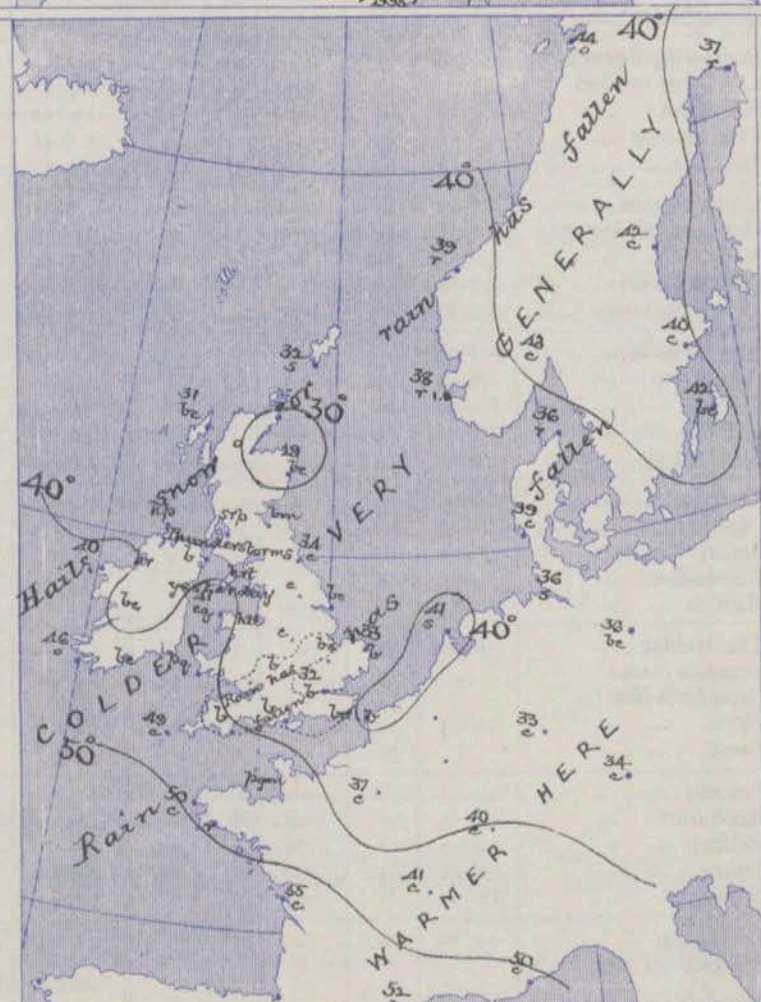
**RAINFALL**—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

### MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of November.)

STATIONS.	TEMPERATURE.				RAINFALL. (Inches.)
	Daily Max.	Daily Min.	at 8 a.m.		
			Dry.	Wet.	
Sumburgh Head.....	45.3	37.4	41.5	39.8	4.24
Stornoway .....	45.7	36.7	41.0	39.9	4.60
Wick .....	45.7	35.7	40.9	39.3	2.97
Nairn .....	44.7	35.5	39.1	37.5	2.32
Aberdeen .....	46.1	36.3	40.3	38.5	3.16
Leith .....	48.2	36.7	41.2	39.6	2.11
Shields .....	47.1	38.1	41.8	40.2	2.63
York .....	47.7	36.1	40.3	39.0	2.21
Loughborough .....	48.0	36.4	40.2	38.9	2.30
Ardrossan .....	47.7	38.9	42.6	40.8	3.92
Donaghadee.....	48.2	39.2	42.9	41.7	3.13
Holyhead.....	49.7	42.8	45.5	43.8	3.71
Liverpool .....	47.7	39.6	42.1	40.4	2.87
Parsonstown .....	49.1	36.9	41.7	40.0	2.84
Valencia .....	52.4	42.7	47.2	45.2	5.60
Roche's Point .....	51.1	41.8	45.9	44.3	4.56
Pembroke.....	50.2	43.7	46.7	44.7	3.96
Scilly .....	52.5	46.7	50.0	48.0	3.76
Jersey .....	51.9	44.2	47.5	45.6	4.24
Hurst Castle .....	50.5	40.3	44.6	43.6	2.98
Dover .....	49.1	40.7	44.0	42.4	3.58
LONDON .....	49.6	37.9	42.0	40.5	2.14
Oxford .....	48.6	37.6	41.0	39.7	2.30
Cambridge .....	48.8	35.7	40.3	39.5	2.02
Yarmouth .....	47.5	39.1	42.9	41.8	3.15

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, 29.9 in: and upwards, over the Bay of Biscay and the south of France.</p> <p>Lowest, 28.6 in: and less, in a large depression the centre of which lies between Rode and Christiansund.</p> <p>Gradients rather steep over Scandinavia and the North Sea, but moderate or slight elsewhere.</p> <p>Barometer falling in most places, slightly in our Islands, but quickly in Scandinavia.</p>
TEMPERATURE	<p>Highest, 55° at Rochefort, 52° at Rhipigan, 50° at Rode and Nieu, 49° at Lillo, and 46° at Valencia and Lorient.</p> <p>Lowest, 29° at Abudeen, 30° at Wick and Kairn, 31° at Stromway, 32° at Sumburgh H<sup>d</sup>, and 33° at Seilh and Wiesbaden.</p> <p>Sharp frost was experienced over Great Britain last night; in London the thermometer on the grass fell to 20°.</p>
WIND	<p>W<sup>1</sup> or NW<sup>1</sup> over our Islands, the west and north of France, and the eastern shores of the North Sea, with a gale in the south of Norway.</p> <p>Moderate from the SW<sup>2</sup> in Germany; strong to gale from the same quarter in Sweden.</p>
WEATHER	<p>Fine in the east and south of our Islands, as well as in Germany, France, and the south of Sweden.</p> <p>Cloudy elsewhere, with rain in the coast of Norway, hail and sleet showers on our northwest coast, and snow at Sumburgh H<sup>d</sup>, Copenhagen and the <sup>Midn.</sup></p> <p>Thunder and lightning are reported in the northeast of England.</p>
SEA	<p>Rough off the Norwegian coast, as well as off the west and southwest of our Islands, but moderate to smooth elsewhere.</p>


## PROBABLE CHANGES IN SYSTEM NOW PREVALENT


In addition to the large depression over Norway, some small secondary disturbances are apparently lying over the northwest of our Islands. The latter will probably move in a southeasterly direction across England, and showers of snow or hail are therefore likely over our eastern and southern districts.

## FORECASTS

For the 24 hours ending at NOON on 27<sup>th</sup> Nov<sup>r</sup> 1889.

DISTRICTS.	FORECASTS.	DISTRICTS.	FORECASTS
0 { SCOTLAND NORTH	NW <sup>1</sup> and N <sup>1</sup> winds, fresh; unsettled, some snow showers.	6 { SCOTLAND WEST	NW <sup>1</sup> winds, fresh or strong; changeable; some snow showers.
1 { SCOTLAND EAST	W <sup>1</sup> to NW <sup>1</sup> winds, moderate or fresh; changeable, some snow showers.	7 { ENGLAND N.W.	
2 { ENGLAND N.E.		8 { ENGLAND S.W.	NW <sup>1</sup> winds, strong; squally, some cold showers.
3 { ENGLAND EAST	W <sup>1</sup> and NW <sup>1</sup> winds, moderate or fresh; fair to unsettled, with some snow showers.	9 { IRELAND NORTH	
4 { MIDLAND COUNTIES		0 { IRELAND SOUTH	NW <sup>1</sup> winds, moderate, fair generally, but local showers.
5 { ENGLAND SOUTH			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:		Ther:		Wind		Wea:	Sea		Bar:		Ther:		Wind		Wea:	Sea
	D	W	D	F	D	F				D	W	D	F	D	F		
Skudesnaes ...	29.79	41	40	7	7	7	7	5		Holyhead ...	29.63	44	42	7	7	7	5
Sumburgh Head ...	29.10	33	33	7	7	7	7	5		Valencia ...	29.86	48	45	7	7	7	5
Stornoway ...	29.46	38	38	7	7	7	7	5		Scilly ...	29.85	50	48	7	7	7	5
Aberdeen ...	29.31	34	33	7	7	7	7	5		Jersey ...	29.82	51	44	7	7	7	5
Shields ...	29.58	42	37	7	7	7	7	5		Dungeness ...	29.59	47	42	7	7	7	5
Ardrossan ...	29.49	42	38	7	7	7	7	5		London ...	29.61	47	42	7	7	7	5
Malin Head ...	29.58	38	37	7	7	7	7	5		Yarmouth ...	29.41	43	41	7	7	7	5
Mullaghmore ...	29.68	44	39	7	7	7	7	5		Rocheport ...	30.02	55	51	7	7	7	5
Belmullet ...	29.74	42	40	7	7	7	7	5									

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

The reports for yesterday morning showed that the distribution of pressure over Europe had become complex, readings varying from <sup>between</sup> 30.3 ins. and 30.5 ins. over the southeast of Russia, and from between 30.2 ins. and 30.3 ins. over the greater part of the Spanish Peninsula to 28.9 ins. and less, in a well marked depression lying over the northwest of Norway and adjacent parts of the Atlantic, and to between 29.0 ins. and 29.2 ins. in a large "hollow" which extended thence in a southerly direction over the North Sea. Thus, while S<sup>1</sup> and SW<sup>1</sup> winds of considerable strength prevailed over the Continent and the Baltic, with rain in several places, the winds over the United Kingdom, the Bay of Biscay and west and north of France had, (after blowing very strongly from SW. with rain) shifted to the NW<sup>1</sup>, with a considerable fall of temperature, cold showers, and a rising barometer. The weather was very unsettled everywhere. Temperature was very irregularly distributed, and over the British Islands it was falling decidedly. The highest individual values at about 8 am were 60° at Algiers, 59° at Malta, 56° at Messina and Laibach, 55° at Brindisi, 54° at Rochefort, 53° at Bilbao and Brest, 49° at Scilly, and Dungeness, 48° at Skudersnaes, 47° over the Netherlands, and 46° at Christiansund; the lowest were (1) 23° at Odesa, 24° at Munich, 26° at Warsaw, 27° at Vienna, 28° at Prague and Breslau, 30° at Ruda Kuth and Hermannstadt, and between 30° and 35° over nearly all the rest of Central and Southern Europe; (2) 36° at Stornoway, 37° at Kain, Aberdeen, Shields, and Ramonstown, 38° at Sumburgh H<sup>d</sup> and Leth, 39° at Malin H<sup>d</sup> and York.

During the day the barometer continued to rise over the United Kingdom, the NW<sup>1</sup> wind moderated, and, as night came on temperature fell very fast.

### EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

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

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

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

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



# DAILY WEATHER REPORT.

for WEDNESDAY 27<sup>TH</sup> NOV<sup>R</sup> 1889.

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

STATIONS.	YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
	Barometer at 32° F. and Sea Level.	Temp. in Shade.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Sea. (0 to 9.)	SHADE TEMP.		Amount of Rainfall.		
			Dir.	Force. (0 to 12.)		Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Dir.	Force. (0 to 12.)		Max.	Min.			
SCANDINAVIA.	Haparanda ...	28.80	29	S	8	bc	28.89	-0.6	36	35	-1	SW	8	T	•	39	34	0.28
	Hernösand ...	28.86	38	SW	9	o	29.02	+0.31	33	32	-9	SW	2	bc	•	?	?	—
	Stockholm ...	29.15	34	SW	6	bc	29.29	+0.28	34	31	-6	SW	4	bc	•	45	?	—
	Wisby ...	29.33	37	SW	4	bc	29.39	+0.21	35	33	-7	S	4	C	•	45	?	—
	Bodö ...	29.62	40	E	4	o	28.67	+0.15	37	36	-7	N	6	T	3	45	34	0.37
	Christiansund	28.77	29	WSW	9	T	29.04	+0.46	39	37	0	NW	9	T	7	41	34	0.47
	Skudesnaes ...	29.15	37	S	10	T	29.23	+0.35	35	34	-3	NW	4	T	4	41	?	—
	Christiania Fjord (Færder)	29.00	41	WNW	4	bc	29.19	+0.37	40	35	-3	WSW	4	bc	3	43	39	—
	Skagen (The Scaw)	29.17	38	W	6	o	29.28	+0.23	32	32	-4	SW	3	bc	3	39	30	0.04
	Fanö ...	29.32	33	SE	4	bc	29.28	-0.02	33	32	-6	N	2	C	•	39	32	0.12
BRITISH ISLANDS.	Sumburgh Head	29.26	34	N	6	o	29.61	+0.45	35	33	+3	N	6	o	6	38	29	0.07
	Stornoway ...	29.54	34	N	6	o	29.93	+0.46	33	33	+2	N	6	bc	6	35	27	0.12
	Wick ...	29.40	34	NW	6	o	29.80	+0.46	33	33	+3	N	6	cu	4	35	29	0.15
	Nairn ...	29.46	31	W	3	o	29.84	+0.39	33	33	+3	N	6	o	6	33	29	0.06
	Aberdeen ...	29.38	33	WNW	6	bc	29.74	+0.31	32	31	+3	N	5	cgsp	6	34	29	0.22
	Leith ...	29.52	33	W	1	bc	29.77	+0.30	34	31	+1	NW	1	cm	•	38	30	—
	Shields ...	29.46	31	WNW	3	bc	29.66	+0.15	32	31	-2	WNW	4	C	4	35	28	—
	Spurn Head ...	29.45	36	WNW	6	bc	29.52	-0.03	33	32	-5	NW	8	o	6	39	32	0.10
	York ...	29.52	32	WNW	1	bc	29.65	+0.07	32	30	-3	N	5	bc	•	37	27	0.02
	Loughborough	29.58	35	NW	3	bc	29.68	0.00	31	30	-3	WNW	4	o	•	41	29	0.07
GERMANY.	Ardrossan ...	29.56	36	WNW	2	bc	29.86	+0.35	32	30	-4	NNE	1	bc	1	38	31	—
	Malin Head ...	29.64	37	WNW	7	bc	29.94	+0.34	35	34	-4	WNW	8	cgsp	5	40	31	0.04
	Mullaghmore ...	29.76	34	WNW	6	cgsp	30.03	+0.32	36	34	-4	N	8	cgsp	6	43	33	0.43
	Belmullet ...	29.81	37	N	6	bc	30.17	+0.38	36	35	-4	N	8	cgsp	•	42	33	0.25
	Donaghadee ...	29.68	34	NW	4	cgsp	29.87	+0.24	36	34	+1	NE	5	bc	3	41	33	0.27
	Barrow-in-Furness	29.07	35	N	3	bc	29.75	+0.21	33	30	-4	NNE	4	bc	•	40	31	0.16
	Liverpool (Bidston)	29.61	38	NW	4	bc	29.78	+0.17	35	31	0	WNW	4	bc	4	42	33	0.17
	Holyhead ...	29.65	41	NW	5	bc	29.84	+0.18	36	35	-5	WNW	7	cgsp	6	44	35	0.08
	Parsonstown ...	29.78	33	NE	1	bc	30.00	+0.22	31	30	-5	S	0	C	•	41	30	—
	Valencia ...	29.90	44	N	4	bc	30.17	+0.30	39	37	-7	WNW	4	cgsp	4	47	33	0.31
FRANCE AND NETHERLANDS.	Roche's Point...	29.82	42	NW	4	bc	30.09	+0.25	36	34	-6	WNW	5	bc	4	46	35	0.06
	Pembroke (St. Ann's Hd.)	29.72	43	NW	6	bc	29.89	+0.11	39	38	-6	WNW	7	cgsp	6	46	35	0.03
	Scilly ...	29.75	48	WNW	5	o	29.90	+0.05	43	38	-6	N	9	cgsp	6	50	39	0.13
	Prawle Point ...	29.76	40	NW	3	bc	29.82	0.00	32	32	-8	WNW	3	bc	2	47	32	0.03
	Jersey (St. Aubin's)	29.73	47	WNW	3	o	29.73	-0.11	37	36	-9	WNW	3	cgsp	3	50	30	0.19
	Hurst Castle ...	29.70	43	WNW	4	bc	29.73	-0.05	34	33	-5	WNW	4	bc	2	47	33	—
	Dungeness ...	29.62	36	W	4	bc	29.61	-0.12	28	27	-5	NW	3	bc	2	48	26	—
	London ...	29.62	37	NW	2	bc	29.67	-0.06	31	30	-1	NW	1	bc	•	47	28	—
	Oxford ...	29.65	34	NW	3	bc	29.71	-0.02	32	30	-1	NW	3	bc	•	45	30	0.01
	Cambridge ...	29.56	35	NW	3	bc	29.65	-0.02	30	30	-2	NW	2	bc	•	45	27	?
PENINSULA.	Yarmouth ...	29.53	36	W	4	bc	29.50	-0.13	32	32	0	WNW	5	o	4	40	28	—
	Cuxhaven ...	29.48	36	SW	2	o	29.35	-0.14	35	34	-1	SW	3	bc	•	37	35	0.10
	Berlin ...	29.62	33	SW	2	bc	29.47	-0.18	34	34	-2	S	3	bc	•	41	28	—
	Wiesbaden ...	•	•	•	•	•	29.54	-0.26	30	30	-3	S	0	o	•	41	30	—
	Munich ...	29.74	32	SW	4	bc	29.56	-0.32	33	33	-1	SW	5	o	•	39	30	0.04
	The Helder ...	29.39	39	WSW	3	o	29.32	-0.25	41	38	0	W	5	o	4	43	36	0.28
	Brussels (9 a.m.)	•	•	•	•	•	29.56	-0.19	32	30	-3	SW	2	bc	•	43	32	0.04
	Cape Gris Nez	•	41	NW	6	bc	•	•	36	32	-6	N	5	bc	5	54	32	—
	Paris ...	29.73	42	SW	2	C	29.63	-0.22	33	32	-4	WNW	2	o	•	44	33	—
	Brest ...	•	51	NW	4	o	•	•	42	40	-8	NW	9	C	8	53	37	0.08
PENINSULA.	Lorient ...	29.83	50	WNW	3	o	29.79	-0.12	42	38	-4	WNW	7	bc	7	32	37	0.04
	Rocheport ...	•	51	W	4	o	29.80	-0.09	45	42	-10	WNW	6	C	4	53	39	0.35
	Belfort ...	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	Lyons ...	29.84	41	SW	1	T	29.63	-0.36	41	40	0	SW	2	o	•	50	40	0.08
	Nice ...	29.69	50	S	0	bc	29.39	-0.33	43	40	-7	bc	2	bc	2	57	41	—
	Perpignan ...	29.84	58	NW	4	bc	29.71	-0.27	53	50	+1	W	1	o	•	63	57	0.08
PENINSULA.	Biarritz ...	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	Corunna ...	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
PENINSULA.	Lisbon ...	30.30	58	N	4	o	30.22	-0.09	58	56	+2	WNW	4	o	•	61	53	—
	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•



# WEATHER CHARTS

for 8 a.m. on

Wednesdays 27<sup>th</sup> November.

1889.

## BAROMETER, WIND AND SEA.

### EXPLANATION OF MAP.

**BAROMETER**—Isobars are drawn for each tenth of an inch.

Changes since previous morning are stated in words.

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

→ = forces above 10; → = forces 8 to 10;

→ = forces 5 to 7; → = forces 1 to 4.

⊙ = dead calm.

**SEA DISTURBANCE**—Where considerable, is shown thus:

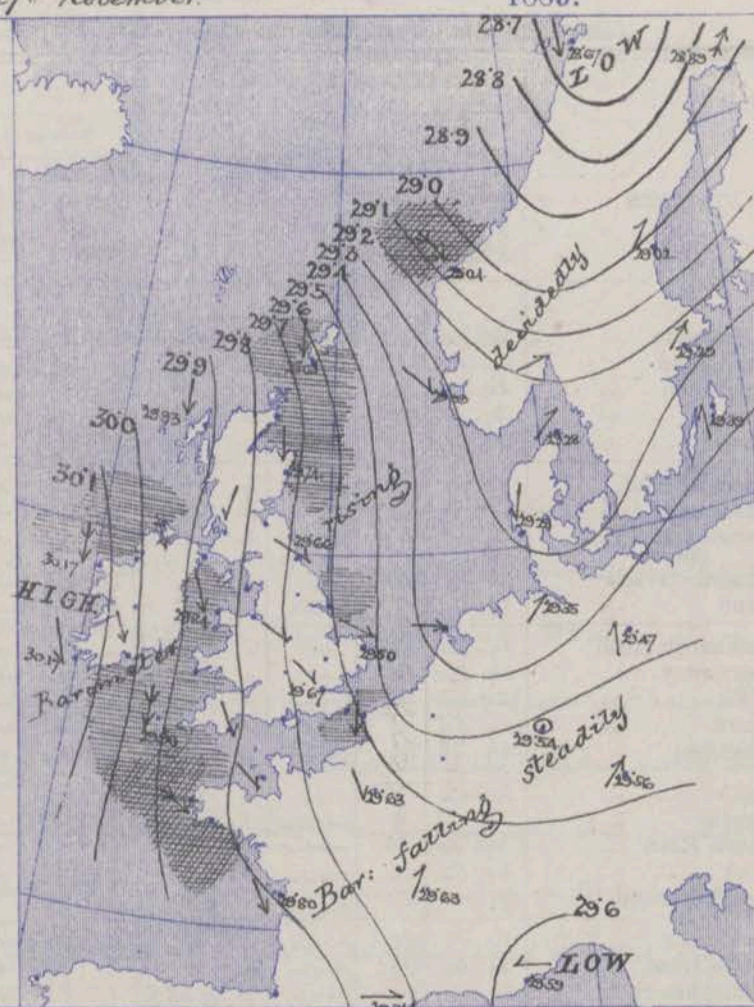
▨ = Rough. ▨ = High.

## MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of November.

During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS.
Sumburgh Head .....	29.687
Stornoway .....	29.707
Wick .....	29.726
Nairn .....	29.743
Aberdeen .....	29.756
Leith .....	29.793
Shields .....	29.815
York .....	29.844
Loughborough .....	29.876
Ardrossan .....	29.795
Donaghadee .....	29.811
Holyhead .....	29.835
Liverpool .....	29.852
Parsonstown .....	29.848
Valencia .....	29.864
Roche's Point .....	29.864
Pembroke .....	29.862
Silly .....	29.898
Jersey .....	29.923
Hurst Castle .....	29.898
Dover .....	29.893
LONDON .....	29.897
Oxford .....	29.893
Cambridge .....	29.885
Yarmouth .....	29.863



## 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.

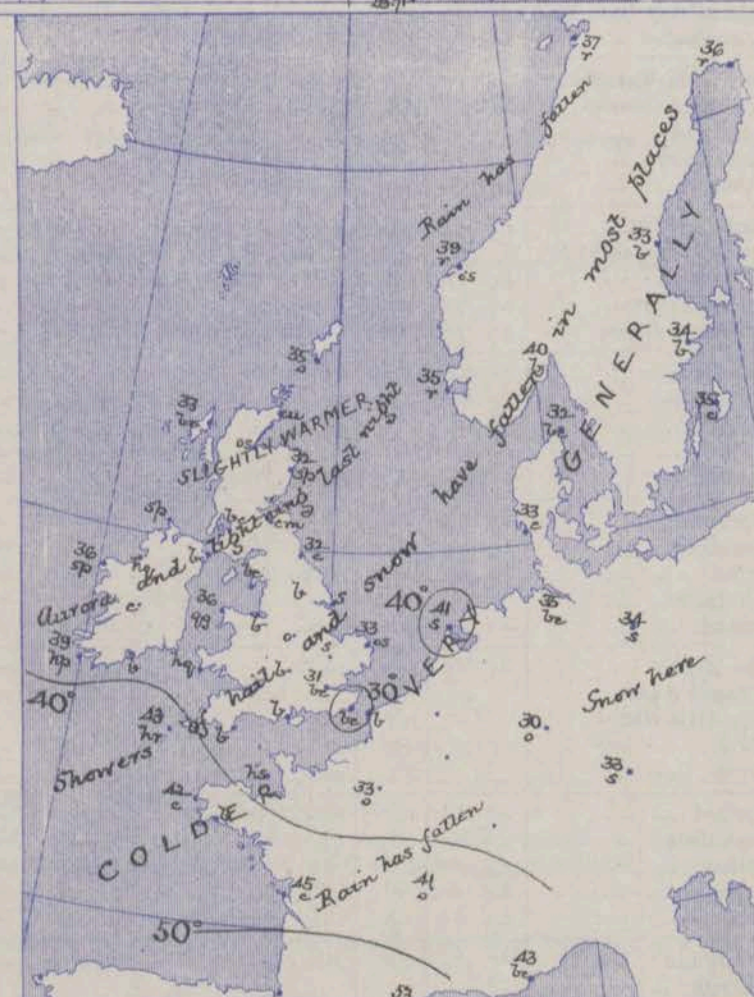
**RAINFALL**—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

### MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of November.)

STATIONS.	TEMPERATURE.				RAINFALL (Inches.)
	Daily Max.	Daily Min.	at 8 a.m.		
			Dry.	Wet.	
Sumburgh Head.....	45.3	37.4	41.5	39.8	4.24
Stornoway .....	45.7	36.7	41.0	39.9	4.60
Wick .....	45.7	35.7	40.9	39.3	2.97
Nairn .....	44.7	35.5	39.1	37.5	2.32
Aberdeen .....	46.1	36.3	40.3	38.5	3.16
Leith.....	48.2	36.7	41.2	39.6	2.11
Shields .....	47.1	38.1	41.8	40.2	2.63
York .....	47.7	36.1	40.3	39.0	2.21
Loughborough .....	48.0	36.4	40.2	38.9	2.30
Ardrossan .....	47.7	38.9	42.6	40.8	3.92
Donaghadee.....	48.2	39.2	42.9	41.7	3.13
Holyhead.....	49.7	42.8	45.5	43.8	3.71
Liverpool .....	47.7	39.5	42.1	40.4	2.87
Parsonstown .....	49.1	36.9	41.7	40.0	2.84
Valencia .....	52.4	42.7	47.2	45.2	5.50
Roche's Point .....	51.1	41.8	45.9	44.3	4.56
Pembroke.....	50.2	43.7	46.7	44.7	3.96
Scilly .....	52.5	46.7	50.0	48.0	3.76
Jersey .....	51.9	44.2	47.5	45.6	4.24
Hurst Castle .....	50.5	40.3	44.6	43.6	2.98
Dover .....	49.1	40.7	44.0	42.4	3.58
LONDON .....	49.6	37.9	42.0	40.5	2.14
Oxford.....	48.6	37.6	41.0	39.7	2.30
Cambridge .....	48.8	35.7	40.3	39.5	2.02
Yarmouth .....	47.5	39.1	42.9	41.8	3.15

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





# GENERAL SITUATION AT 8 A.M.

## PRESSURE

Highest, 30.2 in: and upwards, in Portugal; 30.1 in: and upwards, in the west of Ireland.  
 Lowest, 28.7 in: and less, in a depression lying over the north of Scandinavia; several small secondary disturbances are lying over Denmark, the North Sea and the Netherlands.  
 Gradients rather steep over the whole of Northern Europe. Barometer rising at all but the French and German stations.

## TEMPERATURE

Highest, 58° at Lisbon, 53° at Liverpool, 45° at Rochefort, 43° at Sally and Nice and 42° at Rome and Genoa.  
 Lowest, 28° at Bungeners, 30° at Cambridge and Middelburg, and 31° at Loughborough, Karsruhe and in London.  
 Sharp frost was experienced over Great Britain last night; in London the thermometer on the grass fell to 16°.

## WIND

Strong from the NW<sup>W</sup> or N<sup>W</sup> over the whole of our Islands and the west of Norway, with gales at one or two of the more exposed stations.  
 Moderate from the SW<sup>W</sup> over Sweden, Denmark and Germany; light and variable in the south of France.

## WEATHER

Squally with showers of hail or snow in many parts of the United Kingdom; snow is also falling in Holland and Germany.  
 Raining in the west of Norway; fine in Sweden, Denmark, and the coast and south of France.  
 Displays of Aurora and lightning were seen last night at many of our western and northern stations.

## SEA

Rough or rather so on nearly all parts of our coasts, but slight on the English side of the Channel.

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The small depressions to the eastward of our Islands appear to be moving away over the Continent, but snow showers are still probable in various parts of Great Britain.

The new high pressure system which has appeared off our extreme western coast seems likely to spread slowly in an easterly direction.

## FORECASTS

For the 24 hours ending at NOON on 28<sup>th</sup> Nov<sup>r</sup> 1889.

### DISTRICTS.

### FORECASTS.

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

N<sup>W</sup> winds, fresh or strong; squally  
 some snow showers.  
 N<sup>W</sup> to N<sup>W</sup> winds, fresh; changeable,  
 some snow showers.

### 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.

N<sup>W</sup> winds, strong; squally, some cold showers

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

### WARNINGS

NONE ISSUED.

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



# YESTERDAY'S 2 P.M. REPORTS.

	Bar:	Ther:		Wind		Wea:	Sea		Bar.	Ther:		Wind		Wea:	Sea.
		D	W	D	F					D	W	D	F		
Skudesnaes ...	29.05	41	37	WNW	5	0	6	Holyhead ...	29.63	41	39	WNW	7	ch q	6
Sumburgh Head ...	29.18	33	33	N	3	0	5	Valencia ...	29.83	45	44	NW	3	om p	3
Stornoway ...	29.51	34	33	N	4	C	4	Scilly ...	29.79	48	46	NW	5	of	5
Aberdeen ...	29.37	33	35	WSW	4	Cg	4	Jersey ...	29.80	50	46	WNW	4	Cg	3
Shields ...	29.46	34	33	WNW	2	C	3	Dungeness ...	29.62	46	42	W	4	bc	4
Ardrossan ...	29.55	33	34	WNW	3	t	2	London ...	29.64	46	41	NW	4	og q r s p	4
Malin Head ...	29.65	35	34	WNW	6	of	4	Yarmouth ...	29.53	40	38	W	4	Cg	4
Mullaghmore ...	29.72	38	37	NW	7	ch q r s	6	Rochefort ...	29.95	52	50	NW	5	C	3
Belmullet ...	29.81	40	36	NW	4	bc	*								

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

The reports for yesterday morning showed that the high pressure area noticed over the southeast of Russia on the previous day was receding in an easterly direction, that the low pressure systems in the north were spreading southwards and eastwards over the Baltic, Germany, Austria, and Russia, and that a new and large area of high pressure lay over the Spanish Peninsula and the Atlantic, and was inclined to spread northeastwards towards the British Isles. In the meantime a new depression had been developed over the Gulf of Genoa. The gales experienced over the British Isles and France had subsided, but NW winds still prevailed in those regions, and were still strong on our northwestern coasts and at Sumburgh Hd. On the eastern shores of the North Sea the wind was W<sup>3</sup>, in Germany, SW<sup>3</sup>, and over the Baltic S<sup>4</sup>, and was moderate in most places, but strong in Sweden, and blew a gale at Hernö and. Weather was in an unsettled changeable condition over nearly the whole of Europe; clear (temporarily) in many places, cloudy in others, with hail, and thunder on our northwestern coasts, rain in many parts of Norway and Sweden and at Kiev, snow at Moscow, at Copenhagen and the Helles, fog at Vienna, Buda Pesth and at Constantinople. Temperature had fallen fast over Northern Europe generally, even in many parts of Austria, South Germany, and the south of France. It was lowest (1) 20° at Arkhangel, 25° at Seinemünde, 27° at Humankirk, 28° at Cassow and Kiev, 29° at New Jahwasser and Archangel, and 31° at Vienna; (2) 29° at Aberdeen, 30° at Kurr and Wick, 31° at Stornoway, 32° at Sumburgh Hd, Cambridge and in London 33° at Oxford and Mersbadew. It was highest 62° at Palma, 58° at Bilbao, Oyar and Legan, 57° at Genoa, Algiers, and Malta, 56° at Palermo and Sanguinaires, 55° at Bordis, Lisbon and Rochefort, 52° at Perpignan, 50° at Basel, 49° at Kelly and 46° at Valencia; even at Bodo it was as high as 44°. Later on the NW wind increased greatly in force on the coasts of the British Isles, sleet and hail showers fell in many places, and thunder occurred even in London. The night was very cold and foggy inland over England.

### EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

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

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

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

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



# DAILY WEATHER REPORT.

for *Thursday, 28<sup>th</sup> November, 1889.*  
*Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.*

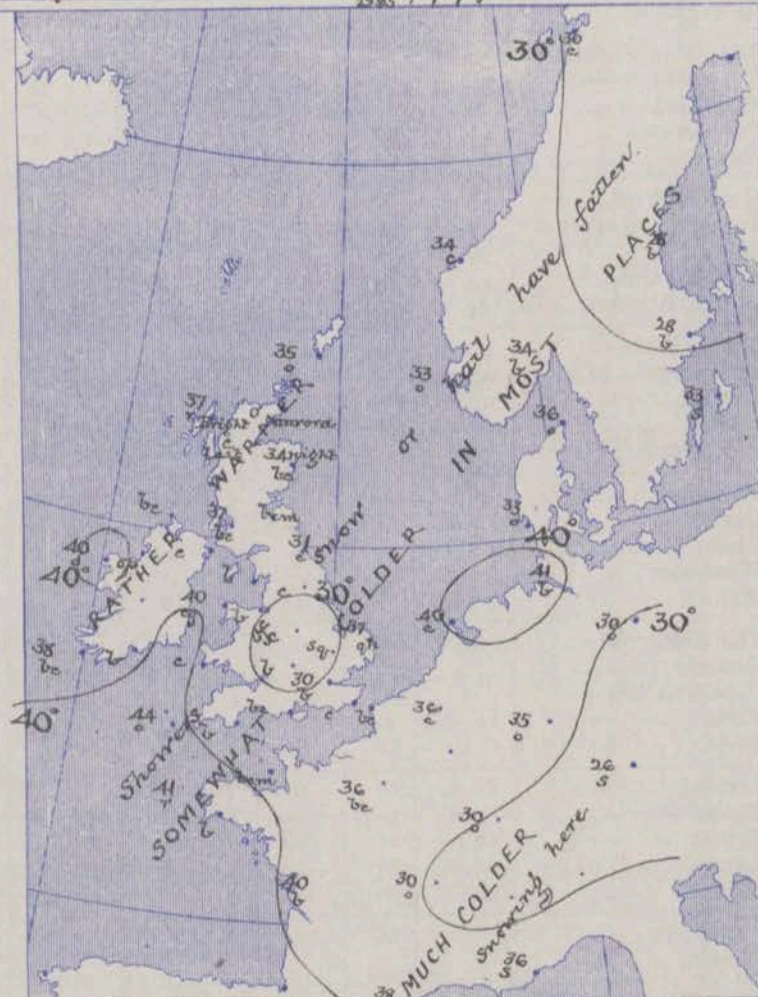
STATIONS.		YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
		Barometer at 32° F. and Sea Level.	Temp. in Shade.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Sea. (0 to 9.)	SHADE TEMP.		Amount of Rainfall.		
				Dirce.	Force. (0 to 12.)		Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Dirce.	Force. (0 to 12.)		Weather.	Max.		Min.	
SCANDINAVIA.	Haparanda ...																		
	Hernösand ...	29.33	30	SW	2	b	29.58	+ .56	28	26	- 5	NNE	4	b	*	44	28	-	
	Stockholm ...	29.52	30	SW	0	b	29.87	+ .28	28	27	- 6	N	2	b	*	37	28	-	
	Wisby ...	29.54	34	S	4	bc	29.47	+ .08	33	33	- 2	ENE	2	S	*	39	23	0.24	
	Bodö ...	29.26	34	N	8	m	29.92	+ .45	30	27	- 7	N	4	e	2	37	27	-	
	Christiansund	29.66	33	WNW	8	c	29.80	+ .76	34	32	- 5	NW	3	c	6	?	30	0.16	
	Skudesnaes ...	29.63	37	NW	8	bc	29.87	+ .34	33	30	- 2	WNW	4	0	4	37	32	-	
	Christiania Fjord (Fæder)	29.43	37	NNE	5	b	29.73	+ .34	34	30	- 6	WNW	7	b	2	?	34	-	
	Skagen (The Scaw)	29.45	35	SW	0	b	29.63	+ .85	36	33	+ 4	NE	6	0	6	39	28	-	
	Fanö ...	29.42	37	WNW	2	c	29.63	+ .35	33	33	0	WNW	4	0	*	37	32	0.04	
BRITISH ISLANDS.	Sumburgh Head	29.92	34	N	5	bc	29.98	+ .27	35	34	0	SW	0	0	4	36	28	0.03	
	Stornoway ...	30.15	31	N	5	ops	30.16	+ .23	37	37	+ 4	NW	4	T	4	37	29	0.18	
	Wick ...	30.02	33	N	6	0	30.09	+ .29	36	35	+ 3	NW	4	0	4	36	30	0.07	
	Nairn ...	30.10	33	WNW	4	bc	30.13	+ .29	36	34	+ 3	WNW	3	e	3	37	30	-	
	Aberdeen ...	30.00	33	NW	5	bq	30.13	+ .39	34	32	+ 2	WNW	3	bc	5	36	31	0.04	
	Leith ...	30.06	35	NW	1	bc	30.20	+ .43	34	33	0	NW	1	bcn	*	40	30	-	
	Shields ...	29.94	36	NW	4	bc	30.18	+ .52	31	30	- 1	WNW	3	c	5	39	29	0.02	
	Spurn Head ...	29.93	34	N	4	bc	30.17	+ .52	30	30	- 2	WNW	2	c	*	36	29	0.06	
	York ...	29.97	34	NW	3	b	30.21	+ .53	27	25	- 4	W	3	c	*	36	26	-	
	Loughborough	30.14	34	WNW	3	b	30.25	+ .39	37	35	+ 5	NW	2	bc	1	40	31	-	
GERMANY.	Malin Head ...	30.20	39	N	6	bhp	30.30	+ .36	39	37	+ 4	NW	3	bcp	2	40	35	0.02	
	Mullaghmore ...	30.27	38	NNE	5	bchsp	30.36	+ .33	40	38	+ 4	NW	4	op	3	41	36	0.05	
	Belmullet ...	30.32	40	N	6	0	30.39	+ .22	40	39	+ 4	NW	1	0	*	41	34	0.04	
	Donaghadee ...	30.15	40	NNE	6	bbsp	30.30	+ .43	36	35	0	NW	3	c	1	40	35	0.03	
	Barrow-in-Furness	30.08	35	N	2	b	30.22	+ .47	34	32	+ 1	N	3	b	*	37	32	-	
	Liverpool (Bidston)	30.07	36	WNW	4	b	30.26	+ .48	36	34	+ 1	WNW	4	b	4	37	34	-	
	Holyhead ...	30.11	40	N	6	bcp	30.28	+ .44	40	38	+ 4	NNE	4	cq	4	41	36	0.09	
	Parsonstown ...	30.28	31	NE	1	b	30.39	+ .39	31	30	0	SW	0	bc	*	36	28	-	
	Valencia ...	30.36	40	NNE	3	bcp	30.45	+ .28	38	36	- 1	NNE	1	bc	1	42	34	0.04	
	Roche's Point...	30.27	38	WNW	5	b	30.42	+ .33	35	33	- 1	NW	2	b	3	40	30	-	
FRANCE AND NETHERLANDS.	Pembroke (St. Ann's Hd.)	30.12	35	N	4	S	30.33	+ .44	40	37	+ 1	WNW	5	c	4	40	32	0.28	
	Scilly ...	30.08	43	WNW	8	cqh	30.32	+ .42	44	40	+ 1	N	6	0	6	44	36	0.04	
	Prawle Point ...	30.05	32	WNW	4	b	30.31	+ .49	31	29	- 1	WNW	3	b	2	41	29	0.02	
	Jersey (St. Aubin's)	29.95	42	NW	4	bc	30.24	+ .51	40	34	+ 3	NW	4	bcn	3	44	36	0.17	
	Hurst Castle ...	29.94	36	WNW	6	b	30.24	+ .51	31	30	- 3	N	4	bc	1	38	30	-	
	Dungeness ...	29.74	35	N	6	bc	30.07	+ .46	29	28	+ 1	WNW	5	c	3	35	27	0.08	
	London ...	29.85	35	WNW	5	bc	30.16	+ .49	30	29	- 1	WNW	2	b	*	35	29	0.02	
	Oxford ...	30.03	33	NW	3	b	30.22	+ .51	29	27	- 3	NW	3	b	*	36	28	-	
	Cambridge ...	29.89	34	WNW	5	bc	30.16	+ .51	28	27	- 2	WNW	2	cq/s	*	34	26	-	
	Yarmouth ...	29.72	41	N	4	bc	30.00	+ .50	37	36	+ 4	NW	5	ogh	5	41	31	0.25	
PENINSULA.	Cuxhaven ...	29.47	39	SW	2	c	29.56	+ .21	41	39	+ 6	N	4	b	*	42	?	0.04	
	Berlin ...	29.86	35	SW	3	c	?	?	30	29	- 4	N	2	0	*	37	27	-	
	Wiesbaden ...	*	*	*	*	*	29.78	+ .22	35	34	+ 5	W	1	0	*	37	?	-	
	Munich ...	29.51	?	E	4	0	29.73	+ .17	26	26	- 7	W	4	S	*	39	25	0.39	
	The Helder ...	29.63	38	N	5	c	29.83	+ .30	40	37	- 1	WNW	6	c	*	45	37	0.35	
	Brussels (9 a.m.)	*	*	*	*	*	29.91	+ .35	36	34	+ 4	WNW	2	c	*	38	?	0.04	
	Cape Gris Nez	?	36	N	8	S	?	?	36	33	0	N	8	bc	7	37	32	-	
	Paris ...	29.76	34	W	2	0	29.99	+ .36	36	34	+ 3	N	4	bc	*	40	33	0.12	
	Brest ...	?	42	NW	8	0	?	?	41	41	- 1	N	6	T	4	54	34	0.16	
	Lorient ...	30.02	40	N	4	e	30.27	+ .68	42	37	0	N	4	b	4	50	34	0.08	
PENINSULA.	Rocheport ...	30.02	42	WNW	4	b	30.24	+ .44	40	37	- 5	WNW	7	b	4	46	34	-	
	Belfort ...	29.51	31	NW	1	S	29.82	+ .29	30	26	- 9	N	1	0	*	?	23	0.43	
	Lyons ...	29.71	33	WNW	4	S	29.91	+ .28	30	29	- 11	N	3	0	*	48	30	0.04	
	Nice ...	29.44	50	NW	5	bc	29.46	+ .07	36	30	- 7	WNW	6	S	3	57	34	-	
	Perpignan ...	29.82	43	NW	6	T	29.95	+ .24	38	32	- 15	NW	5	b	*	59	36	0.12	
	Biarritz ...																		
	Corunna ...																		
	Lisbon ...	30.17	56	N	4	bc	30.32	+ .10	46	38	- 12	N	6	b	4	63	45	-	

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

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



## 1889.





# GENERAL SITUATION AT 8 A.M.

## PRESSURE

Highest, 30.4 ins. and upwards, in an anticyclone lying over the south of Ireland.  
Lowest, 29.5 ins. and less, over the Baltic, and also in a depression lying over the Gulf of Genoa.  
Gradient steep over the south of France, but moderate or slight elsewhere.  
Barometer rising generally, but beginning to fall again in the north of Scotland.

## TEMPERATURE

Highest, 46° at Lisbon, 44° at Lillo, 41° at Genoa, 41° at Paris, and 40° at Birmmullet, Holyhead, Lonsdale, Jersey and Rochefort.  
Lowest, 26° at Munich, 27° at Loughborough, 28° at Hammerstad, Stockholm, and Cambridge, and 29° at Aungmye and Oxford.  
Sharp frost was experienced last night in most places; in London the thermometer on the grass fell to 25°.

## WIND

Light to fresh from the NW<sup>2</sup> or N<sup>2</sup> in nearly all parts of Western Europe, but strong on some parts of the French coast, with a gale at Cape Gier Nag.

## WEATHER

In the south of Sweden and north of Denmark the wind is chiefly NE.  
Fair generally, but dull in Germany and the east and south of France, with snow at Munich and Nice.  
Snow squalls are also reported at Cambridge, and rain is falling at Stomway.  
Showers of hail or snow were experienced generally, yesterday. Knight Aurora was seen in the north of Scotland at night, and lightning at Aungmye.

## SEA

High at Cape Gier Nag, rough at Skagen and Lillo, and rather rough off the east of England.

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The new fall of the barometer which has commenced in the north of Scotland seems to indicate the approach of another depression from the northward. Unsettled weather is therefore likely to continue, with snow showers in most parts of Great Britain.

## FORECASTS

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

### DISTRICTS.

### FORECASTS.

0 { SCOTLAND NORTH	NW <sup>2</sup> winds, freshening; unsettled, some snow showers.
1 { SCOTLAND EAST	
2 { ENGLAND N.E.	NW <sup>2</sup> winds, moderate or fresh; fair to unsettled and some snow showers.
3 { ENGLAND EAST	
4 { MIDLAND COUNTIES	
5 { ENGLAND SOUTH	



### DISTRICTS.

### FORECASTS

6 { SCOTLAND WEST	Same as N <sup>o</sup> s 2 to 5.
7 { ENGLAND N.W.	
8 { ENGLAND S.W.	N <sup>2</sup> and NW <sup>2</sup> winds, fresh; fair generally.
9 { IRELAND NORTH	NW <sup>2</sup> winds, freshening; squally, some cold showers.
10 { IRELAND SOUTH	N <sup>2</sup> and NW <sup>2</sup> winds, moderate; fair to 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:	Ther:		Wind		Wea:	Sea		Bar:	Ther:		Wind		Wea:	Sea:	
		D	W	D	F					D	W	D	F			
Skudesnaes ...	29.43	37	36	NW	8	ovshg			Holyhead ...	29.97	40	37	NW	7	ohp	6
Sumburgh Head ...	29.80	34	32	N	6	b	6		Valencia ...	30.29	41	38	N	4	bcghp	4
Stornoway ...	30.09	31	30	N	4	c	5		Scilly ...	30.03	43	39	NW	8	cq	6
Aberdeen ...	29.91	34	32	NW	5	bcqsp	6		Jersey ...	29.86	43	36	NW	4	bc	3
Shields ...	29.82	37	35	NW	5	c	5		Dungeness ...	29.46	31	31	N	6	s	4
Ardrossan ...	30.00	37	34	NW	3	b	2		London ...	29.74	35	34	NW	6	oqsp	*
Malin Head ...	30.09	39	35	N	7	bc	5		Yarmouth ...	29.58	39	38	NW	5	oqd	5
Mullaghmore ...	30.18	38	35	NW	6	bcqh	5		Rochefort ...	29.89	45	40	NW	7	c	4
Belmullet ...	30.26	39	37	NW	4	c	7									

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

The reports for yesterday morning showed that pressure was high (30.0 ins. to 30.2 ins., and apparently much more) both over the southeastern parts of Russia, over Ireland, and over the parts of the Atlantic adjacent to the European western coast, while it was low (29.0 ins. to 28.6 ins.) in a depression lying over the north of Scandinavia, and 29.2 ins. to 29.6 ins. in a very large hollow which extended thence in a southerly direction across the North Sea, Denmark, the Netherlands and Western Germany to Switzerland. Strong N and NW winds (blowing a gale in places) were being experienced over Norway, the British Isles, and France. W and SW winds over the Netherlands and Western Germany, SW to S winds over the Baltic, and S gales over Finland. Over the southern half of Russia the wind was SE. The weather at about 8 am was dull over Northern and Eastern Europe, with cold rain at Haparanda. Snow or rain was prevalent in several parts of Central Europe, fog in others, while over the British Isles and north of France squalls of snow and hail were felt in some localities, while the sky was clear in others. Temperature was low almost everywhere — the highest morning readings (except over Spain and the east and south of France) being very little above 40°, while the lowest (shade) values ranged between 29° and 32° and these were found over Russia, Germany, and the British Isles pretty equally.

During the day snow-squalls continued prevalent in the United Kingdom and apparently over the North Sea, temperature remained low, the wind dry and very keen, but towards night the wind was inclined to subside a little, without, however, showing any tendency to shift to a warmer quarter.

### 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, 29<sup>th</sup> November, 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.)		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 ...	29.54	24	N	4	S	29.69	+ .37	23	23	- .9	N	6	c	*	37	23	0.08
	Hernösand ...	29.70	27	NNW	4	c	29.93	+ .25	21	19	- .4	NW	2	b	*	34	?	-
	Stockholm ...	29.76	27	N	2	b	29.82	+ .25	17	16	- .11	NW	2	b	*	32	?	-
	Wisby ...	29.66	32	SE	2	b	29.73	+ .26	34	32	+ .1	NE	4	c	*	37	28	0.24
	Bodö ...	29.72	23	E	2	b	29.93	+ .31	21	20	- .9	E	2	b	1	30	16	-
	Christiansund ...	29.64	32	NW	3	S	29.85	+ .05	31	29	- .3	SE	5	b	5	34	28	0.28
	Skudesnaes ...	29.89	36	SE	4	S	29.89	+ .02	34	32	+ .1	NNW	2	o	3	36	32	-
	Christiania Fjord (Færder) ...	29.85	33	WNW	3	b	29.85	+ .12	29	28	- .5	NNE	4	S	2	34	28	-
	Skagen (The Seaw) ...	29.86	35	NNE	1	b	29.74	+ .11	33	32	- .3	SW	1	S	2	36	30	0.08
	Fanö ...	29.93	29	Z	0	b	29.73	+ .10	35	34	+ .2	NW	2	b	*	37	28	0.08
BRITISH ISLANDS.	Sumburgh Head ...	29.94	43	NW	3	o	29.95	- .03	38	38	+ .3	Z	0	c	4	44	33	0.15
	Stornoway ...	30.14	38	SW	3	b	29.98	- .18	41	41	+ .4	SW	2	o	3	41	36	0.02
	Wick ...	30.07	38	NW	4	c	30.02	- .04	38	37	+ .2	NW	2	o	2	38	35	0.12
	Nairn ...	30.15	40	WNW	2	o	30.04	- .09	41	38	+ .5	W	1	o	1	41	35	-
	Aberdeen ...	30.14	38	W	3	c	30.06	- .07	39	37	+ .5	W	2	o	3	40	34	-
	Leith ...	30.20	35	W	1	b	30.11	- .09	40	39	+ .6	W	1	om	*	41	32	-
	Shields ...	30.19	34	WNW	2	bm	30.11	- .07	37	35	+ .6	W	2	c	3	40	30	-
	Spurn Head ...	30.14	37	WNW	5	bc	30.12	+ .03	38	36	+ .6	W	5	c	4	38	32	0.04
	York ...	30.22	33	NW	1	b	30.16	- .01	34	33	+ .4	WNW	1	bc	*	40	29	-
	Loughborough ...	30.26	32	W	2	b	30.22	+ .01	34	33	+ .7	W	2	bc	*	38	29	-
BRITISH ISLANDS.	Ardrossan ...	30.25	43	WNW	2	o	30.13	- .12	44	42	+ .7	SE	1	o	1	44	36	-
	Malin Head ...	30.28	42	W	3	o	30.11	- .19	38	37	- .1	S	4	cq	2	42	38	0.02
	Mullaghmore ...	30.33	40	SW	4	c	30.13	- .23	40	39	0	SSW	4	bc	3	43	37	0.03
	Belmullet ...	30.29	40	SW	2	o	30.08	- .31	45	44	+ .3	SW	4	b	*	45	38	0.06
	Donaghadee ...	30.32	36	WNW	3	bc	30.19	- .11	37	36	+ .1	WNW	3	bc	1	40	34	0.01
	Barrow-in-Furness ...	30.24	38	N	2	b	30.17	- .05	42	39	+ .8	NW	1	bc	*	42	33	-
	Liverpool (Bidston) ...	30.28	41	NW	3	b	30.21	- .05	40	38	+ .4	W	3	o	3	42	36	0.01
	Holyhead ...	30.31	43	NNW	4	cq	30.23	- .05	43	41	+ .3	WNW	3	cq	3	44	37	0.04
	Parsonstown ...	30.37	35	Z	0	bc	30.21	- .18	33	32	+ .2	Z	0	bc	*	40	30	-
	Valencia ...	30.42	43	SSE	1	og	30.19	- .26	47	45	+ .9	SSW	4	cp	4	47	36	0.04
BRITISH ISLANDS.	Roche's Point... ..	30.41	42	WNW	2	b	30.28	- .14	41	40	+ .6	SSE	2	bc	3	44	34	0.02
	Pembroke (St. Ann's Hd.) ...	30.35	40	N	3	c	30.27	- .06	41	40	+ .1	NNW	1	cp	1	44	39	0.02
	Scilly ...	30.36	45	NNW	5	c	30.30	- .02	45	41	+ .1	WSW	2	c	4	45	42	-
	Prawle Point ...	30.34	34	NNW	2	b	30.33	+ .02	39	37	+ .8	NW	2	c	2	43	30	-
	Jersey (St. Aubin's) ...	30.30	41	NW	4	cm	30.32	+ .08	36	33	- .4	NW	3	bcm	3	42	34	-
	Hurst Castle ...	30.29	35	N	4	b	30.29	+ .05	35	33	+ .4	NNW	3	bc	1	40	30	-
	Dungeness ...	30.14	34	N	4	bc	30.18	+ .11	31	31	+ .2	NNW	4	m	3	35	27	-
	London ...	30.22	34	NW	1	bm	30.24	+ .08	32	30	+ .2	WSW	1	o	*	38	28	-
	Oxford ...	30.29	31	NW	2	b	30.26	+ .04	30	29	+ .1	W	1	b	*	37	28	-
	Cambridge ...	30.22	30	NW	2	b	30.20	+ .04	35	34	+ .7	NW	1	o	*	35	27	-
GERMANY.	Yarmouth ...	30.11	41	N	4	bc	30.11	+ .11	35	34	- .2	NW	3	cq	4	43	33	0.31
	Cuxhaven ...	29.24	36	N	5	o	29.31	+ .25	34	33	- .7	SW	4	S	*	41	34	-
	Berlin ...	29.82	29	NW	3	f	29.89	?	33	32	+ .3	NW	3	o	*	34	27	-
	Wiesbaden ...	*	*	*	*	*	30.06	+ .28	33	32	- .2	NW	4	b	*	39	32	-
	Munich ...	29.81	27	W	4	S	29.98	+ .25	30	30	+ .4	W	5	o	*	30	27	0.20
FRANCE AND NETHERLANDS.	The Helder ...	30.02	40	N	2	b	29.97	+ .14	44	43	+ .4	NW	5	o	4	45	39	0.04
	Brussels (8 a.m.) ...	?	38	N	8	b	30.13	+ .22	35	33	- .1	WSW	3	o	*	40	33	0.04
	Cape Gris Nez ...	?	37	NNW	3	o	30.23	+ .24	36	36	0	WNW	1	o	*	40	34	0.16
	Paris ...	30.14	37	NNW	3	o	30.23	+ .24	36	36	0	WNW	1	o	*	40	34	0.16
	Brest ...	?	40	NNW	3	r	?	?	42	38	+ .1	Z	0	b	2	35	36	0.08
FRANCE AND NETHERLANDS.	Lorient ...	30.31	42	NNE	5	b	30.32	+ .05	40	37	- .2	NNE	1	bc	2	45	39	-
	Rochefort ...	30.32	41	N	5	o	30.39	+ .15	36	34	- .4	SE	4	b	2	45	28	-
	Belfort ...	29.87	30	NW	1	o	30.08	+ .26	28	25	- .2	N	1	bc	*	39	26	0.12
	Lyons ...	30.05	33	NNW	4	S	30.21	+ .30	32	30	+ .2	N	2	cs	*	35	?	0.08
	Nice ...	29.69	37	E	3	b	29.95	+ .49	37	28	+ .1	EAC	4	b	2	43	32	-
PENIN. ISLANDS.	Perpignan ...	30.13	47	NW	4	b	30.18	+ .23	38	33	0	NW	4	b	*	43	35	-
	Biarritz ...	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	-
	Corunna ...	30.41	45	NNE	4	b	30.48	+ .06	41	37	- .5	N	3	b	2	54	39	-
PENIN. ISLANDS.	Lisbon ...	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	-
	Lisbon ...	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	-

For Explanation of Columns, see bottom of p 4

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



# WEATHER CHARTS

for 8 a.m. on Friday, 29<sup>th</sup> November, 1889.

## BAROMETER, WIND AND SEA.

### EXPLANATION OF MAP.

**BAROMETER**—Isobars are drawn for each tenth of an inch.

Changes since previous morning are stated in words.

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

→ = forces above 10; → = forces 8 to 10;

→ = forces 5 to 7; → = forces 1 to 4.

○ = dead calm.

**SEA DISTURBANCE**—Where considerable, is shown thus:

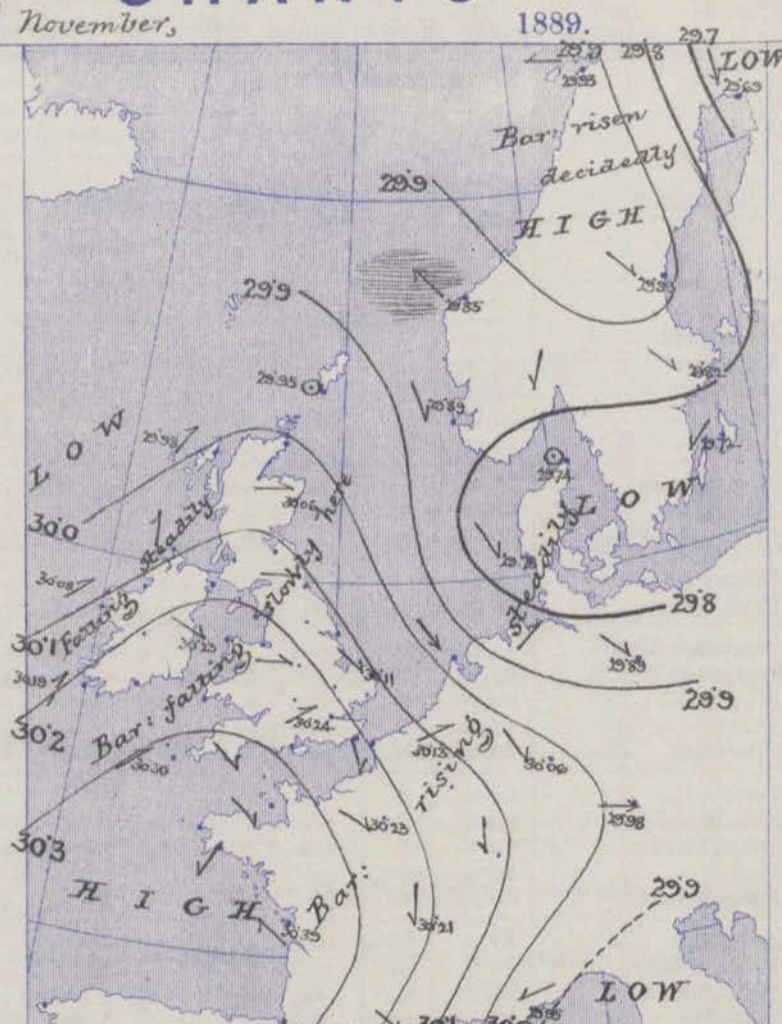
— = Rough. — = High.

## MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of November.

During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS.
Sumburgh Head .....	29.687
Stornoway .....	29.707
Wick .....	29.726
Nairn .....	29.743
Aberdeen .....	29.756
Leith .....	29.793
Shields .....	29.815
York .....	29.844
Loughborough .....	29.876
Ardrossan .....	29.795
Donaghadee .....	29.811
Holyhead .....	29.835
Liverpool .....	29.852
Parsonstown .....	29.848
Valencia .....	29.864
Roche's Point .....	29.864
Pembroke .....	29.862
Scilly .....	29.898
Jersey .....	29.923
Hurst Castle .....	29.898
Dover .....	29.893
LONDON .....	29.897
Oxford .....	29.893
Cambridge .....	29.885
Yarmouth .....	29.863



## 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.

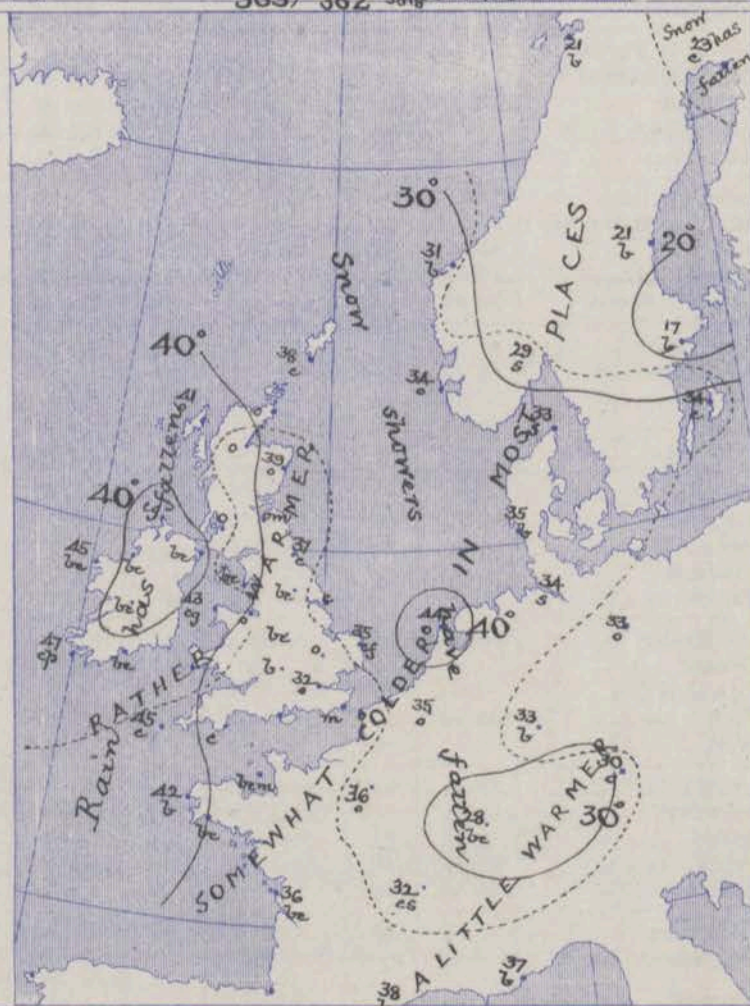
**RAINFALL**—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

### MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of November.)

STATIONS.	TEMPERATURE.				RAINFALL. (Inches.)
	Daily Max.	Daily Min.	at 8 a.m.		
			Dry.	Wet.	
Sumburgh Head.....	45.3	37.4	41.5	39.8	4.24
Stornoway .....	45.7	36.7	41.0	39.9	4.60
Wick .....	45.7	35.7	40.9	39.3	2.97
Nairn .....	44.7	35.5	39.1	37.5	2.32
Aberdeen .....	46.1	36.3	40.3	38.5	3.16
Leith .....	48.2	36.7	41.2	39.6	2.11
Shields .....	47.1	38.1	41.8	40.2	2.03
York .....	47.7	36.1	40.3	39.0	2.21
Loughborough .....	48.0	36.4	40.2	38.9	2.30
Ardrossan .....	47.7	38.9	42.6	40.8	3.92
Donaghadee.....	48.2	39.2	42.9	41.7	3.13
Holyhead.....	49.7	42.8	45.5	43.8	3.71
Liverpool .....	47.7	39.6	42.1	40.4	2.87
Parsonstown .....	49.1	36.9	41.7	40.0	2.84
Valencia .....	52.4	42.7	47.2	45.2	5.50
Roche's Point .....	51.1	41.8	45.9	44.3	4.56
Pembroke .....	50.2	43.7	46.7	44.7	3.96
Scilly .....	52.5	46.7	50.0	48.0	3.76
Jersey .....	51.9	44.2	47.5	45.6	4.24
Hurst Castle .....	50.5	40.3	44.6	43.6	2.98
Dover .....	49.1	40.7	44.0	42.4	3.58
LONDON .....	49.6	37.9	42.0	40.5	2.14
Oxford .....	48.6	37.6	41.0	39.7	2.30
Cambridge .....	48.8	35.7	40.3	39.5	2.02
Yarmouth .....	47.5	39.1	42.9	41.8	3.15

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





## GENERAL SITUATION AT 8 A.M.

### PRESSURE

Highest, 30.3 ins. and upwards, in an anticyclone lying over Spain, the Bay of Biscay, and the western parts of the Channel and France.  
 Lowest, 29.7 ins. and less, in the north of Sweden, and also (apparently) over the Baltic.  
 Gradient slight. Barometer falling in our Islands, — most in the extreme west — but rising at nearly all the Continental stations.

### TEMPERATURE

Highest, 47° at Valencia, 45° at Belmullet and Scilly, 44° at Andersons, 43° at Holyhead, and 42° at Brest.  
 Lowest, 17° at Stockholm, 21° at Rode and Helsingfors, 23° at Haparanda, 28° at Belfast, 29° at Fardra, and 30° at Oxford and Munich.  
 Sharp frost was again experienced over England last night; in London the thermometer on the grass fell to 20°.

### WIND

Moderate from the SW<sup>2</sup> or S<sup>4</sup> in the extreme west and northwest of our Islands.  
 W<sup>4</sup> or NW<sup>4</sup> at our eastern, southern, and most of the Continental stations, but E<sup>1</sup> in the west of Norway.

### WEATHER

Fair generally, but dull in Scotland, and showery at Valencia and Pembroke.  
 Snow is falling at Fardra, Skagen, Copenhagen and Lyons.  
 Slight showers fell yesterday at some of our western and extreme northern stations.

### SEA

Rather rough at Christiansund, but moderate to smooth elsewhere.

### PROBABLE CHANGES IN SYSTEM NOW PREVALENT

A large depression is apparently advancing towards our extreme northwest coast, and a temporary change to milder weather is probable over England. The centre of the disturbance is likely to skirt our northern coast, and increasing W<sup>3</sup> winds are probable in all the more western and northern parts of the Kingdom.

## FORECASTS

For the 24 hours ending at NOON on 30<sup>th</sup> Nov<sup>r</sup> 1889.

#### DISTRICTS.

#### FORECASTS.

- |                         |   |  |
|-------------------------|---|--|
| 0 { SCOTLAND<br>NORTH   | } | SW <sup>2</sup> and W <sup>2</sup> winds, freshening; dull,<br>some rain or sleet. |
| 1 { SCOTLAND<br>EAST    |   |  |
| 2 { ENGLAND<br>N.E.     | } | W <sup>2</sup> winds, freshening; fair to unsettled,<br>with some rain or sleet.   |
| 3 { ENGLAND<br>EAST     |   |  |
| 4 { MIDLAND<br>COUNTIES |   |  |
| 5 { ENGLAND<br>SOUTH    |   |  |

#### DISTRICTS.

#### FORECASTS

- |                       |   |  |
|-----------------------|---|--|
| 6 { SCOTLAND<br>WEST  | } | SW <sup>2</sup> to W <sup>2</sup> or NW <sup>2</sup> winds, increasing in force;<br>fair to squally and showery. |
| 7 { ENGLAND<br>N.W.   |   |  |
| 8 { ENGLAND<br>S.W.   | } | Same as N <sup>os</sup> 3 to 5.  |
| 9 { IRELAND<br>NORTH  |   |  |
| 10 { IRELAND<br>SOUTH |   |  |

#### WARNINGS

NONE ISSUED.

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

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



# YESTERDAY'S 2 P.M. REPORTS.

	Bar:	Ther:		Wind		Wea:	Sea		Bar:		Ther:		Wind		Wea:	Sea
		D	W	D	F						D	W	D	F		
Skudesnaes ...	29.94	33	31	N	1	bc	4		Holyhead ...	30.29	44	40	NW	4	bcq	4
Sumburgh Head ...	29.90	41	41	NW	8	r	5		Valencia ...	30.42	47	42	NW	1	bc	2
Stornoway ...	30.17	40	40	NW	4	r	4		Scilly ...	30.35	46	39	N	5	c	5
Aberdeen ...	30.12	38	35	W	3	bc	5		Jersey ...	30.26	42	36	NW	4	c	3
Shields ...	30.16	39	36	NW	3	bc	4		Dungeness ...	30.10	35	33	N	4	c	3
Ardrossan ...	30.23	43	40	NW	3	c	2		London ...	30.18	38	34	NW	3	b	2
Malin Head ...	30.28	41	39	NW	3	c	2		Yarmouth ...	30.02	43	38	N	5	cq	6
Mullaghmore ...	30.34	43	40	N	3	c p	3		Rocheport ...	30.27	43	40	NW	6	bc	3
Belmullet ...	30.37	43	41	NW	1	c p	2									

## 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 was inclined to move northwards, while that over Western Europe and the Atlantic was spreading eastwards. Over Lapland, the Baltic, Germany, Austria, Switzerland and Italy, pressure was relatively low, and definite minima were found over the northern extremity of the Gulf of Bothnia, the southern part of the Baltic, the Gulf of Venice, and the Gulf of Genoa. The winds over Western and North-western Europe were consequently N, but had materially decreased in force since the previous day, while over Russia and Finland it was S<sup>2</sup>, and over the Mediterranean and Central Europe variable. Over the south of France and the northern part of the Mediterranean as a whole, there was a gale from the NW<sup>2</sup>, while in the north of Italy the wind was S<sup>2</sup>, and at Leria there was a fresh gale from the latter quarter. Temperature remained low over the British Islands and Western Europe, and was singularly uniform over the Continent as a whole. Over the extreme southern and eastern shores of the Mediterranean and the Black Sea coast, and we have as the highest morning readings 50° at Cumma, 44° at Scilly and 40° at Rochefort, while as the lowest we have 26° at Munich, 27° at Loughborough, 28° at Warsaw, Stockholm, Helsingfors and Lund, 29° at Oxford, New Fehru, Moscow, Archangel and Haparanda, and 30° at many other places including London.

Later on the barometer began to fall a little in the northwest of the British Isles, but the night was again cold over the United Kingdom generally— frost being prevalent at all inland stations.

### EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

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

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

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

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



# DAILY WEATHER REPORT.

for *Saturday, 30<sup>th</sup> November, 1889.*  
 Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.

Issued by the Meteorological Office, 55, Victoria Street, London. H. 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 ...	30.08	18	N	4	b	30.21	+5.2	9	9	-14	N	2	b	*	23	?	-	
Hernösand ...	30.14	19	NW	6	b	30.25	+3.2	18	16	-3	N	4	b	*	27	16	-	
Stockholm ...	30.06	23	NW	2	b	30.18	+3.6	23	21	+6	NW	2	b	*	30	16	-	
Wisby ...	29.95	32	NNE	4	b	30.08	+3.5	33	30	-1	NE	4	b	*	36	28	0.04	
Bodö ...	30.06	23	E	2	b	29.93	-0.0	30	26	+9	E	2	c	1	?	18	-	
Christiansund	30.02	32	ESE	4	b	30.08	+2.3	31	29	0	ESE	3	b	4	32	30	-	
Skudesnaes ...	30.15	35	E	1	b	30.26	+3.7	34	30	0	SE	4	b	4	36	32	-	
Christiania Fjord (Færd)	30.15	28	N	5	c	30.28	+4.3	25	23	-4	NNE	3	b	1	?	25	-	
Skagen (The Scaw)	30.14	32	ENE	3	b	30.24	+5.0	29	28	-4	ENE	3	b	3	34	28	-	
Fanö ...	30.04	27	NE	6	b	30.16	+4.3	25	25	-10	NNE	4	b	*	37	25	-	
Sumburgh Head	29.92	44	W	2	0	29.90	-0.5	46	45	+8	SSE	4	b	6	46	38	0.05	
Stornoway ...	29.85	46	SW	6	0	29.79	-1.9	46	45	+5	SW	4	c	4	47	40	0.05	
Wick ...	29.95	42	SE	1	0	29.90	-1.2	44	42	+6	SSW	4	b	3	44	36	0.01	
Nairn ...	29.94	40	SE	0	b	29.88	-1.6	38	35	-3	SE	0	b	1	43	34	-	
Aberdeen ...	30.01	38	SE	0	cm	30.01	-0.5	39	38	0	S	2	cm	3	42	36	-	
Leith ...	30.03	40	W	1	c	29.99	-1.2	42	40	+2	S	1	cm	*	44	38	-	
Shields ...	30.04	40	W	2	m	30.09	-0.2	41	39	+4	S	3	0	2	42	35	-	
Spurn Head ...	30.04	40	WNW	4	0	30.11	-0.1	42	40	+4	SSE	1	c	3	43	37	0.05	
York ...	30.08	40	W	1	0	30.11	-0.5	39	38	+5	SSE	1	f	*	43	33	-	
Loughborough	30.12	39	W	2	0	30.12	-1.0	35	35	+1	S	1	om	*	41	33	-	
ARDROSSAN ...	30.01	46	SW	3	0	29.96	-1.7	43	42	-1	NE	4	0	3	51	40	-	
Malin Head ...	29.91	41	S	5	og	29.80	-3.1	44	44	+6	SSE	4	0	2	45	37	-	
Mullaghmore ...	29.93	45	S	5	b	29.78	-3.5	50	48	+10	SSE	6	omp	4	50	40	-	
Belmullet ...	29.89	48	S	5	om	29.72	-3.6	48	48	+3	SE	3	or	*	49	44	0.40	
Donaghadee ...	30.04	37	SSW	3	b	29.95	-2.4	43	43	+6	SW	3	c	1	43	37	-	
BRITISH ISLANDS.																		
Barrow-in-Furness	30.03	43	NW	2	0	30.02	-1.5	41	39	-1	E	3	0	*	44	39	-	
Liverpool (Bidston)	30.10	42	W	1	0	30.06	-1.5	39	39	-1	SE	2	c	3	43	36	-	
Holyhead ...	30.08	45	WSW	3	c	30.00	-2.3	46	45	+3	SSE	4	c	4	48	43	0.13	
Parsonstown ...	30.01	44	SE	0	c	29.85	-3.6	49	47	+16	S	2	0	*	49	33	0.01	
Valencia ...	29.96	50	SSE	5	ogm	29.75	-4.4	52	51	+5	SSE	8	rmu	7	52	46	0.53	
Roche's Point...	30.05	49	SW	4	r	29.88	-4.0	50	50	+9	SSW	5	r	5	50	41	0.20	
Pembroke (St. Ann's Hd.)	30.13	45	SW	3	c	30.02	-2.5	50	48	+9	S	4	cp	3	50	41	0.03	
Scilly ...	30.15	46	SSW	5	c	30.01	-2.9	49	46	+4	SSW	4	0	5	50	43	-	
Prawle Point ...	30.18	43	W	3	0	30.10	-2.3	45	44	+6	NE	2	og	1	45	37	0.03	
Jersey (St. Aubin's)	30.22	46	W	3	ogm	30.11	-2.1	45	44	+9	NW	1	ogm	1	49	35	0.09	
HURST CASTLE ...	30.18	42	NW	3	c	30.12	-1.7	41	40	+6	NE	1	om	0	42	34	-	
Dungeness ...	30.11	38	NW	4	m	30.08	-1.0	40	40	+9	ESE	3	0	2	40	30	-	
London ...	30.14	39	NW	2	0	30.12	-1.2	36	35	+4	SE	0	og	*	41	32	-	
Oxford ...	30.14	37	W	1	0	30.13	-1.3	34	33	+4	SE	0	og	*	39	30	-	
Cambridge ...	30.11	38	W	1	0	30.14	-0.6	37	36	+2	SE	0	0	*	38	33	-	
GERMANY.																		
Yarmouth ...	30.04	38	NW	3	c	30.12	+0.1	40	37	+5	E	3	b	4	40	33	0.06	
Cuxhaven ...	29.87	32	NE	3	c	30.07	+2.6	31	30	-3	NE	5	b	*	38	29	-	
Berlin ...	29.88	30	SSE	3	0	29.99	+1.0	29	28	-4	E	3	0	*	36	27	-	
Wiesbaden ...	*	*	*	*	*	29.93	-1.3	32	30	-1	N	1	0	*	37	30	0.55	
Munich ...	30.01	26	W	5	c	29.83	-1.5	30	30	0	SW	5	S	*	41	24	0.08	
FRANCE AND NETHERLANDS.																		
The Helder ...	29.92	41	N	4	c	30.13	+1.6	35	32	-9	ESE	1	b	2	46	36	0.24	
Brussels (3 a.m.)	*	*	*	*	*	?	?	30	26	-5	NW	1	S	*	36	28	0.28	
Cape Gris Nez	?	42	W	6	0	?	?	37	34	-3	ESE	3	b	3	43	?	-	
Paris ...	30.19	39	W	2	0	30.06	-1.7	39	38	+3	NW	2	0	*	43	?	-	
Brest ...	?	47	SW	3	0	?	?	51	48	+9	SSE	3	0	2	55	36	0.04	
Lorient ...	30.26	46	WSW	1	c	30.14	-1.8	45	43	+5	E	2	0	2	48	37	-	
Rochefort ...	30.37	42	W	1	0	30.21	-1.8	46	44	+10	WNW	4	0	2	46	36	-	
Belfort ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	-	
Lyons ...	30.24	32	N	1	0	30.09	-1.2	33	32	+1	WNW	2	S	*	36	30	0.04	
Nice ...	30.03	42	SSW	4	b	29.91	-0.4	37	30	0	ENE	4	b	2	50	32	-	
Perpignan ...	30.24	39	NW	4	b	30.15	-0.8	40	33	+2	WNW	2	0	*	43	34	-	
Biarritz ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	-	
PENINSULA.																		
Corunna ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	-	
Lisbon ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	-	

For Explanation of Columns, see bottom of p 4.

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



# WEATHER CHARTS

for 8 a.m. on

Saturday, 30<sup>th</sup> November.

1889.

## BAROMETER, WIND AND SEA.

### EXPLANATION OF MAP.

**BAROMETER**—Isobars are drawn for each tenth of an inch.

Changes since previous morning are stated in words.

**WIND**—Arrows show the prevalent winds. They fly with the wind and

their barbs and feathers refer to force thus—

→ = forces above 10; → = forces 8 to 10;

→ = forces 5 to 7; → = forces 1 to 4.

○ = dead calm.

**SEA DISTURBANCE**—Where considerable, is shown thus:

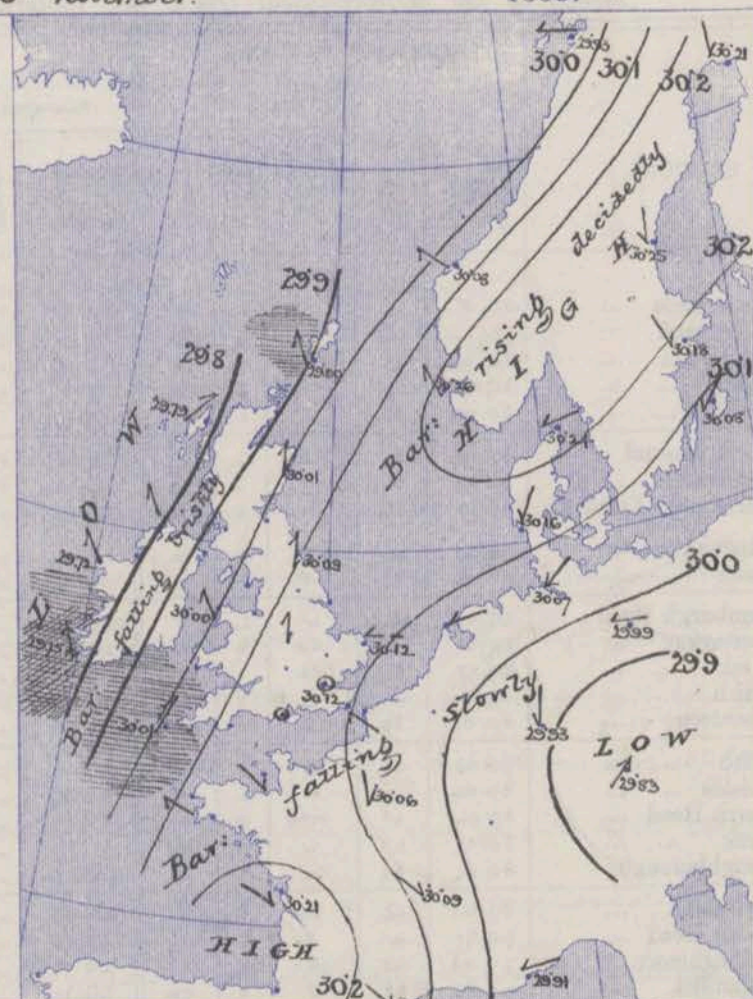
▨ = Rough. ▨ = High.

## MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of November.

During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS.
Sumburgh Head .....	29.687
Stornoway .....	29.707
Wick .....	29.726
Nairn .....	29.743
Aberdeen .....	29.756
Leith .....	29.793
Shields .....	29.815
York .....	29.844
Loughborough .....	29.876
Ardrossan .....	29.795
Donaghadee .....	29.811
Holyhead .....	29.835
Liverpool .....	29.852
Parsonstown .....	29.848
Valencia .....	29.864
Roche's Point .....	29.864
Pembroke .....	29.862
Scilly .....	29.898
Jersey .....	29.923
Hurst Castle .....	29.898
Dover .....	29.893
LONDON .....	29.897
Oxford .....	29.893
Cambridge .....	29.885
Yarmouth .....	29.863



## 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.

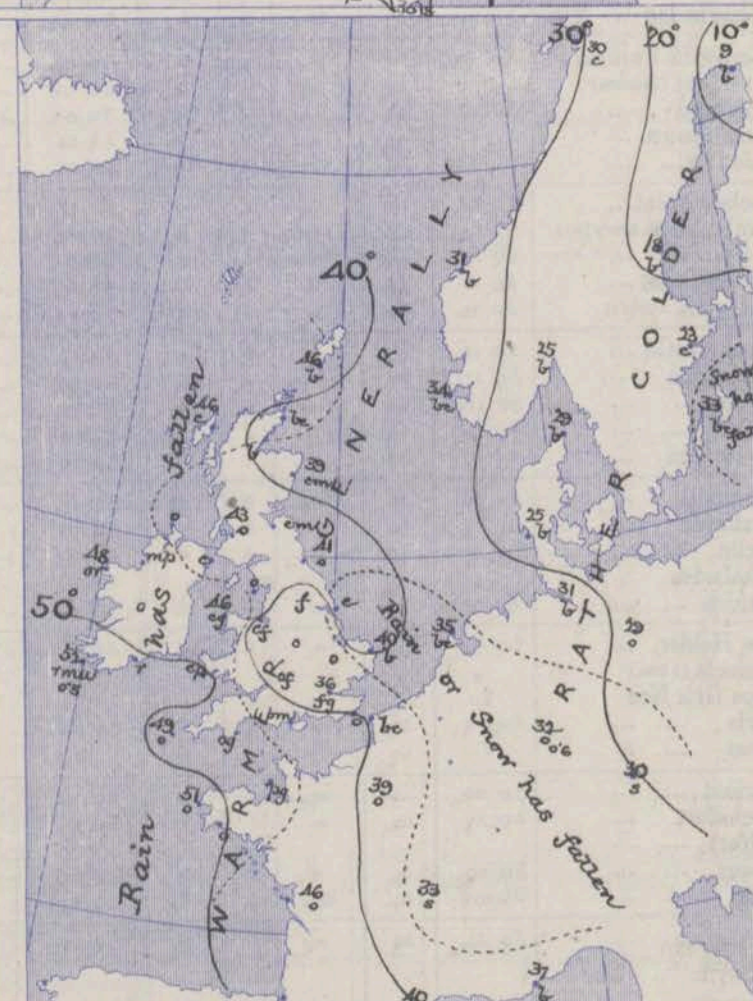
**RAINFALL**—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

### MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of November.)

STATIONS.	TEMPERATURE.				RAINFALL (Inches.)
	Daily Max.	Daily Min.	at 8 a.m.		
			Dry.	Wet.	
Sumburgh Head.....	45.3	37.4	41.5	39.8	4.24
Stornoway .....	45.7	36.7	41.0	39.9	4.60
Wick .....	45.7	35.7	40.9	39.3	2.97
Nairn .....	44.7	35.5	39.1	37.5	2.32
Aberdeen .....	46.1	36.3	40.3	38.5	3.16
Leith .....	48.2	36.7	41.2	39.6	2.11
Shields .....	47.1	38.1	41.8	40.2	2.63
York .....	47.7	36.1	40.3	39.0	2.21
Loughborough .....	48.0	36.4	40.2	38.9	2.30
Ardrossan .....	47.7	38.9	42.6	40.8	3.92
Donaghadee.....	48.2	39.2	42.9	41.7	3.13
Holyhead .....	49.7	42.8	45.5	43.8	3.71
Liverpool .....	47.7	39.5	42.1	40.4	2.87
Parsonstown .....	49.1	36.9	41.7	40.0	2.84
Valencia .....	52.4	42.7	47.2	45.2	5.50
Roche's Point .....	51.1	41.8	45.9	44.3	4.56
Pembroke.....	50.2	43.7	46.7	44.7	3.96
Scilly .....	52.5	46.7	50.0	48.0	3.76
Jersey .....	51.9	44.2	47.5	45.6	4.24
Hurst Castle .....	50.5	40.3	44.6	43.6	2.98
Dover .....	49.1	40.7	44.0	42.4	3.56
LONDON .....	49.6	37.9	42.0	40.5	2.14
Oxford .....	48.6	37.6	41.0	39.7	2.30
Cambridge .....	48.8	35.7	40.3	39.5	2.02
Yarmouth .....	47.5	39.1	42.9	41.8	3.15

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





# GENERAL SITUATION AT 8 A.M.

## PRESSURE

Highest, 30.2 in. and upwards, in an anticyclone lying over the southwest of France, and also in another system which has appeared over Scandinavia.  
Lowest, 29.8 in. and less, in the Atlantic and west of Ireland; 29.9 in. and less, over South Germany.

Gradients rather steep in the extreme west, but slight elsewhere.

Barometer rising in Scandinavia, Denmark, and North Germany, but falling elsewhere, most on our extreme western coast.

## TEMPERATURE

Highest, 51° at Valencia, 51° at Brest, 50° at Mullaghmore, Rock Point and Lamlash, and 45° at Barronstown and Selly.

Lowest, 3° at Haparanda, 18° at Herrisand, 23° at Stockholm, 25° at Tander and Tams, and 29° at Skagen and Berlin.

A gradual rise is taking place in most places.

## WIND

S over all the more eastern and northern parts of the United Kingdom; strong in the west of Ireland, with a gale at Valencia.

E or NE over Denmark, the Netherlands, North Germany and the south and southeast of England.

SE or E in the west of Norway, N in Sweden, W in the south of France.

## WEATHER

Fine in Scandinavia, Denmark, the greater part of Scotland, and the extreme south of France.

Cloud elsewhere, with fog over England, rain in the east and south of Ireland, and snow at Munich.

Hail fell yesterday at several of our eastern and extreme northern stations.

## SEA

High at Valencia, rough at Lumburg H., and rather rough at Rock Point and Selly.

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The barometric fall at Valencia is reported to have slackened, and the depression which is at present lying to the W of our Islands is apparently moving northwards. Another disturbance is, however, likely to follow shortly, and increasing winds are probable on all our western and northern coast. The anticyclone to the southward of our Islands is gradually breaking up.

## FORECASTS

For the 24 hours ending at NOON on 1<sup>st</sup> DEC<sup>r</sup> 1889.

### DISTRICTS.

### FORECASTS.

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

0 S<sup>2</sup> winds, increasing in force; fair to cloudy and some rain.

1 S<sup>2</sup> winds, moderate; cloudy, misty, rain locally.

2 Calms and Variable airs followed by moderate S<sup>2</sup> or SE<sup>2</sup> breezes; drizzle, some mist or fog, slight rain locally.

### DISTRICTS.

### FORECASTS

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

6 SE<sup>2</sup> winds, increasing in force; cloudy, some rain.

7 S<sup>2</sup> winds, fresh or strong; drizzle, some rain.

8 S<sup>2</sup> and SE<sup>2</sup> winds, strong; drizzle, some rain.

### WARNINGS

NONE ISSUED.

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

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



# YESTERDAY'S 2 P.M. REPORTS.

	Bar:	Ther:		Wind		Wea:	Sea		Bar:	Ther:		Wind		Wea:	Sea.
		D	W	D	F					D	W	D	F		
Skudesnaes ...	30.01	35	31	E.N.E.	2	b.c.	3	Holyhead ...	30.15	44	41	W.S.W.	3	e	2
Sumburgh Head ...	29.94	43	43	S.E.E.	1	o	4	Valencia ...	30.04	50	49	S.S.E.	5	o.p.	5
Stornoway ...	29.91	47	46	S.W.	4	o	4	Scilly ...	30.22	47	45	S.S.W.	4	o.p.	4
Aberdeen ...	30.01	41	39	E.W.	1	c.m.	3	Jersey ...	30.28	48	43	W	3	c	3
Shields ...	30.05	42	40	W	3	o	3	Dungeness ...	30.14	38	37	N.E.	4	o	3
Ardrossan ...	30.06	51	49	S.W.	3	c	2	London ...	30.18	41	39	N.W.	1	c.m.	2
Malin Head ...	29.99	41	39	S	5	o	3	Yarmouth ...	30.06	38	37	N.W.	4	o.p.	4
Mullaghmore ...	30.00	43	41	S.S.E.	5	o	3	Rochefort ...	30.32	45	42	E.N.E.	2	o	2
Belmullet ...	29.97	48	47	S.S.W.	5	o.m.	2								

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

The reports for yesterday morning showed a considerable recovery of pressure over Northern, Central, and Southern Europe, and the partial filling up of the various depressions noticed in those regions on Thursday. In the meantime, however, a considerable decrease had occurred over the coast of our Islands and the neighbouring parts of the Atlantic. Reading at 8 a.m. varied from between 30.0 in. and 30.2 in. over the southeast of Russia, and from between 30.4 in. and 30.2 in. over Spain, the west of France, the Bay of Biscay, and the southern half of our Islands, to between 29.6 in. and 29.8 in. over Northern Europe, the Baltic, Germany, Austria, and the northeastern part of the Mediterranean. The wind remained S<sup>1</sup> and SE<sup>1</sup> over Russia, very variable within the zone of lowest pressure, and N<sup>1</sup> to NW<sup>1</sup> over the North Sea, the east and south of England, the Channel and France; but had decreased greatly in force. Over Ireland it had backed to the S<sup>1</sup> and was freshening at the western stations. Weather was very rainy over the northern, eastern, and southern part of the Mediterranean, dull and somewhat showery over Russia, fair over the North Sea, France, and the greater part of the British Isles, but rather showery in the extreme west. Temperature was rising in Ireland and also over Russia, falling fast over Algeria and the eastern part of the Mediterranean, changing irregularly elsewhere. The highest morning values were 62° at Malta, 59° at Brindisi, 57° at Constantinople, 55° at Leghain, 50° at Odessa and Nicolaiiff, 48° at Kiev, 47° at Valencia, 46° at Saragossa and Rome, 45° at Belmullet, Scilly, and Naples, and 44° at Ardrossan. The lowest were 17° at Stockholm, 21° at Helsingfors and Riga, 26° at New-Fahrewasser, 28° at Uleaborg, Kuopio, Riga, Münster, and Belfort, 29° at Breslau, 30° at Oxford, St. Mans, Munich and Buda-Pesth, 32° in London, 34° at St. Petersburg, Wietzy, Anshaven, and also at Aumale, and 35° at Madrid, Toulon, and Genoa.

Later in the day the S<sup>1</sup> winds spread more over the British Isles and temperature began to rise over Western Europe generally.

### EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

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

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

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

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



# ADDITIONS AND CORRECTIONS TO THE

## 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.	Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	SHADE TEMP.			WIND.		Weather.	Sea (0 to 12.)	SHADE TEMP.		Amount of Rainfall.		
				Direc.	Force (0 to 12.)				Dry.	Wet.	Difference from 8 a.m. yesterday.	Direc.	Force (0 to 12.)			Max.	Min.			
1	Corunna .....	*	*	*	*	*	30.03	-16	59	59	+5	SSW	2	f	1	66	52	0.12		
..	Lisbon .....	30.21	57	W	3	bc	30.16	-05	59	59	+6	SW	3	o	6	?	?	0.04		
2	Corunna .....	*	*	*	*	*	30.16	+23	55	53	-4	NE	1	f	6	66	52	0.08		
4	Corunna .....	*	*	*	*	*	30.00	-19	59	57	+5	S	2	o	4	59	52	-		
5	Lorient .....	29.89	53	S	1	o	29.99	+02	48	-	-3	NW	3	m	2	57	43	-		
..	Belfort .....	29.99	48	NW	1	c	29.93	-06	48	41	0	NW	1	c	*	58	37	-		
..	Corunna .....	*	*	*	*	*	30.19	+19	54	54	-5	NW	1	r	5	61	52	0.91		
6	Dyons .....	29.89	56	SW	1	o	30.08	+17	48	?	-5	NW	1	o	*	54	45	0.28		
..	Corunna .....	*	*	*	*	*	30.35	+16	57	54	+3	NNE	4	b	5	59	54	0.20		
7	Corunna .....	*	*	*	*	*	30.48	+13	52	51	-5	NE	2	bc	5	59	48	0.04		
8	Corunna .....	*	*	*	*	*	30.49	+01	55	50	+3	NE	5	b	5	59	50	-		
9	Corunna .....	*	*	*	*	*	30.34	-15	47	44	-8	ENE	3	b	4	59	41	-		
11	Corunna .....	*	*	*	*	*	30.09	+12	49	46	-1	E	1	d	2	63	43	-		
12	Corunna .....	*	*	*	*	*	30.06	-03	51	49	+2	E	2	b	3	66	46	-		
13	Corunna .....	*	*	*	*	*	30.13	+09	56	55	+5	SSE	1	r	1	68	?	-		
14	Corunna .....	*	*	*	*	*	30.14	+01	53	53	-3	ENE	1	o	2	64	50	0.16		
15	Corunna .....	*	*	*	*	*	30.26	+12	57	54	+4	ENE	1	b	2	66	52	-		
..	Lisbon .....	30.12	60	E	3	o	30.21	+17	57	54	+3	NE	4	o	?	63	?	0.67		
16	Corunna .....	*	*	*	*	*	30.39	+13	51	49	-6	E	1	b	4	68	48	-		
18	Corunna .....	*	*	*	*	*	30.36	-02	48	46	-5	?	2	b	4	66	45	-		
19	Corunna .....	*	*	*	*	*	30.34	-02	49	47	+1	ENE	1	b	4	61	45	-		
20	Corunna .....	*	*	*	*	*	30.33	-01	51	49	+2	E	1	b	4	63	45	-		
21	Corunna .....	*	*	*	*	*	30.31	-02	57	55	+6	ESE	1	b	3	72	48	-		
22	Corunna .....	*	*	*	*	*	30.36	+05	55	-	-2	SSE	1	bc	4	70	52	-		
23	Bordeaux .....	29.64	41	SW	9	bc	29.36	-53	43	41	-2	SW	8	o	5	45	42	0.24		
..	Christiansund .....	29.82	47	WSW	8	r	29.69	-30	42	41	0	WSW	8	r	5	49	42	0.43		
..	Corunna .....	*	*	*	*	*	30.25	-11	59	55	+4	SE	4	o	4	70	54	-		
25	Biarritz .....	30.27	54	SSW	1	o	30.06	-32	53	-	-4	SW	4	r	3	59	52	0.12		
..	Corunna .....	*	*	*	*	*	30.18	-19	56	55	+3	W	1	f	4	57	48	0.08		
26	Biarritz .....	30.13	56	W	5	o	30.03	-03	54	-	+1	W	7	r	6	59	50	0.47		
..	Corunna .....	*	*	*	*	*	30.25	+09	57	57	+1	W	4	o	6	59	50	0.16		
27	Belfort .....	29.77	39	NW	3	c	29.56	-35	39	-	-1	SSW	1	o	*	45	32	0.39		
..	Biarritz .....	30.02	56	W	6	r	29.79	-24	54	-	0	NW	6	r	8	59	48	0.47		
..	Corunna .....	*	*	*	*	*	30.10	-15	55	54	-2	N	6	o	6	59	52	0.75		
28	Spurn Head .....	29.84	39	NNE	1	m	30.09	+55	32	31	-1	WSW	6	sq	6	89	30	0.85		
..	Biarritz .....	30.00	48	N	6	o	30.24	+45	39	-	-18	SSW	3	o	7	54	32	0.55		
29	Biarritz .....	30.25	41	NE	4	r	30.32	+08	36	-	-3	ESE	3	c	4	41	32	0.43		
..	Corunna .....	*	*	*	*	*	30.40	+01	41	40	-9	E	1	c	4	50	39	0.08		
30	Belfort .....	30.12	30	W	1	c	29.88	-20	30	-	+2	NW	1	r	*	36	28	0.28		
..	Biarritz .....	30.31	40	N	1	c	30.21	-11	36	-	0	SSE	3	bc	2	45	32	-		
..	Corunna .....	*	*	*	*	*	30.13	-27	44	41	+3	SE	2	bc	4	52	36	-		
..	Lisbon .....	30.31	46	NW	1	b	30.21	-17	35	34	-6	NNE	1	bc	2	52	36	-		



## 2. CORRECTIONS.

[illegible]