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METEOROLOGICAL OFFICE,  
LONDON.

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DAILY WEATHER REPORTS.

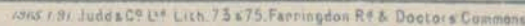
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1<sup>ST</sup> JULY-31<sup>ST</sup> DECEMBER,  
1890.

*Soc. Reg. Lond.*



*July to December, 1890.*





# DAILY WEATHER REPORT.

for Monday, 1<sup>st</sup> December, 1890.

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

STATIONS.		YESTERDAY EVENING.					8 A.M. TO DAY.										FAST 24 HOURS.		
		BAROM.  Reading at 32° F. and Sea Level.	TEMP.  Dry.	WIND.		Weather.	BAROMETR.		SHADE TEMP.			WIND.		Weather.	Sea. (0 to 9.)	SHADE TEMP.		Amount of Rainfall.	
				Force. (0 to 12.)	Dirac.		Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Dirac.	Force. (0 to 12.)			Max.	Min.		
SCANDINAVIA.	Haparanda ...	29.58	28	N	6	0	29.44	58	32	32	+6	SSW	6	S	*	32	21	0.08	
	Hernösand ...	29.78	28	S	4	0	29.58	48	34	33	+29	S	4	T	+	34	3	-	
	Stockholm ...	30.13	30	NW	2	0	29.98	16	32	32	+1	SW	2	O	+	34	27	-	
	Wisby ...	30.20	35	SSW	4	0	30.19	08	36	34	+3	NW	4	GC	+	37	30	0.04	
	Bodö ...	29.26	42	SW	7	T	28.97	62	39	37	+2	ENE	3	T	3	41	34	0.20	
	Christiansund	29.50	48	SW	8	0	29.32	16	51	48	+13	NW	1	T	3	52	?	0.20	
	Skudesnaes ...	29.89	43	SSW	8	T	29.84	18	47	47	+5	S	8	O	6	47	?	0.39	
	Christiania Fjord (Færdø)	30.03	40	SSW	6	0	29.91	26	45	44	+21	SSW	5	m	5	?	?	-	
	Skagen (The Seaw.)	30.18	35	SW	4	m	30.03	16	40	39	+9	SW	4	m	3	40	30	-	
	Fanö ...	30.24	39	SW	4	e	30.21	04	40	39	+10	NW	4	O	4	41	30	-	
BRITISH ISLANDS.	Sumburgh Head	29.57	47	SW	3	T	29.55	02	51	51	+7	SW	3	O	6	51	44	0.06	
	Stornoway ...	29.53	51	SW	7	0	29.58	00	52	52	+5	SW	7	T	5	53	45	0.22	
	Wick ...	29.62	49	SW	2	0	29.65	02	51	49	+8	SW	2	GC	1	53	41	0.01	
	Nairn ...	29.65	41	N	4	0	29.67	04	55	53	+11	NW	4	C	1	55	42	-	
	Aberdeen ...	29.78	46	S	4	Cg	29.77	07	50	49	+11	S	3	GC	3	50	39	0.16	
	Leith ...	29.84	46	NW	5	0	29.85	06	52	51	+9	NW	3	C	*	53	37	-	
	Shields ...	30.00	43	SW	5	0	29.94	14	49	47	+18	SW	3	C	2	49	29	0.06	
	Spurn Head ...	30.18	37	SSW	6	C	30.11	15	37	36	+5	SSW	4	O	4	38	30	-	
	York ...	30.12	37	S	1	0	30.08	15	38	38	+8	S	1	T	*	38	29	0.14	
	Loughborough	30.27	37	SSW	5	0	30.14	18	39	38	+13	SE	1	O	*	39	25	0.01	
BRITISH ISLANDS.	Ardrossan ...	29.88	48	SSW	6	T	29.86	06	50	50	+5	SSW	5	O	4	50	44	0.26	
	Malin Head ...	29.76	52	SSW	6	Op	29.76	07	52	51	+17	S	5	O	3	53	35	0.01	
	Mullaghmore ...	29.86	52	SSW	6	Op	29.82	02	53	52	+7	SW	6	Om	4	54	45	0.08	
	Belmullet ...	29.86	52	SSW	7	0	29.78	01	51	51	0	SW	7	Op	*	53	49	0.19	
	Donaghadee ...	29.94	47	NW	4	0	29.93	05	50	50	+9	SSW	4	m	3	50	40	0.58	
	Liverpool (Bigston)	30.16	43	SW	3	T	30.05	16	44	43	+13	SE	1	O	2	48	31	0.14	
	Holyhead ...	30.12	46	SW	8	rmq	30.02	13	49	49	+5	S	4	dm	4	50	44	0.89	
	Parsonstown ...	30.02	49	N	0	0	29.96	09	51	50	+9	N	0	C	*	53	41	0.26	
	Valencia ...	30.06	54	SSW	7	0	29.96	10	54	53	+4	SSW	6	Um	6	54	49	0.62	
	Roche's Point...	30.14	48	SW	6	T	30.03	14	50	50	+4	SW	5	rm	5	50	46	0.40	
BRITISH ISLANDS.	Pembroke (St. Ann's Hd.)	30.25	47	SSW	5	0	30.09	16	49	49	+6	SSW	5	rm	5	49	43	0.20	
	Scilly ...	30.20	46	SSW	4	C	30.10	20	47	46	+5	SSW	4	rm	3	47	40	0.01	
	Prawle Point ...	30.36	42	SSW	4	0	30.20	17	44	43	+7	SSW	3	Og	2	44	37	-	
	Jersey (St. Aubin's)	30.42	33	SE	3	Cg	30.25	16	33	31	-3	ENE	3	Og	3	40	32	-	
	Hurst Castle ...	30.39	40	SSW	4	Cg	30.23	13	41	40	+5	SSW	4	Om	2	43	33	-	
	Dungeness ...	30.38	41	SW	3	C	30.23	12	36	35	+11	S	1	C	1	41	23	-	
	London ...	30.38	37	S	1	0	30.22	16	32	31	+8	NW	1	C	*	39	24	-	
	Oxford ...	30.35	36	S	2	C	30.20	17	37	36	+9	S	3	O	*	37	25	-	
	Cambridge ...	30.35	36	N	1	C	30.22	14	34	33	+16	S	1	O	*	35	17	-	
	Yarmouth ...	30.32	33	SW	2	C	30.22	10	33	32	+9	SW	2	C	3	33	22	-	
GERMANY & HOLLAND.	Cuxhaven ...	30.37	32	SSW	2	C	30.36	12	26	25	-7	SSW	2	m	*	?	14	-	
	Berlin ...	30.40	32	N	4	S	30.45	22	28	28	+4	SW	3	GC	*	32	?	0.04	
	Wiesbaden ...	*	*	*	*	*	30.30	10	28	27	+5	NE	2	O	*	29	19	-	
	Munich ...	30.46	16	E	2	m	30.21	18	16	16	-2	E	5	m	*	25	14	-	
	The Helder ...	30.36	39	SW	2	C	30.29	02	27	26	-5	S	1	C	3	39	27	-	
	Brussels (9 a.m.)	*	*	*	*	*	30.28	12	18	18	-5	ENE	1	C	1	33	18	-	
	Cape Gris Nez	30.41	32	SSW	3	C	30.24	09	28	27	-9	SE	1	C	1	34	25	-	
	Paris ...	30.46	22	NE	4	C	30.23	17	19	19	-4	NNE	2	C	*	29	18	-	
	Brest ...	30.39	40	SE	3	C	30.24	08	35	34	-4	SE	2	m	3	43	29	0.04	
	Lorient ...	30.36	27	E	1	O	30.23	14	23	23	-8	NE	2	m	2	37	23	-	
FRANCE AND BELGIUM.	Rochefort ...	30.28	32	NE	4	C	30.14	16	23	22	+1	NE	5	m	*	39	16	-	
	Belfort ...	?	21	NW	2	O	?	?	19	14	-2	NW	3	GC	*	30	17	-	
	Lyons ...	30.35	27	N	3	C	30.02	36	23	22	+3	N	3	C	*	32	?	-	
	Nice ...	30.03	53	NE	8	O	29.65	48	45	41	-3	NNE	9	C	5	54	39	0.12	
	Perpignan ...	30.10	39	N	4	O	29.79	40	38	31	0	NW	5	O	*	39	36	0.04	
	Biarritz ...	30.26	30	E	3	O	30.07	16	37	36	+8	ENE	3	O	2	?	?	-	
	Corunna ...	*	*	*	*	*	30.08	11	42	35	+7	NNE	4	C	2	46	?	-	
	Lisbon ...	30.16	42	NW	5	C	30.08	11	42	35	+7	NNE	4	C	2	46	?	-	
	Peninsular																		



# WEATHER CHARTS

for 8 a.m. on

Monday, 1<sup>st</sup> December,

1890.

## BAROMETER, WIND AND SEA.

### EXPLANATION OF MAP.

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

Changes since previous morning are stated in words.

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

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

→ = forces 5 to 7; → = forces 1 to 4.

○ = dead calm.

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

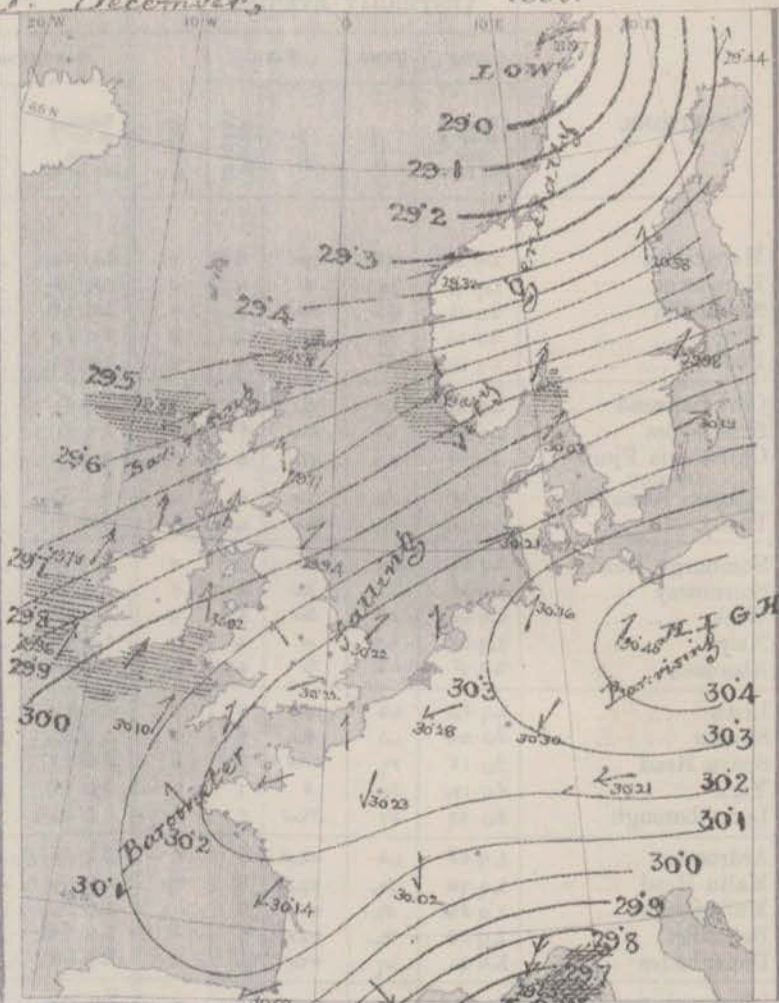
▨ = Rough. ▨ = High.

## MEAN HEIGHT OF THE BAROMETER

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

During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS.
	<i>inches.</i>
Sumburgh Head .....	29.667
Stornoway .....	29.701
Wick .....	29.711
Nairn .....	29.739
Aberdeen .....	29.757
Leith .....	29.803
Shields .....	29.843
York .....	29.888
Loughborough .....	29.923
Ardrossan .....	29.819
Donaghadee .....	29.817
Holyhead .....	29.879
Liverpool .....	29.895
Parsonstown .....	29.909
Valencia .....	29.908
Roche's Point .....	29.915
Pembroke .....	29.918
Sally .....	29.962
Jersey .....	29.985
Hurst Castle .....	29.959
Dover .....	29.957
LONDON .....	29.951
Oxford .....	29.954
Cambridge .....	29.938
Yarmouth .....	29.914



## 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.

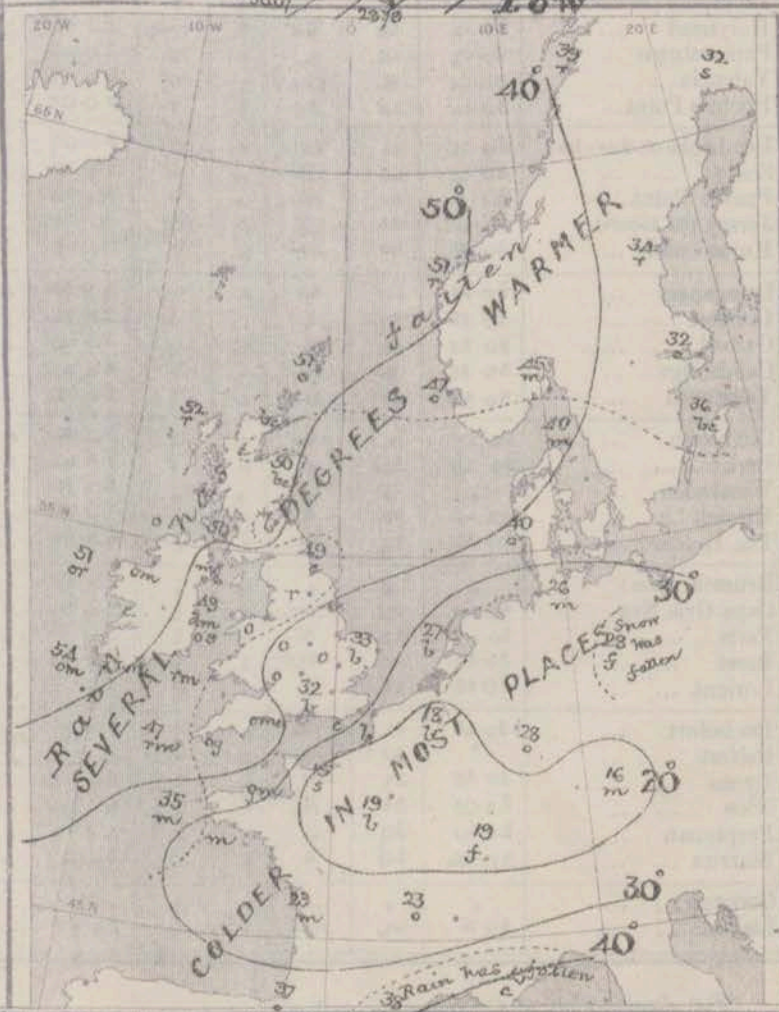
**RAINFALL**—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more are quoted in figures.

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

(For the month of December.)

STATIONS.	TEMPERATURE.				RAINFALL (Inches.)
	Daily Max.	Daily Min.	at 8 a.m.		
			Dry.	Wet.	
Sumburgh Head.....	42.5	35.0	39.5	37.9	4.33
Stornoway .....	44.4	33.0	39.2	38.2	5.66
Wick .....	42.1	32.6	38.0	36.6	3.18
Nairn .....	41.7	32.8	37.0	35.5	2.08
Aberdeen .....	42.0	32.5	36.9	35.3	3.34
Leith .....	44.2	33.7	38.6	37.0	2.01
Shields .....	43.1	34.3	38.5	37.2	2.74
York .....	42.7	32.4	36.8	35.7	2.45
Loughborough .....	43.1	32.9	36.9	35.9	2.36
Ardrossan .....	44.6	36.0	40.1	38.7	4.04
Donaghadee.....	43.1	36.2	40.2	39.2	2.84
Holyhead.....	46.7	39.3	43.0	41.4	3.84
Liverpool .....	43.8	36.0	39.3	37.6	2.70
Parsonstown .....	44.8	33.2	37.9	36.6	3.02
Valencia .....	50.0	40.0	44.6	42.3	5.82
Roche's Point .....	48.0	39.0	42.9	41.5	4.74
Pembroke.....	47.1	40.6	43.9	42.5	4.06
Sally .....	49.8	43.8	47.1	45.4	4.10
Jersey .....	47.7	40.1	43.4	41.8	3.87
Hurst Castle .....	46.1	36.9	40.9	40.2	2.84
Dover .....	44.7	36.8	40.3	39.1	3.20
LONDON .....	44.7	34.6	38.5	37.4	2.14
Oxford .....	43.6	34.3	37.7	36.6	2.13
Cambridge .....	43.5	32.3	36.9	36.1	1.99
Yarmouth .....	42.4	34.2	38.3	37.6	2.95

**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. and upwards, over Germany; 30.5 in. and upwards in an anticyclone extending from Central Europe to the southeast of Ireland, and the N. of France.</p> <p>Lowest, 29.0 in. and less, in a depression lying off the northwest of Norway.</p> <p>Gradient, steep over Scandinavia, and rather so over the northern and northwestern parts of our Islands, but slight elsewhere.</p> <p>Barometer falling at nearly all stations—quickly in Scandinavia.</p>
TEMPERATURE	<p>Highest, 55° at Narvik, 54° at Valencien Island, 53° at Mull of Galloway, and 52° at Shorness, Leith and Malin Head.</p> <p>Lowest, 15° at Harre, 16° at Munich, 18° at Belfast and Paris, and 23° at Lorient, Rochefort and Lyons.</p> <p>The maximum registered yesterday, some about 50° at many of our western and northern stations, but below 40° in the east and southeast of England.</p>
WIND	<p>SW or S over the United Kingdom, the North Sea, Scandinavia, Denmark, and North Germany, strong in force on our western, western and northwestern coasts.</p> <p>Light or moderate from the E or NE over France, Belgium, and south Germany, but a strong NE gale reported at Harre.</p>
WEATHER	<p>Fine over the eastern part of Great Britain, as well as over the Netherlands and Central France.</p> <p>Dull elsewhere, with fog or mist at several of the French and German stations and rain in Scandinavia and the west of our Islands.</p> <p>Rain fell yesterday in the west and north generally, the largest amount being 0.3 in. at Holyhead and 0.6 in. at Valencien Island.</p>
SEA	<p>Very high at Harre, and rough off the southwest and extreme north of our Islands, but moderate to smooth elsewhere.</p>

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

A fresh fall of the barometer has set in at Valencien during the night, and a new depression is evidently approaching from the westward. Increasing SW winds are probable over the Kingdom generally, with a further rise of temperature in the southeast.

## FORECASTS

For the 24 hours ending at NOON on 2<sup>nd</sup> DEC. 1890.

DISTRICTS.	FORECASTS.	DISTRICTS.	FORECASTS.
<div> <div>0</div> <div>SCOTLAND NORTH</div> </div> <div> <div>1</div> <div>SCOTLAND EAST</div> </div> <div> <div>2</div> <div>ENGLAND N.E.</div> </div> <div> <div>3</div> <div>ENGLAND EAST</div> </div> <div> <div>4</div> <div>MIDLAND COUNTIES</div> </div> <div> <div>5</div> <div>ENGLAND SOUTH</div> </div>	<p>S<sup>2</sup> and SW<sup>2</sup> winds, moderate to strong; fair to dull and some rain.</p> <p>S<sup>2</sup> and SW<sup>2</sup> winds, freshening; milder, unsettled, some rain.</p>	<div> <div>6</div> <div>SCOTLAND WEST</div> </div> <div> <div>7</div> <div>ENGLAND N.W.</div> </div> <div> <div>8</div> <div>ENGLAND S.W.</div> </div> <div> <div>9</div> <div>IRELAND NORTH</div> </div> <div> <div>10</div> <div>IRELAND SOUTH</div> </div>	<p>S<sup>2</sup> winds, increasing in force; dull, some rain.</p> <p>S<sup>2</sup> and SW<sup>2</sup> winds, fresh or strong; squally, some rain.</p> <p>S<sup>2</sup> and SW<sup>2</sup> strong winds and gales; squally, some rain.</p>
		WARNINGS	<p>The SOUTH CONE is still flying in districts 0 to 2, 6, 7, 9, 10, and part of 8.</p>

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 ...	29.95	42	40	S	E	+	6	Holyhead ...	30.13	46	44	SW	E	+ m q	6
Sumnergh Head								Valencia ...							
Stornoway ...	29.55	51	51	SW	4	+	14	Scilly ...							
Aberdeen ...								Jersey ...	30.44	36	33	ENE	3	c	3
Shields ...								Dungeness ...	30.39	34	33	SE	0	c	0
Ardrossan ...								London ...							8
Mulin Head ...	29.74	49	48	SW	6	0	3	Yarmouth ...							
Mullaghmore ...								Rochefort ...	30.27	36	36	E	3	6	*
Belmullet ...	29.83	52	52	SW	8	0	*								

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

Weather in morning fine and bright over the southern half of England, the west of France and the southern parts of the Spanish Peninsula; cloudy or overcast generally elsewhere, with rain at the Irish and Scotch stations, snow in some parts of Russia and north Germany. Rain falling generally in the west and north later, heavily at Holyhead and Valencia, and in considerable quantities in the west of Norway, fine weather continuing over the southeastern parts of our Islands and the greater part of France and Germany.

Temperature rising fast over Ireland, Scotland, many parts of France, north Germany and the Baltic, as well as in Algeria, falling over southeastern and eastern Europe. Morning readings as high as 66° at Brindisi and exceeding 50° at most stations on the eastern shores of the Mediterranean, as well as in the extreme west of Ireland, much lower elsewhere; as low as 7° at Khar'kov, 14° at Moscow, 18° at Cambridge, 20° at Kuopio, Kiev and Lyons, 23° at Paris and Brussels, 24° at Berlin and in London. Rising to 55° and more later all over Ireland and Scotland, and touching 54° at Valencia and Mullaghmore, 53° at Nairn.

Wind (1) Strong to a gale from SW and S. over Ireland and Scotland, and light from SE in the N. and S. of Scandinavia, and over Russia; (2) Moderate to a gale from between E. and N. over the northern and western parts of the Mediterranean, light from SE at Brindisi, and from E at Lefina. Very light and variable over France and the east and south of England. The SW<sup>ly</sup> wind becoming still more general over our Islands later, but moderating in force in the east of Scotland.

Barometer 30.9 ins. to 30.4 ins. over central and southern Russia, 30.4 ins. to 30.3 ins. over France, south Germany, the Bay of Biscay and southern parts of England. Lowest 29.6 ins. and less in the extreme north of our Islands and northwest of Norway, and about the same value in a well-marked depression over Algeria. Falling later - little and unsteadily over our Islands, but more decidedly in the north of Norway.

### SUMMARY OF CHANGES IN THE WEATHER OVER THE BRITISH ISLANDS AND THEIR NEIGHBOURHOOD FROM THE 25<sup>th</sup> TO 29<sup>th</sup> NOV. 1890.

The weather of the past week has presented some very striking contrasts, more particularly with regard to temperature. At the commencement of the period a large and deep depression covered the greater part of western Europe, its centre being situated on the 25<sup>th</sup> over the south of Norway. Secondary disturbances were also passing across our Islands, and strong winds or gales from the W and were reported over Ireland, England and France, with very mild weather, the thermometer in many places rising to nearly 60°. In Scandinavia and Finland, however, there was a violent gale from the E<sup>ly</sup>, with cold weather and snow. On the 26<sup>th</sup> the depression and its subsidiary systems travelled southeastward across central Europe and occasional heavy rains & floods in many parts of Germany, Austria and Belgium. In its rear an anticyclone spread from Scandinavia and northern Russia over the northern parts of the United Kingdom and the wind over our Islands and the Continent became generally NE<sup>ly</sup>. A very decided fall of temperature now took place, and over England, the Netherlands, France and Germany some very low readings were observed, especially on the 27<sup>th</sup> and 28<sup>th</sup>. On the latter date the thermometer at Paris registered a minimum of 5° F. and on both days the maxima over the eastern and southeastern parts of England were below the freezing point, the reading of 25° registered in London on the 28<sup>th</sup> being the lowest November maximum on record. Owing to shallow disturbance which advanced from the eastward snow fell in many places on the 26<sup>th</sup>, 27<sup>th</sup> and 28<sup>th</sup>, the fall being very heavy in some parts of our eastern and southern counties.

At the close of the week a decided change was in progress. Depressions were beginning to approach our northern coasts from the Atlantic, and SW<sup>ly</sup> breezes were spreading over all our western and northern districts with milder weather.

### EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

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

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

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

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



# DAILY WEATHER REPORT.

for Tuesday 2<sup>nd</sup> December. 1890.  
 Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.

STATIONS.		YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
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SCANDINAVIA.	Haparanda ...	29.19	38	SW	8	0	29.57	+10	32	31	0	W	2	0	•	?	25	0.79	
	Hernösand ...	29.63	41	S	2	0	29.76	+10	40	38	+6	SW	2	0	•	45	27	—	
	Stockholm ...	29.96	41	SW	4	0	30.01	+0.3	38	36	+6	W	4	0	•	41	27	—	
	Wisby ...	30.15	37	SW	4	0	30.14	-0.01	36	35	0	W	4	0	•	39	32	—	
	Bodö ...	29.26	39	SE	6	0	29.20	+0.2	35	34	-4	W	3	0	4	46	34	—	
	Christiansund ...	29.55	51	W	7	0	29.71	+0.3	47	46	-4	W	3	0	6	54	46	0.12	
	Skudesnaes ...	29.89	47	S	0	0	29.85	+0.5	45	44	-2	S	0	0	6	43	43	0.16	
	Christiania Fjord (Færder)	29.92	46	SW	5	0	29.95	+0.4	43	42	-2	SW	5	0	4	46	43	—	
	Skagen (The Seaw)	30.05	36	SW	3	0	30.02	-0.1	35	35	-5	SW	2	0	2	41	34	—	
	Faro ...	30.12	27	SE	3	0	30.00	-0.2	30	30	-10	E	4	0	•	41	23	—	
BRITISH ISLANDS.	Sumburgh Head	29.65	52	W	3	0	29.65	+10	48	48	-3	NNE	1	0	3	53	47	0.09	
	Stornoway ...	29.62	52	SW	6	0	29.75	+10	45	45	-7	SW	2	0	3	53	47	0.12	
	Wick ...	29.68	53	W	0	0	29.75	+10	48	48	-3	W	0	0	1	54	49	0.01	
	Nairn ...	29.68	52	W	1	0	29.74	+0.7	51	50	-4	W	0	0	1	55	49	0.01	
	Aberdeen ...	29.77	50	S	2	0	29.76	-0.1	48	47	-2	SW	1	0	3	55	48	0.01	
	Leith ...	29.81	52	W	3	0	29.76	-0.9	49	49	-3	W	1	0	•	57	47	0.15	
	Shields ...	29.86	47	W	0	0	29.75	-1.5	40	39	-9	S	2	0	2	49	37	0.05	
	Spurn Head ...	29.98	37	S	4	0	29.82	-2.9	39	38	+2	NE	2	0	3	39	34	0.01	
	York ...	29.95	35	S	1	0	29.84	-2.4	33	33	-5	E	1	0	•	41	32	0.02	
	Loughborough	29.97	41	SW	1	0	29.84	-3.0	33	32	-6	ESE	1	0	•	44	32	0.04	
GERMANY & HOLLAND.	Ardrossan ...	29.79	51	SW	3	0	29.76	-1.0	49	49	-1	W	0	0	0	51	48	0.06	
	Malin Head ...	29.71	52	SW	3	0	29.75	-0.1	51	50	-1	NW	2	0	4	53	49	0.02	
	Mullaghmore ...	29.75	53	SW	4	0	29.75	-0.7	50	49	-3	NW	2	0	4	53	49	0.10	
	Belmullet ...	29.74	52	SW	6	0	29.78	0.0	50	50	-1	NNE	1	0	•	53	49	0.18	
	Donaghadee ...	29.82	52	SW	3	0	29.77	-1.6	50	50	0	SE	3	0	1	53	50	0.25	
	Liverpool (Bliston)	29.91	44	SE	2	0	29.78	-2.7	39	39	-5	E	3	0	3	46	39	0.06	
	Holyhead ...	29.89	49	SW	3	0	29.74	-2.8	47	47	-2	W	0	0	0	51	46	0.36	
	Parsonstown ...	29.82	51	W	0	0	29.73	-2.3	49	48	-2	W	0	0	•	54	48	0.18	
	Valencia ...	29.81	53	SW	4	0	29.73	-2.3	51	50	-3	N	1	0	1	54	50	0.16	
	Roche's Point...	29.87	50	SW	4	0	29.72	-3.1	50	50	0	E	2	0	4	51	48	0.65	
FRANCE AND BELGIUM.	Pembroke (St. Ann's Id.)	29.91	49	SW	3	0	29.72	-3.7	48	47	-1	ESE	3	0	4	51	46	0.62	
	Scilly ...	29.92	49	SW	2	0	29.69	-4.1	48	48	+1	SW	3	0	6	50	46	0.44	
	Prawle Point ...	29.96	44	SW	1	0	29.74	-4.6	43	43	-1	ESE	4	0	3	45	43	0.42	
	Jersey (St. Aubin's)	30.02	32	ESE	2	0	29.75	-5.0	38	37	+5	ESE	3	0	3	38	37	0.01	
	Hurst Castle ...	30.01	41	ESE	1	0	29.79	-4.4	36	36	-5	NE	4	0	1	43	34	—	
	Dungeness ...	29.98	37	ESE	3	0	29.79	-1.4	36	34	0	SE	3	0	2	40	25	—	
	London ...	30.02	34	SE	1	0	29.80	-4.2	35	34	+3	SE	1	0	•	44	28	—	
	Oxford ...	29.96	38	S	1	0	29.82	-3.8	34	33	-3	NE	1	0	•	40	32	0.02	
	Cambridge ...	30.01	35	S	1	0	29.82	-4.0	33	33	-1	N	1	0	•	39	27	—	
	Yarmouth ...	30.03	36	S	1	0	29.81	-4.1	37	36	+4	SE	2	0	3	37	32	—	
PENINSULA.	Cuxhaven ...	30.18	30	SE	3	0	29.97	-3.9	30	29	+4	SE	4	0	•	32	27	—	
	Berlin ...	30.20	31	E	4	0	30.02	-4.3	29	28	+1	E	4	0	•	32	27	—	
	Wiesbaden ...	29.87	28	SW	2	0	29.93	-3.7	30	29	+2	NE	2	0	•	36	28	—	
	Munich ...	30.03	23	ESE	5	0	29.87	-4.2	24	24	+8	NE	4	0	•	30	16	—	
	The Helder ...	30.03	23	ESE	5	0	29.87	-4.2	29	28	+2	SE	1	0	2	34	27	—	
	Brussels (9 a.m.)	29.97	30	E	4	0	29.88	-4.0	25	24	+7	E	1	0	•	31	18	—	
	Cape Gris Nez	29.93	27	NW	2	0	29.80	-4.3	23	23	+4	SE	2	0	4	31	23	—	
	Paris ...	30.01	39	SE	2	0	29.73	-5.1	38	37	+3	SE	2	0	5	41	28	—	
	Brest ...	29.99	32	NE	3	0	29.70	-5.3	34	32	+11	ESE	1	0	3	36	23	—	
	Lorient ...	29.99	32	NE	3	0	29.70	-5.3	34	32	+11	ESE	1	0	3	36	23	—	

For Explanation of Columns, see bottom of p. 1.

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



# WEATHER CHARTS

for 8 a.m. on Tuesday, 2<sup>nd</sup> December, 1890.

## BAROMETER, WIND AND SEA.

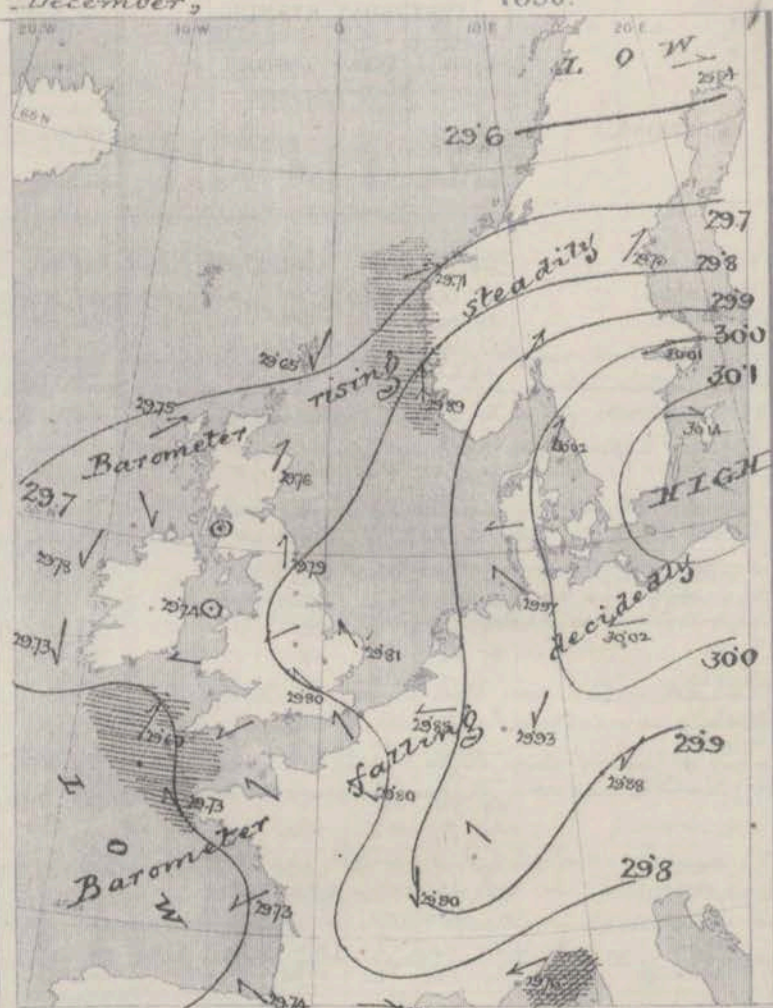
### EXPLANATION OF MAP

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

### MEAN HEIGHT OF THE BAROMETER

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

STATIONS.	MEAN READINGS.
Sumburgh Head .....	29.687
Stornoway .....	29.701
Wick .....	29.711
Nairn .....	29.739
Aberdeen .....	29.757
Leith .....	29.803
Shields .....	29.843
York .....	29.888
Loughborough .....	29.923
Ardrossan .....	29.819
Donaghadee .....	29.847
Holyhead .....	29.879
Liverpool .....	29.895
Parsonstown .....	29.909
Valencia .....	29.905
Roche's Point .....	29.915
Pembroke .....	29.918
Scilly .....	29.922
Jersey .....	29.985
Hurst Castle .....	29.959
Dover .....	29.957
LONDON .....	29.951
Oxford .....	29.954
Cambridge .....	29.938
Yarmouth .....	29.914



## 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.

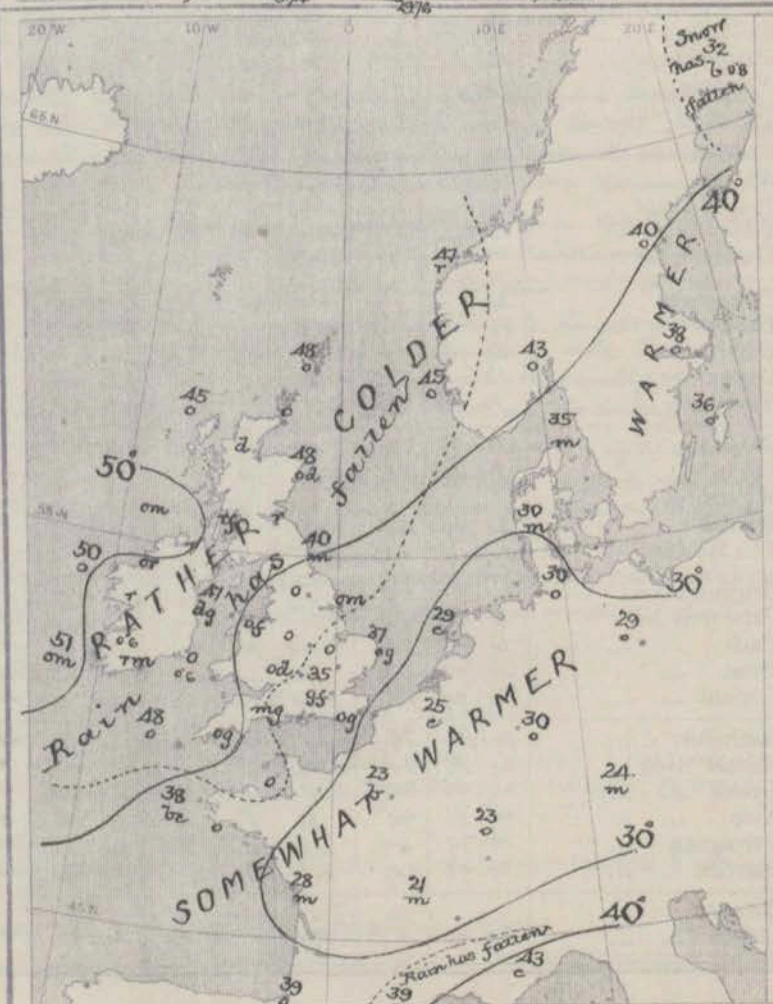
**RAINFALL**—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more are quoted in figures.

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

(For the month of December.)

STATIONS.	TEMPERATURE.				RAINFALL. (Inches.)
	Daily Max.	Daily Min.	Dry, at 8 a.m.	Wet.	
Sumburgh Head....	42.5	35.0	39.5	37.9	4.33
Stornoway .....	44.4	33.9	39.2	38.2	5.66
Wick .....	42.1	32.6	38.0	36.6	3.18
Nairn .....	41.7	32.8	37.0	35.5	2.08
Aberdeen .....	42.0	32.5	36.9	35.3	3.34
Leith .....	44.2	33.7	38.6	37.0	2.01
Shields .....	43.1	34.3	38.5	37.2	2.74
York .....	42.7	32.4	36.8	35.7	2.45
Loughborough .....	43.1	32.9	36.9	35.9	2.36
Ardrossan .....	44.6	36.0	40.1	38.7	4.04
Donaghadee .....	43.1	35.2	40.2	39.2	2.84
Holyhead .....	46.7	39.3	43.0	41.4	3.84
Liverpool .....	43.8	36.0	39.3	37.6	2.70
Parsonstown .....	44.8	33.2	37.9	36.6	3.02
Valencia .....	50.0	40.0	44.6	42.3	5.82
Roche's Point .....	48.0	39.0	42.9	41.5	4.74
Pembroke .....	47.1	40.0	43.9	42.5	4.06
Scilly .....	49.8	43.8	47.1	45.4	4.10
Jersey .....	47.7	40.1	43.4	41.8	3.87
Hurst Castle .....	46.1	36.0	40.9	40.2	2.84
Dover .....	44.7	36.8	40.3	39.1	3.20
LONDON .....	44.7	34.6	38.5	37.4	2.14
Oxford .....	43.6	34.3	37.7	36.6	2.13
Cambridge .....	43.5	32.3	36.9	36.1	1.99
Yarmouth .....	42.4	34.2	38.3	37.5	2.95

NOTE.—The Temperature means are for the 15 years 1871-85, the Rainfall means are mainly those for the 20 years 1868-85.





# GENERAL SITUATION AT 8 A.M.

## PRESSURE

Highest, 30.1 in. and more, to 29.9 in. over Denmark, the Baltic, Germany, and the east of France.  
Lowest, (1) 29.6 in. and less over England; (2) 29.7 in. and less, over the Bay of Biscay; (3) 29.8 in. and less, over the Gulf of Genoa.

Gradients are slight and irregular over our Islands and France.  
Barometer falling at all but our extreme northern and the Scandinavian.

## TEMPERATURE

Highest, 50° to 51° in the east and south of Ireland, 48° in the northeast of Scotland and also on the southwest coast of England.  
Lowest, 21° at Lyons, 23° at Belfast and Paris, 24° at Munich, 23° at Berlin, and 33° to 35° over the inland parts of England.  
In London it fell to 28° late last night, but rose again subsequently.

## WIND

Chiefly E (SE to NE) over the southern parts of our area, but variable and light; chiefly SW over Scandinavia.  
Very light and variable elsewhere.

## WEATHER

Dull gloomy and damp very generally; fog prevails in many places, rain in others. Paris and Copenhagen only report a clear sky. Rain has fallen very generally in all the more western and northern parts of the Kingdom and also in the south of France.

## SEA

Rough in the far north, rather so off Scilly and Brest, high at Nice, moderate to slight elsewhere.

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

Changeable unsettled weather is likely to continue in most places.

# FORECASTS

For the 24 hours ending at NOON on 3<sup>rd</sup> DEC<sup>r</sup>. 1890.

## DISTRICTS.

## FORECASTS.

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

Varying light winds;  
misty or foggy, colder.

Varying SE<sup>ly</sup> and E<sup>ly</sup> winds;  
dull, some rain.

## DISTRICTS.

## FORECASTS.

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

Varying airs; rain at times.

Same as No<sup>s</sup> 3 to 5.

Same as No<sup>s</sup> 6 and 7.

## 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.

	THER: WIND								THER: WIND						
	BAR:	D.	W.	D.	F.	WEA	SEA		BAR:	D.	W.	D.	F.	WEA	SEA
Skudesnaes ...								Holyhead ...	29.53	51	51	SW	4	dm	4
Sumburgh Head ...	29.60	52	52	W	4	0	6	Valencia ...	29.85	54	54	SW	6	md	5
Stornoway ...	29.62	53	53	SW	2	0	3	Seilly ...	30.00	45	45	SW	3	0	4
Aberdeen ...	29.74	52	50	N	2	C	3	Jersey ...	30.10	32	31	NE	2	0	2
Shields ...	29.86	47	46	S	3	C	2	Dungeness ...	30.10	37	35	ESE	3	bc	2
Ardrossan ...	29.81	51	50	SW	3	0	2	London ...	30.01	44	41	SW	1	of	3
Malin Head ...	29.70	53	51	SW	5	0	3	Yarmouth ...	30.10	37	36	SW	2	bc	3
Mullaghmore ...	29.76	54	53	SW	5	0	4	Rochefort ...	29.96	36	33	WN	4	0	?
Belmullet ...	29.75	52	52	SW	5	0	*								

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

Weather fine over the east of Great Britain as well as in the Netherlands, Central France, Spain and some parts of Austria, dull elsewhere, with fog or mist at several of the French and German stations, and rain in Scandinavia, the west of our Islands, the extreme south of France, the north of Italy, and Algeria. Snow reported at Moscow. Rain falling during day in all the more western and northern parts of the United Kingdom; fog appearing in London.

Temperature highest, 61° at Perpignan, 60° at Malte, 58° at Rome and Panguinaire, and 57° at Lening; above 50° at most of the Irish and Scotch stations, but below 45° in Algeria. Lowest (1) 6° at Moscow, and 14° at Arkhar; (2) 15° at Munster and Haver, 16° at Munich, 18° at Brussels, 19° at Paris, Belfast, and Vienna, and 20° at Madrid, below the freezing point over the whole of Russia and Central Europe. Daily maxima exceeding 55° in some parts of Scotland, but thermometer remaining below 40° in the east of England and also over the greater part of France.

Wind SW over the United Kingdom and all the more northern parts of the Continent, strong in force in the extreme west and northwest of our Islands. E or NE over Austria, Switzerland, France and Spain, with a fresh to strong gale in the extreme south of France; strong from the SE over Italy and the Adriatic. SW in Algeria. Subsequently shifting to the NW at many of the French stations.

Barometer highest 30.7 in. and upwards over the southern parts of Russia; 30.1 in. and upwards, in a broad anticyclonic band extending from Russia across Denmark, Central Europe, France and the southeast of our Islands to the Bay of Biscay and the north of Spain. Lowest 29.0 in. and less, in a rather deep depression lying off the northwest of Norway; 29.5 in. and less, in a well marked disturbance lying over the central parts of the Mediterranean. Depression in north subsequently travelling away in a northeasterly direction.

### 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, 3<sup>rd</sup> December, 1890.*  
*Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.*

STATIONS.		YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
		BAROM.  Reading at 32° F. and Sea Level.	TEMP.  Dry.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Weather.	Sea. (0 to 3.)	SHADE TEMP.		Amount of Rainfall.	
				Dirac.	Force. (0 to 12.)		Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Dirac.	Force. (0 to 12.)			Max.	Min.		
SCANDINAVIA.	Haparanda ...	29.68	30	Z	0	0	29.61	+ 0.7	27	27	- 5	N	2	0	*	39	25	0.04	
	Hernösand ...	29.65	32	SSW	2	c	29.67	- 0.9	35	34	- 5	S	2	bc	*	45	?	-	
	Stockholm ...	29.95	30	SSW	2	0	29.84	- 1.1	36	35	- 2	SW	2	f	*	45	28	-	
	Wishby ...	29.97	35	SW	4	0	29.88	- 2.6	36	35	0	NNW	4	0	*	39	32	-	
	Bodö ...	29.65	35	W	6	c	29.70	+ 5.0	35	31	0	NNW	2	c	2	36	32	-	
	Christiansund	29.52	45	SW	5	r	29.87	+ 1.6	35	33	- 12	NE	3	S	4	34	34	0.64	
	Skudesnaes ...	29.79	42	S	8	0	29.70	- 1.9	40	39	- 5	SSE	4	0	5	45	39	-	
	Christiania Fjord (Færdar)	29.87	38	SSW	4	0	29.74	- 2.1	39	39	- 4	SSE	3	r	3	43	37	-	
	Skagen (The Seaw)	29.81	38	S	3	r	29.74	- 2.8	36	36	+ 1	S	1	m	2	37	34	0.04	
	Fanö ...	29.82	30	S	2	f	29.72	- 2.8	31	31	+ 1	Z	0	f	*	32	30	-	
BRITISH ISLANDS.	Sumburgh Head	29.68	46	NNW	2	r	29.85	+ 2.0	36	36	- 12	N	5	r	5	49	35	0.12	
	Stornoway ...	29.84	42	N	4	b	29.99	+ 2.4	33	33	- 12	N	6	S	6	48	31	0.10	
	Wick ...	29.75	48	Z	0	0	29.92	+ 1.7	38	37	- 10	N	5	c	2	49	36	0.05	
	Nairn ...	29.78	46	Z	0	0	29.91	+ 1.7	37	37	- 14	NW	3	0	2	51	36	0.14	
	Aberdeen ...	29.76	46	NNW	2	og r	29.82	+ 0.6	39	38	- 9	NNW	5	og p	4	49	39	0.78	
	Leith ...	29.72	48	W	1	r	29.81	+ 0.5	40	38	- 9	NNW	2	0	*	49	39	0.90	
	Shields ...	29.72	38	SW	1	rm	29.68	- 1.1	39	38	- 1	NNW	2	d	2	40	38	-	
	Spurn Head ...	29.77	37	SW	1	0	29.72	- 1.0	37	35	- 2	S	2	om	2	41	34	-	
	York ...	29.79	37	NW	1	0	29.73	- 1.1	36	36	+ 3	SSE	1	0	*	38	33	0.02	
	Loughborough	29.79	35	WSW	1	0	29.72	- 1.2	36	35	+ 3	SSE	1	ogm	*	37	33	-	
GERMANY & HOLLAND.	Ardrossan ...	29.72	49	Z	0	rf	29.81	+ 0.5	39	37	- 10	NNW	1	c	0	49	38	0.56	
	Malin Head ...	29.79	48	N	4	og	29.87	+ 1.2	42	38	- 9	NNE	7	og	4	51	42	0.06	
	Mullaghmore ...	29.80	49	NNE	5	om	29.89	+ 1.4	43	39	- 7	NNE	6	e	5	50	43	0.13	
	Belmullet ...	29.86	49	NNE	4	bc	29.96	+ 1.8	43	38	- 7	NNE	8	c	*	53	42	0.05	
	Donaghadee ...	29.75	48	SSE	1	r	29.80	+ 0.3	43	42	- 7	NE	6	r	4	50	38	0.81	
	Liverpool (Belton)	29.76	36	SE	2	0	29.71	- 0.7	35	34	- 4	E	2	of	2	40	34	0.04	
	Holyhead ...	29.74	42	SSE	1	og	29.68	- 0.6	42	42	- 5	ESE	3	rmq	2	48	41	0.34	
	Parsonstown ...	29.74	50	Z	0	r	29.81	+ 0.8	41	38	- 8	NW	2	0	*	51	39	0.51	
	Valencia ...	29.75	50	NNE	2	rg	29.87	+ 1.4	44	41	- 7	NE	4	c	4	51	42	0.33	
	Roche's Point...	29.72	50	E	1	f	29.76	+ 0.4	42	39	- 8	N	4	b	4	51	40	0.25	
FRANCE AND BELGIUM.	Pembroke (St. Ann's Hd.)	29.73	41	SSE	4	0	29.67	- 0.5	41	41	- 7	E	2	d	3	48	39	0.11	
	Scilly ...	29.67	47	SSW	2	rm	29.64	- 0.4	47	46	- 1	SSW	2	0	6	49	40	0.14	
	Prawle Point ...	29.74	40	ESE	2	bc	29.72	- 0.2	43	41	0	ESE	1	c	1	44	36	-	
	Jersey (St. Aubin's)	29.74	36	SE	3	ogm	29.71	- 0.4	37	35	- 1	ESE	2	ogm	2	38	34	-	
	Hurst Castle ...	29.76	41	E	2	0	29.72	- 0.7	41	41	+ 5	E	3	m	2	42	36	-	
	Dungeness ...	29.76	38	S	3	bc	29.72	- 0.7	37	36	+ 1	NNE	2	bef	1	38	27	-	
	London ...	29.81	36	SSW	1	ogf	29.73	- 0.7	35	34	0	NE	1	ogf	*	37	33	-	
	Oxford ...	29.81	35	E	1	0	29.73	- 0.9	35	35	+ 1	SE	1	ogf	*	36	34	-	
	Cambridge ...	29.81	32	E	1	0	29.74	- 0.8	34	34	+ 1	S	1	0	*	35	31	-	
	Yarmouth ...	29.80	34	SW	1	c	29.73	- 0.8	34	33	- 3	Z	0	f	3	37	30	-	
PENINSULA.	Cuxhaven ...	29.89	31	SE	2	0	29.72	- 2.5	33	32	+ 3	NE	2	f	*	?	?	-	
	Berlin ...	29.88	33	E	3	0	29.71	- 3.1	31	31	+ 2	SE	4	0	*	36	?	-	
	Wiesbaden ...	*	*	*	*	*	29.68	- 3.5	36	34	+ 6	N	2	r	*	37	?	-	
	Munich ...	29.71	29	SW	2	f	29.57	- 3.4	29	29	+ 5	SW	3	m	*	30	23	0.20	
	The Helder ...	29.83	28	SE	1	f	29.73	- 1.4	36	35	+ 7	NNW	1	f	1	39	28	-	
	Brussels (9 a.m.)	*	*	*	*	*	29.72	- 1.6	29	29	+ 4	NE	1	f	*	38	23	-	
	Cape Gris Nez	29.79	34	SE	2	0	29.79	- 0.1	37	37	+ 12	NE	4	0	4	37	26	-	
	Paris ...	29.80	29	NNW	1	0	29.71	- 0.9	23	23	0	NE	1	0	*	39	21	-	
	Brest ...	29.72	41	SE	1	0	29.73	- 0.0	35	33	- 3	E	2	0	5	41	30	-	
	Lorient ...	29.73	30	ESE	3	0	29.70	- 0.0	35	32	+ 1	ESE	3	0	6	36	30	-	
PENINSULA.	Rochefort ...	29.67	33	SSE	3	m	29.70	- 0.3	30	29	+ 2	ESE	3	m	*	36	23	-	
	Belfort ...	?	28	SE	1	0	?	?	30	?	+ 7	NW	1	S	*	30	?	-	
	Lyons ...	29.82	28	N	1	0	29.67	- 2.3	26	25	+ 5	NNW	1	m	*	36	?	-	
	Nice ...	29.62	49	E	3	0	29.50	- 2.6	42	35	- 1	SE	2	0	3	52	41	-	
	Perpignan ...	29.72	42	SW	2	0	29.69	- 0.7	34	32	- 5	SW	2	0	*	47	31	0.12	
	Biarritz ...	29.71	45	SSW	3	0	29.66	- 0.8	41	37	+ 2	S	1	0	3	48	36	-	
	Corunna ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
Lisbon ...	29.49	50	ESE	4	0	29.53	- 1.8	44	43	- 1	NNE	5	0	8	50	43	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

WEDNESDAY, 3<sup>rd</sup> DECEMBER,

1890.

## BAROMETER, WIND AND SEA.

### EXPLANATION OF MAP.

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

Changes since previous morning are stated in words.

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

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

→ = forces 5 to 7; → = forces 1 to 4.

○ = dead calm.

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

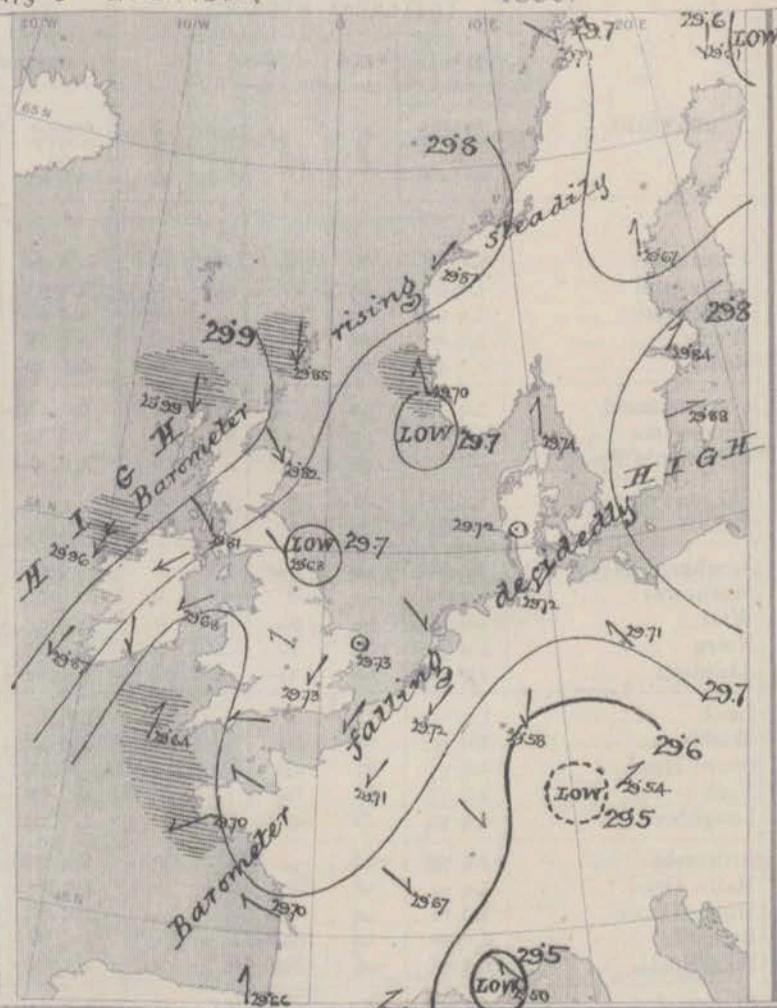
■ = Rough. ■ = High.

## MEAN HEIGHT OF THE BAROMETER

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

During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS.
Sumburgh Head .....	29.667
Stornoway .....	29.701
Wick .....	29.711
Nairn .....	29.739
Aberdeen .....	29.757
Leith .....	29.803
Shields .....	29.843
York .....	29.888
Loughborough .....	29.923
Ardrossan .....	29.819
Donaghadee .....	29.847
Holyhead .....	29.879
Liverpool .....	29.893
Parsonstown .....	29.909
Valencia .....	29.908
Roche's Point .....	29.915
Pembroke .....	29.918
Sally .....	29.962
Jersey .....	29.985
Hurst Castle .....	29.959
Dover .....	29.957
LONDON .....	29.951
Oxford .....	29.954
Cambridge .....	29.938
Yarmouth .....	29.914



## 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.

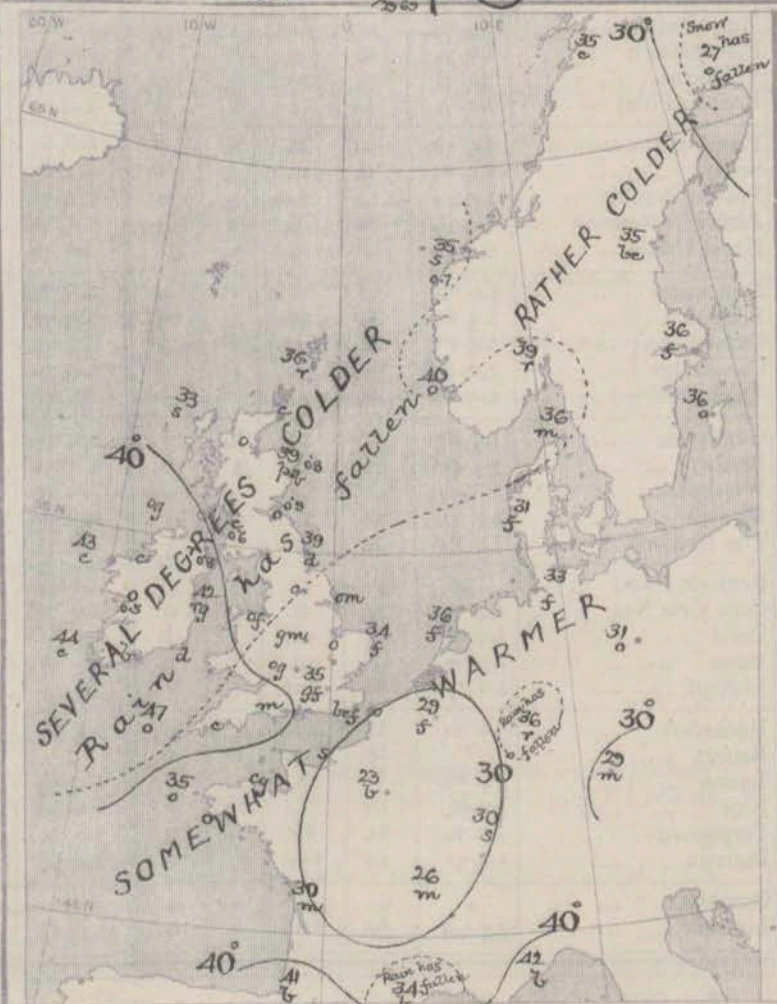
**RAINFALL**—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more are quoted in figures.

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

(For the month of December.)

STATIONS.	TEMPERATURE.				RAINFALL (Inches.)
	Daily Max.	Daily Min.	at 8 a.m.		
			Dry.	Wet.	
Sumburgh Head.....	42.5	35.0	39.5	37.9	4.33
Stornoway .....	41.4	33.9	39.2	38.2	5.66
Wick .....	42.1	32.6	38.0	36.6	3.18
Nairn .....	41.7	32.8	37.0	35.5	2.08
Aberdeen .....	42.0	32.5	36.9	35.3	3.34
Leith .....	44.2	33.7	38.6	37.0	2.01
Shields .....	43.1	34.3	38.5	37.2	2.74
York .....	42.7	32.4	36.8	35.7	2.45
Loughborough .....	43.1	32.9	36.9	35.9	2.36
Ardrossan .....	44.6	36.0	40.1	38.7	4.04
Donaghadee.....	43.1	36.2	40.2	39.2	2.84
Holyhead .....	46.7	39.3	43.0	41.4	3.84
Liverpool .....	43.8	36.0	39.3	37.6	2.70
Parsonstown .....	44.8	33.2	37.9	36.6	3.02
Valencia .....	50.0	40.0	44.6	42.8	5.82
Roche's Point .....	48.0	39.0	42.9	41.5	4.74
Pembroke.....	47.1	40.6	43.9	42.5	4.08
Sally .....	49.8	43.8	47.1	45.4	4.10
Jersey .....	47.7	40.1	43.4	41.8	3.87
Hurst Castle .....	46.1	36.9	40.9	40.2	2.84
Dover .....	44.7	36.8	40.3	39.1	3.20
LONDON .....	44.7	34.6	38.5	37.4	2.14
Oxford .....	43.6	34.3	37.7	36.6	2.13
Cambridge .....	43.6	32.3	36.9	36.1	1.99
Yarmouth .....	42.1	34.2	38.3	37.5	2.95

**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 29.8 in. over Ireland, Scotland, the coast of Norway, and neighbouring parts of the Atlantic; 29.5 in. and more over the Baltic Provinces; lowest, about 29.5 in. in a depression over Western Germany and in another over the extreme south of France; 29.7 in. and less over Wales and the southwest of England; 29.6 in. and less over the Spanish Peninsula.

Gradients extremely variable, but increasing for N. winds on our extreme north and west coasts.

Barometer rising in the northwest and north, falling over Germany and France, changing but little over England.

## TEMPERATURE

Highest, 47° at Scilly, 44° at Valencia (Ireland) and Lister, 43° at Hunt Castle and Skelmullet, 42° at Holyhead.

Lowest, 23° at Paris, 26° at Lyons, 29° at Munich, Hanover, and Brussels, 31° at Berlin and Tams, 35° in London.

It is falling decidedly over the northern and northern part of our islands, and the change appears to be spreading to England.

## WIND

N. at the Irish and Scotch stations, fresh to strong in force, and is reported to have blown a gale at Skelmullet in the night.

Elsewhere it is extremely variable and light, but mainly S.W. at the Swedish stations.

## WEATHER

Very cloudy or overcast generally, with rain at some northern and northwestern stations, snow at Christiansund and Stornoway; fog or haze prevails very generally at the English, Dutch and Danish stations.

Rainfall in Scotland and the northeast of Ireland has been very large.

## SEA

Rough in the north and extreme northwest, and also at the mouth of the Channel, moderate at the other western stations, slight or smooth in the east and south.

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The general appearance is very unsettled; the strong N. winds in Ireland and Scotland appear likely to increase in force and spread to England.

## FORECASTS

For the 24 hours ending at NOON on 4<sup>th</sup> DEC<sup>r</sup> 1890.

### DISTRICTS.

### FORECASTS.

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

0, 1 } N. winds, strong to a gale; snow showers

2, 3 } Calms followed by increasing N. winds and cold showers.

4, 5 } Calms and Variable airs; cold, foggy, doubtful later.

### DISTRICTS.

### FORECASTS.

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

Same as No 0 and 1.

Same as No 5.

9, 10 } N. gales and strong winds; cold showers.

### WARNINGS

The NORTH CONE has been hoisted this morning in districts 0, 6, 7, 9, and part of 1.

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

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



# YESTERDAY'S 2 P.M. REPORTS.

	BAR:	THER:		WIND		WEA	SEA		BAR:	THER:		WIND		WEA	SEA
		D.	W.	D.	F.					D.	W.	D.	F.		
Skudesnaes ...	29.86	43	41	S	8	O	6		Holyhead ...	29.73	45	45	1	dgm	1
Sumburgh Head ...	29.69	48	48	WNV	1	O	3		Valencia ...	29.73	51	51	2	tm	2
Stornoway ...	29.80	48	47	NE	3	bc	3		Scilly ...	29.66	47	48	3	c	6
Aberdeen ...	29.75	48	48	WNV	1	omr	3		Jersey ...	29.74	35	34	SE	c	3
Shields ...	29.76	38	37	SW	3	c	2		Dungeness ...	29.78	38	36	SW	c	2
Ardrossan ...	29.70	49	49	W	1	r	1		London ...	29.79	37	35	S	of	3
Malin Head ...	29.78	49	49	NNE	3	O	3		Yarmouth ...	29.79	35	34	SSW	om	3
Mullaghmore ...	29.77	50	49	NNE	4	ogt	4		Rochefort ...	29.67	33	32	ESE	m	*
Belmullet ...	29.80	50	50	NNE	4	O	*								

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

Weather dull and unsettled over nearly the whole of Europe, with fog or mist in many places and rain in Ireland and the south of Scotland, as well as in isolated parts of Russia and Austria. Fine at a few of the Mediterranean stations, but a thunderstorm reported at Brindisi. No important change taking place during day, but rain becoming general in the west and north of our Islands; falls heavy in the south of Scotland and the northern parts of England and Ireland.

Temperature highest 64° at Malta, 61° at Brindisi, 55° at Sangunaire and Cagliari, and 52° at Rome, Naples, Palermo and Constantinople, reaching 50° at some of the Irish and Scotch stations. Lowest (1) 12° at Charkov and 21° at Kiev; (2) 21° at Lyons, 23° at Munster, Paris, and Brest, and 24° at Munich; and (3) 33° at York, Loughborough and Cambridge. Daily maxima below 40° in most parts of England, France, and Germany, and as low as 35° at Cambridge.

Wind light or moderate from the SE<sup>w</sup> over nearly the whole of Denmark and Central Europe, and also in the east and southeast of England; light from the E<sup>w</sup> in France and the southwest and south of our Islands, NE<sup>z</sup> in Spain and N<sup>z</sup> in Italy, but S<sup>z</sup> in Algeria. Light and variable over the northern parts of the United Kingdom, moderate to strong from the SW<sup>w</sup> or W<sup>w</sup> over Scandinavia and northern Russia. Moderate N<sup>z</sup> breezes setting in later in the extreme west and north of our Islands.

Barometer highest 30.3 in. to 30.6 in. and upwards in a large anticyclone lying over the central and southern parts of Russia. Lowest 29.3 in. in a large and rather deep depression over the White Sea, 29.6 in. and less, in a small disturbance lying to the westward of Scandinavia; 29.7 in. and less, in a large shallow area over the Bay of Biscay and our extreme southwestern coasts. High pressure system beginning to appear later to the northward of our Islands.

### EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

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

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

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

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



# DAILY WEATHER REPORT.

for Thursday, 4<sup>th</sup> December, 1890.

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

STATIONS.		YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
		BAROM.  Reading at 32° F. and Sea Level.	TEMP.  Dry.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Weather.	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 ...	29.75	15	Z	0	bc	29.86	+ .25	6	6	- 21	Z	0	b	*	30	?	0.08	
	Hernösand ...	29.88	32	N	2	o	30.00	+ .33	26	24	- 9	NW	4	b	*	30	30	0.08	
	Stockholm ...	29.78	36	Z	0	r	29.84	- .00	32	32	- 4	N	6	s	*	30	28	0.08	
	Wisby ...	29.79	37	S	4	o	29.75	- .13	36	35	0	S	2	o	*	37	34	0.08	
	Bodö ...	29.89	35	NW	4	bc	30.01	+ .31	32	31	- 3	ESE	4	c	2	36	30	0.08	
	Christiansund ...	30.06	35	ESE	1	b	30.19	+ .32	35	34	0	ESE	1	c	4	37	32	0.08	
	Skudesnaes ...	29.82	41	NW	2	o	30.01	+ .31	40	36	0	ESE	2	bc	3	37	37	0.08	
	Christiania Fjord (Færdier) ...	29.80	37	NNE	4	m	29.97	+ .23	35	33	- 4	N	6	b	2	39	34	0.08	
	Skagen (The Scaw) ...	29.84	37	NE	4	o	29.88	+ .14	35	34	- 1	NE	7	o	4	39	34	0.08	
	Fanö ...	29.67	34	N	1	f	29.76	+ .04	35	35	+ 4	N	4	o	*	36	30	0.04	
BRITISH ISLANDS.	Sumburgh Head ...	30.08	33	N	4	s	30.17	+ .32	39	36	+ 3	NE	3	c	5	40	33	0.02	
	Stornoway ...	30.14	38	N	6	gph	30.20	+ .21	39	37	+ 6	NE	4	o	4	40	32	0.02	
	Wick ...	30.12	38	NE	5	o	30.19	+ .27	39	38	+ 1	NE	3	c	3	41	35	0.06	
	Nairn ...	30.08	40	NE	4	o	30.15	+ .24	39	38	+ 2	E	4	r	4	41	37	0.10	
	Aberdeen ...	30.05	38	NNE	6	bcgpp	30.10	+ .28	39	36	0	N	4	gpp	6	43	35	0.08	
	Leith ...	29.98	41	NE	3	c	30.06	+ .25	40	38	0	ESE	4	bc	*	45	36	0.20	
	Shields ...	29.82	45	NE	5	r	29.95	+ .27	43	40	+ 4	N	7	op	6	46	36	0.20	
	Spurn Head ...	29.77	37	NW	2	o	29.81	+ .09	44	43	+ 7	NE	5	cp	5	44	35	0.02	
	York ...	29.79	36	NW	1	o	29.89	+ .16	42	40	+ 6	N	2	bc	*	43	35	0.03	
	Loughborough ...	29.79	36	NNE	2	o	29.81	+ .09	42	40	+ 6	NNE	4	og	*	42	35	0.02	
GERMANY & HOLLAND.	Ardrossan ...	29.96	41	ESE	3	b	30.07	+ .26	37	36	- 2	NE	1	bm	1	42	34	0.09	
	Malin Head ...	30.00	42	NE	5	bcp	30.07	+ .20	41	38	- 1	NE	5	o	3	43	39	0.10	
	Mullaghmore ...	29.99	42	NNE	7	o	30.06	+ .19	40	37	- 3	NE	5	o	4	43	39	0.10	
	Belmullet ...	30.04	41	NNE	6	o	30.09	+ .13	38	35	- 5	E	2	b	*	43	36	0.04	
	Donaghadee ...	29.93	46	NE	7	c	30.04	+ .24	41	39	- 2	ESE	7	bc	5	46	40	0.01	
	Liverpool (Bidston) ...	29.82	38	N	1	o	29.93	+ .27	39	37	+ 4	NNE	2	o	2	42	35	0.09	
	Holyhead ...	29.81	46	NNE	6	ogm	29.95	+ .27	43	40	+ 1	NE	4	cg	4	47	41	0.10	
	Parsonstown ...	29.92	40	NW	1	o	30.01	+ .20	31	30	- 10	Z	0	bc	*	42	31	0.10	
	Valencia ...	29.89	41	NE	6	bc	29.98	+ .11	40	37	- 4	NE	4	c	5	45	38	0.10	
	Roche's Point ...	29.87	41	NNE	5	c	29.93	+ .17	38	36	- 4	NNE	4	b	4	48	35	0.10	
FRANCE AND BELGIUM.	Pembroke (St. Ann's Hd.) ...	29.76	41	ESE	3	o	29.87	+ .20	42	41	+ 1	NE	3	cy	2	44	37	0.06	
	Scilly ...	29.64	46	ESE	1	o	29.77	+ .13	45	43	- 2	NE	4	cy	4	47	42	0.08	
	Prawle Point ...	29.72	43	ESE	2	o	29.78	+ .06	39	38	- 4	N	4	om	2	44	35	0.10	
	Jersey (St. Aubin's) ...	29.71	34	Z	0	b	29.69	- .02	43	41	+ 6	NW	3	rm	3	44	32	0.20	
	Hurst Castle ...	29.73	41	E	3	m	29.70	- .02	42	41	+ 1	NE	3	or	1	43	37	0.03	
	Dungeness ...	29.67	41	ESE	3	c	29.62	- .10	43	42	+ 6	E	5	r	4	43	34	0.20	
	London ...	29.75	39	SSE	1	ogm	29.70	- .03	43	42	+ 8	NE	3	ogmd	*	43	35	0.01	
	Oxford ...	29.79	38	SE	1	o	29.76	+ .03	42	40	+ 7	N	4	og	*	42	35	0.01	
	Cambridge ...	29.77	36	NW	1	o	29.74	- .00	42	42	+ 8	N	1	od	*	42	33	0.01	
	Yarmouth ...	29.72	37	N	1	c	29.71	- .02	43	42	+ 9	ESE	3	og	4	43	31	0.04	
PENINSULA.	Cuxhaven ...	29.66	34	NE	2	f	29.72	- .00	33	32	0	ESE	1	f	*	34	32	0.04	
	Berlin ...	29.63	30	SE	3	f	29.70	- .01	30	30	- 1	Z	0	f	*	32	27	0.04	
	Wiesbaden ...	29.63	30	SE	3	f	29.75	+ .17	33	32	- 3	Z	0	f	*	36	32	0.04	
	Munich ...	29.58	33	SW	3	m	29.77	+ .23	29	29	0	SE	2	f	*	34	23	0.04	
	The Helder ...	29.65	38	NNE	1	f	29.72	- .01	35	35	- 1	E	1	f	1	41	?	0.04	
	Brussels (9 a.m.) ...	29.69	32	SE	1	o	29.69	- .03	32	32	+ 3	SE	1	o	*	37	29	0.32	
	Cape Gris Nez ...	29.70	41	NE	4	o	29.62	- .17	36	36	- 1	ESE	4	o	4	43	36	0.59	
	Paris ...	29.65	35	NW	3	o	29.60	- .11	33	33	+ 10	SSE	1	o	*	?	23	0.55	
	Brest ...	29.68	39	E	1	o	29.71	- .02	37	35	+ 2	E	2	o	4	41	30	0.55	
	Lorient ...	29.67	33	ESE	3	m	29.73	+ .03	40	37	+ 5	NNE	2	m	4	40	32	0.55	
PENINSULA.	Rochefort ...	29.65	37	N	2	o	29.60	- .04	34	33	+ 4	ESE	3	m	*	41	27	0.55	
	Belfort ...	29.65	32	NW	1	o	29.60	- .11	33	32	+ 2	NW	1	o	*	32	30	0.55	
	Lyons ...	29.67	30	N	1	f	29.75	+ .08	30	30	+ 4	NW	1	3	*	32	?	0.55	
	Nice ...	29.63	45	W	3	c	29.72	+ .22	43	42	+ 1	ESE	7	r	4	50	39	0.20	
	Perpignan ...	29.62	42	N	1	o	29.67	- .02	39	36	+ 5	SW	2	o	*	51	31	0.20	
	Biarritz ...	29.59	45	E	3	b	29.61	+ .05	32	31	- 9	NE	3	b	4	48	30	0.20	
PENINSULA.	Corunna ...	29.56	48	NNE	3	bc	29.52	- .17	42	41	+ 4	ESE	2	b	6	46	36	0.08	
	Lisbon ...	29.56	48	NNE	3	bc	29.57	- .16	50	46	+ 6	WSW	4	c	?	?	?	0.08	

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

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



# WEATHER CHARTS

for 8 a.m. on Thursday, 4<sup>th</sup> December.

1890.

## BAROMETER, WIND AND SEA.

### EXPLANATION OF MAP.

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

Changes since previous morning are stated in words.

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

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

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

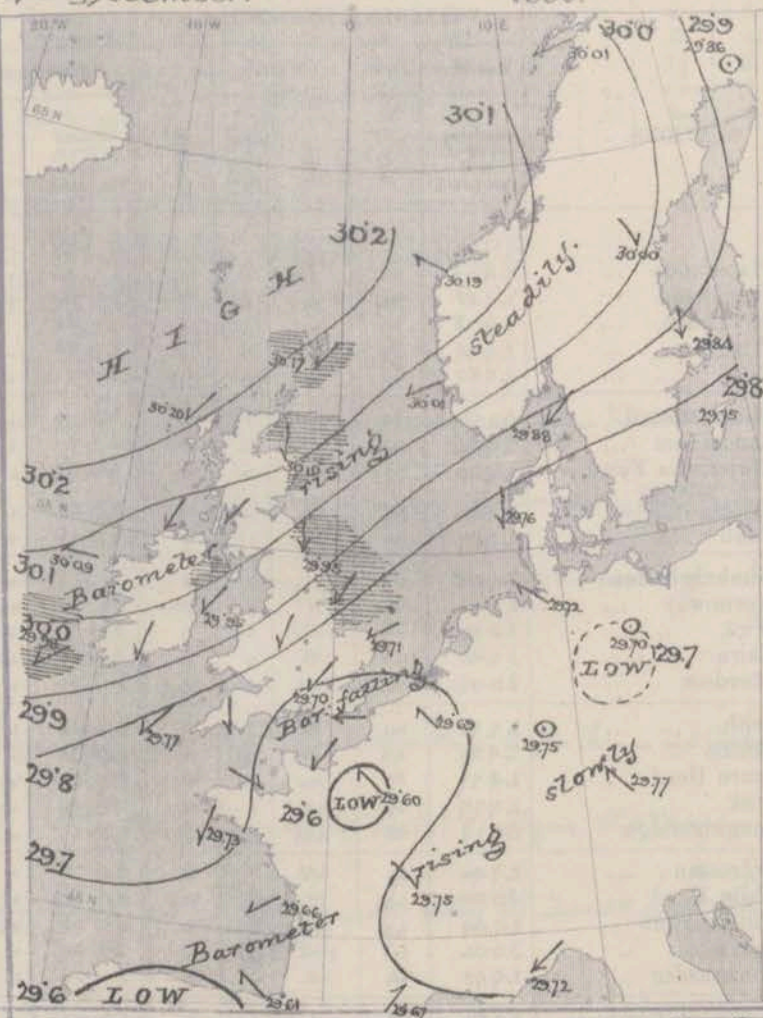
■ = Rough. ■ = High.

## MEAN HEIGHT OF THE BAROMETER

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

During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS.
Sumburgh Head	29.667
Stornoway	29.701
Wick	29.711
Nairn	29.739
Aberdeen	29.757
Leith	29.803
Shields	29.843
York	29.888
Loughborough	29.933
Ardrossan	29.819
Donaghadee	29.847
Holyhead	29.879
Liverpool	29.895
Parsonstown	29.900
Valencia	29.908
Roche's Point	29.915
Pembroke	29.918
Sally	29.922
Jersey	29.925
Hurst Castle	29.929
Dover	29.937
LONDON	29.951
Oxford	29.954
Cambridge	29.938
Yarmouth	29.914





# GENERAL SITUATION AT 8 A.M.

PRESSURE	Highest, 30.2 in. and upwards, in a large anticyclone lying to the northward and north-westward of our Islands. lowest, 29.4 in. and less, in a depression over Portugal, 29.6 in. and less, in a small disturbance near Paris. Gradients moderate over our Islands and the North Sea, but slight elsewhere. Barometer rising generally, but falling a little in the southeast of England and also in Portugal.
TEMPERATURE	Highest, 50° at Lisbon, 45° at Scilly, 44° at Spurn Pt., and 43° at Holyhead, Jersey, Brest, Yarmouth, and in London. lowest, 6° at Haparanda, 26° at Hermon, 23° at Munich, 30° at Berlin and Lyons and 31° at Astrakhan. The maxima registered yesterday were below 45° in many parts of Great Britain.
WIND	Chiefly NE <sup>2</sup> and moderate in force, but strong on the northeast coasts of England and Ireland, as well as in the north of Denmark. In Germany and the east of France calm or variable air are reported, while at Lisbon the wind is light from the SW. Fine in Ireland and the south of Scotland as well as in Scandinavia.
WEATHER	Cloudy or overcast elsewhere, with rain in the eastern and southern parts of Great Britain, as well as at Nice, and snow at Stockholm and Lyons. A little rain fell yesterday in most parts of the United Kingdom, and hail or snow in the north of Scotland.
SEA	Rough on many parts of our northwest, north, and northeast coasts, but moderate to smooth elsewhere.

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

There are at present no indications of any very decided change in the weather, but some decrease in temperature is probable over our Islands.

The anticyclone in the north seems likely to spread slowly southwards.

## FORECASTS

For the 24 hours ending at NOON on 5<sup>th</sup> DEC<sup>r</sup> 1890.

DISTRICTS.		FORECASTS.		DISTRICTS.		FORECASTS.	
0	SCOTLAND NORTH	{	NE <sup>2</sup> winds, moderate or fresh; showery to fair, colder.	6	SCOTLAND WEST	{	NE <sup>2</sup> winds, light; fair generally.
1	SCOTLAND EAST			7	ENGLAND N.W.		
2	ENGLAND N.E.	{	NE <sup>2</sup> winds, fresh or strong; changeable showery, colder.	8	ENGLAND S.W.	{	Same as No <sup>s</sup> 0 and 1. NE <sup>2</sup> winds, freshening; cloudy, some showers.
3	ENGLAND EAST			9	IRELAND NORTH		
4	MIDLAND COUNTIES	{	NE <sup>2</sup> winds, fresh; changeable, some showers, colder.	10	IRELAND SOUTH	{	NE <sup>2</sup> winds, moderate or fresh; fair generally.
5	ENGLAND SOUTH						
				WARNINGS			
				The NORTH CONE is still flying in districts 2 and 9 but has been lowered. This			

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.

The NORTH CONE is still flying in districts 2, 7, and 9 but has been lowered this morning in districts 0, 1, and 6.



# YESTERDAY'S 2 P.M. REPORTS.

	BAR:	THER:		WIND				SEA		BAR:	THER:		WIND				SEA
		D.	W.	D.	F.	WEA.					D.	W.	D.	F.	WEA.		
Skudesnaes ...	29.76	42	41	2	0	0	1			Holyhead ...	29.75	44	42	NE	5	ompg	5
Sumburgh Head ...	30.01	36	34	2	4	0	5			Valencia ...	29.91	46	39	NE	6	bcn	5
Stornoway ...	30.07	39	38	2	4	bc	4			Scilly ...	29.62	47	47	SSE	1	0	5
Aberdeen ...	29.91	41	39	NE	7	cqpu	6			Jersey ...	29.69	42	38	ESE	3	6	3
Shields ...	29.73	46	44	NE	4	r	4			Dungeness ...	29.68	41	39	ENE	2	bc	2
Ardrossan ...	29.89	42	39	2	1	c	1			London ...	29.72	41	39	2	0	ofg	3
Malin Head ...	29.93	42	38	NE	6	0	4			Yarmouth ...	29.72	36	85	WNW	2	5	3
Mullaghmore ...	29.94	43	39	NE	7	0	6			Rocheport ...	29.66	41	39	ESE	2	c	4
Belmullet ...	30.00	43	38	NE	7	0	*										

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

Weather cloudy or overcast in nearly all parts of our Islands and the Continent, with mist or fog in many places, rain in the west and north of the United Kingdom and snow at Christiana<sup>Stornoway</sup> and Belfast. Fine over central France, and also in Poland and Tunis. Rain falling during day in nearly all parts of our Islands and hail or snow in the north of Scotland.

Temperature highest 53° at Brindisi, 56° at Legna and Malta, 55° at La Cella, and 54° at Palermo and Nemours; above 50° over the central and southern parts of the Mediterranean generally. Lowest, 21° at Kiev, 23° at Lemberg and Paris, 24° at Kharkov, and 26° at Archangel and Lyons; below the freezing point in central Spain and very little above it over the central and eastern parts of England. Daily maxima below 45° in most parts of Great Britain and France; thermometer at Lyons not exceeding 32°.

Wind N<sup>3</sup> in Ireland and Scotland, with a gale in the extreme northwest; light in force and chiefly S<sup>3</sup> over the eastern parts of England. Light or moderate from the SE<sup>2</sup> over the Adriatic, Austria, the south of Russia, and eastern Germany; S<sup>3</sup> in Sweden, SW<sup>3</sup> in the north of Russia. Variable over Italy and the east and south of France. E<sup>3</sup> over Spain and the Bay of Biscay, S<sup>3</sup> in Algeria. Strong N<sup>1</sup> or NE<sup>3</sup> winds setting in later over all the more western and northern parts of the United Kingdom.

Barometer highest 30.5 in: and upwards, in an anticyclone lying over Russia; 30.0 in: and upwards in another system lying to the northwestward of our Islands. Lowest, 29.6 in: and less, in a depression lying over Lapland, and also in an irregularly shaped disturbance lying over Western Germany, Switzerland, the south of France, and the north of Italy; 29.7 in: and less, in a shallow system over Wales and the southwest of England, and also in two smaller areas lying respectively near Skudesnaes and Shields. Anticyclone to the northwestward of our Islands subsequently spreading southeastward, and barometer rising in all parts 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 Friday, 5<sup>th</sup> December, 1890.

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

STATIONS.		YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
		BAROM.  Reading at 32° F. and Sea Level.	TEMP.  Dry.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Weather.	Sea (0 to 12.)	SHADE TEMP.		Amount of Rainfall.	
				Direc.	Force. (0 to 12.)		Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Direc.	Force. (0 to 12.)			Max.	Min.		
SCANDINAVIA.	Haparanda ...	29.83	17	SW	2	0	29.78	-0.05	23	22	+17	NE	2	bc	*	?	3	-	
	Hernösand ...	30.15	21	W	0	0	29.98	-0.02	33	32	+7	NW	4	b	*	34	18	-	
	Stockholm ...	30.03	30	N	4	b	30.08	+0.05	21	20	-11	NW	2	b	*	37	?	0.04	
	Wisby ...	29.89	36	E	6	r	29.97	+0.08	34	31	-2	ESE	4	b	*	37	32	0.12	
	Bodö ...	29.93	41	SW	8	m	29.97	-0.04	43	41	+11	W	4	b	2	?	?	0.08	
	Christiansund ...	30.28	36	ESE	1	0	30.25	+0.03	38	35	+3	NW	1	0	4	?	?	-	
	Skudenes ...	30.23	38	E	4	0	30.23	+0.00	29	27	-11	NNE	2	bc	2	?	?	-	
	Christiania Fjord (Pæder) ...	30.19	34	NNE	5	0	30.19	+0.00	31	29	-4	NW	3	b	1	36	30	-	
	Skagen (The Scaw) ...	30.13	32	NE	5	0	30.16	+0.03	31	27	-4	NE	2	b	3	36	30	-	
	Fanö ...	30.02	33	ESE	6	0	30.10	+0.08	30	29	-5	ESE	4	c	*	36	30	-	
BRITISH ISLANDS.	Sumburgh Head ...	30.18	41	NE	4	0	30.19	+0.01	38	37	-1	W	0	c	3	42	36	-	
	Stornoway ...	30.14	39	E	4	bc	30.05	-0.09	39	37	-2	SE	4	bc	4	41	35	-	
	Wick ...	30.17	40	NE	3	0	30.14	-0.03	42	38	+4	SE	5	c	3	44	37	0.03	
	Nairn ...	30.12	38	E	1	0	30.09	-0.03	36	36	0	E	1	0	2	41	36	0.06	
	Aberdeen ...	30.09	43	E	4	oggy	30.12	+0.03	41	36	+5	E	6	oggy	7	43	39	0.04	
	Leith ...	30.03	43	NE	5	0	30.03	-0.00	41	38	+3	E	4	0	*	44	38	0.08	
	Shields ...	29.98	44	NE	4	oggy	29.97	-0.01	43	40	-3	E	7	0	6	45	39	0.02	
	Spurn Head ...	29.82	42	NE	7	r	29.89	+0.07	42	40	-2	E	5	0	5	45	40	0.12	
	York ...	29.89	43	E	1	c	29.93	+0.04	40	40	0	ESE	1	0	*	46	39	0.06	
	Loughborough ...	29.80	42	NE	3	r	29.88	+0.08	37	36	-1	E	2	og	*	48	37	0.08	
GERMANY & HOLLAND.	Ardrossan ...	30.02	40	NE	3	0	29.97	-0.05	40	39	+1	ESE	4	om	2	41	36	-	
	Malin Head ...	30.02	42	ESE	4	0	29.90	-0.12	43	41	+2	E	5	oggy	3	43	41	0.01	
	Mullaghmore ...	29.99	41	E	5	0	29.87	-0.12	42	40	+2	E	5	oggy	4	43	36	-	
	Belmullet ...	30.01	38	E	2	0	29.85	-0.16	40	39	+1	E	2	c	*	42	36	0.03	
	Donaghadee ...	29.99	43	NE	6	bc	29.90	-0.09	44	42	+2	E	7	og	5	44	40	-	
	Liverpool (Bidston) ...	29.88	42	NE	3	0	29.87	-0.01	39	37	+2	ESE	3	0	3	43	39	0.04	
	Holyhead ...	29.89	45	NE	5	og	29.83	-0.06	41	39	-2	E	4	c	4	46	41	-	
	Parsonstown ...	29.96	36	W	0	bc	29.78	-0.18	41	40	+1	W	0	0	*	42	30	0.02	
	Valencia ...	29.93	37	NNE	1	bc	29.73	-0.20	42	40	+2	E	2	og	1	42	37	-	
	Roche's Point ...	29.89	38	NE	3	0	29.74	-0.15	42	42	0	NE	3	p	4	45	36	0.02	
FRANCE AND BELGIUM.	Pembroke (St. Ann's Hd.) ...	29.60	43	NE	3	c	29.74	-0.13	40	39	-1	E	4	oggy	3	44	39	0.02	
	Scilly ...	29.70	47	NNE	5	c	29.60	-0.10	45	44	+1	ESE	5	oggy	4	45	42	0.07	
	Prawle Point ...	29.66	41	NNE	5	r	29.66	0.00	44	42	+2	E	6	oggy	5	44	38	0.21	
	Jersey (St. Aubin's) ...	29.59	42	ESE	3	oggy	29.68	+0.09	37	36	-1	E	4	oggy	3	45	36	0.25	
	Hurst Castle ...	29.68	42	ESE	6	0	29.75	+0.07	40	38	-2	E	6	m	4	43	38	0.06	
	Dungeness ...	29.71	38	SE	3	0	29.79	+0.08	39	38	-1	E	5	c	3	43	35	0.06	
	London ...	29.76	38	E	3	od	29.83	+0.07	37	35	-2	ESE	3	og	*	45	35	0.08	
	Oxford ...	29.77	39	NE	3	0	29.84	+0.07	36	35	-1	E	1	og	*	43	35	0.02	
	Cambridge ...	29.78	41	N	2	r	29.88	+0.10	38	37	-1	ESE	1	0	*	44	36	0.13	
	Yarmouth ...	29.78	41	E	5	oggy	29.86	+0.08	40	38	-2	ESE	5	0	4	43	37	0.08	
PENINSULA.	Cuxhaven ...	29.87	33	NE	3	r	30.03	+0.16	34	33	+1	ESE	3	c	*	34	32	0.12	
	Berlin ...	29.89	29	W	0	f	29.95	+0.06	30	29	-1	NW	2	f	*	30	28	-	
	Wiesbaden ...	*	*	*	*	*	29.88	+0.13	33	32	+1	N	3	0	*	36	32	-	
	Munich ...	29.85	30	E	4	m	29.82	-0.03	27	27	0	E	5	f	*	32	27	-	
	The Helder ...	29.89	34	E	1	f	29.96	+0.07	34	33	-1	E	2	f	3	36	34	-	
	Brussels (9 a.m.) ...	*	*	*	*	*	29.85	+0.16	30	30	-2	ESE	3	0	*	35	28	-	
	Cape Gris Nez ...	29.77	33	SE	2	0	29.80	+0.03	32	32	0	E	5	0	5	39	30	-	
	Paris ...	29.76	34	E	2	0	29.73	-0.03	34	33	+1	ESE	2	0	*	36	33	0.28	
	Brest ...	29.68	44	NNE	1	r	29.56	-0.12	40	39	+1	ESE	3	0	3	45	36	0.43	
	Lorient ...	29.60	42	NW	1	r	29.56	-0.04	37	36	-1	ESE	4	r	4	45	36	0.39	
PENINSULA.	Rochefort ...	29.67	36	ESE	3	m	29.58	-0.09	32	31	-1	E	3	m	*	43	23	-	
	Belfort ...	?	30	NW	1	0	?	?	28	?	-4	NW	1	0	*	37	25	-	
	Lyons ...	29.76	32	NW	4	0	29.75	-0.01	32	32	0	N	1	f	*	36	?	0.08	
	Nice ...	29.78	42	ESE	4	r	29.74	-0.04	49	42	+7	NE	4	c	4	49	41	0.55	
	Perpignan ...	29.61	44	W	2	0	29.53	-0.08	41	41	0	W	2	0	*	46	?	-	
	Biarritz ...	29.59	40	E	3	0	29.51	-0.08	40	37	+3	S	4	r	2	46	?	0.32	
	Corunna ...	29.51	46	NW	3	0	29.66	+0.15	47	44	-3	NW	4	b	?	52	45	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

Friday, 5<sup>th</sup> December.

1890.

## BAROMETER, WIND AND SEA.

### EXPLANATION OF MAP.

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

Changes since previous morning are stated in words.

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

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

→ = forces 5 to 7; → = forces 1 to 4.

☉ = dead calm.

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

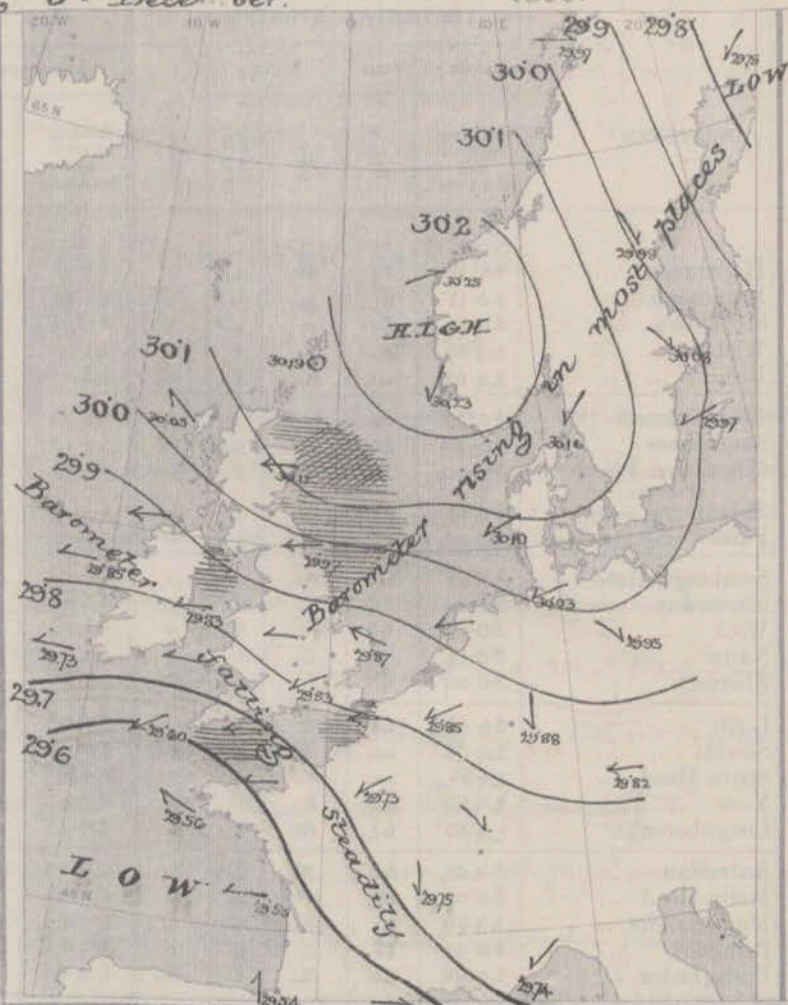
▨ = Rough. ▨ = High.

### MEAN HEIGHT OF THE BAROMETER

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

During the 15 Years; 1871—1885.

STATIONS.	MEAN READINGS.
Sunburgh Head .....	29.087
Stornoway .....	29.701
Wick .....	29.711
Nairn .....	29.739
Aberdeen .....	29.757
Leith .....	29.893
Shields .....	29.843
York .....	29.888
Loughborough .....	29.923
Ardrossan .....	29.819
Donaghadee .....	29.847
Holyhead .....	29.879
Liverpool .....	29.895
Parsonstown .....	29.909
Valencia .....	29.908
Roche's Point .....	29.915
Pembroke .....	29.918
Sally .....	29.962
Jersey .....	29.985
Hurst Castle .....	29.939
Dover .....	29.957
LONDON .....	29.951
Oxford .....	29.954
Cambridge .....	29.938
Yarmouth .....	29.914



## 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.

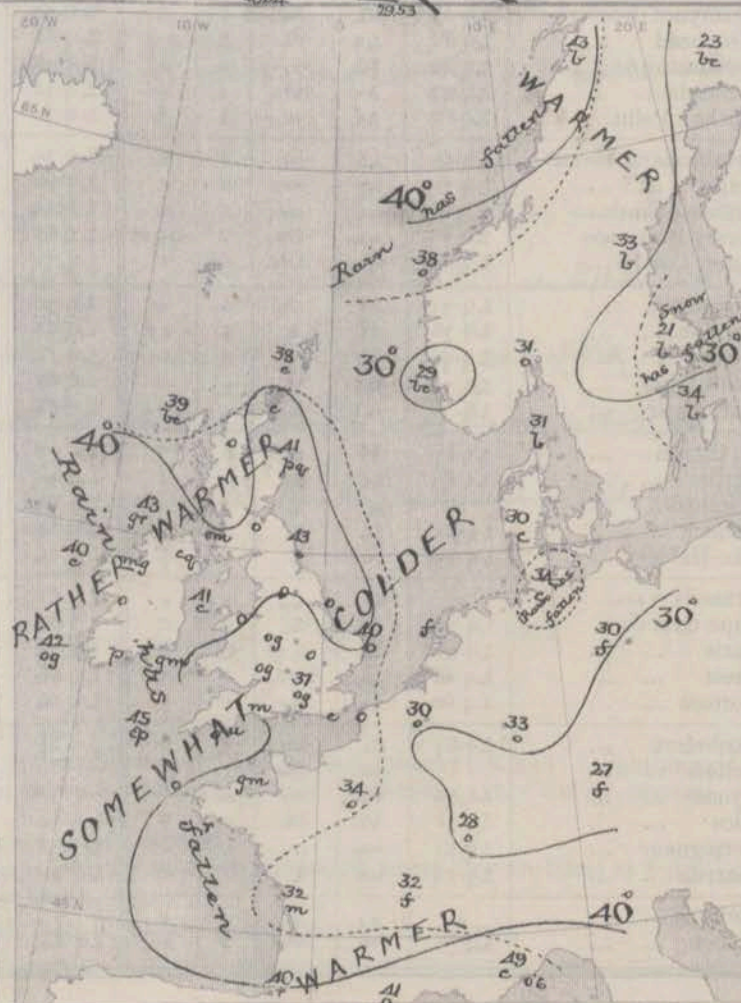
**RAINFALL**—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of .0.5 in. or more are quoted in figures.

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

(For the month of December.)

STATIONS.	TEMPERATURE.				RAINFALL (Inches.)
	Daily Max.	Daily Min.	at 8 a.m.	at 8 a.m.	
			Dry.	Wet.	
Sunburgh Head .....	42.5	35.0	39.5	37.9	4.35
Stornoway .....	41.4	33.9	39.2	38.2	5.66
Wick .....	42.1	32.6	38.0	36.6	3.18
Nairn .....	41.7	32.8	37.0	35.5	2.08
Aberdeen .....	42.0	32.5	36.9	35.3	3.34
Leith .....	44.2	33.7	38.0	37.0	2.01
Shields .....	43.1	34.3	38.5	37.2	2.74
York .....	42.7	32.4	38.8	35.7	2.45
Loughborough .....	43.1	32.9	38.9	35.9	2.36
Ardrossan .....	44.6	36.0	40.1	38.7	4.04
Donaghadee .....	45.1	36.7	40.2	39.2	2.84
Holyhead .....	46.7	39.3	43.0	41.4	3.84
Liverpool .....	43.8	36.0	39.3	37.6	2.70
Parsonstown .....	44.8	33.2	37.9	36.6	3.02
Valencia .....	50.0	40.0	44.6	42.3	5.82
Roche's Point .....	48.0	39.0	42.9	41.5	4.74
Pembroke .....	47.1	40.6	43.9	42.5	4.05
Sally .....	49.8	43.8	47.1	45.4	4.10
Jersey .....	47.7	40.1	43.4	41.8	3.87
Hurst Castle .....	46.1	36.9	40.9	40.2	2.84
Dover .....	44.7	36.8	40.3	39.1	3.20
LONDON .....	44.7	34.0	38.5	37.4	2.14
Oxford .....	43.6	34.3	37.7	36.6	2.13
Cambridge .....	43.5	32.3	36.9	36.1	1.99
Yarmouth .....	42.4	34.3	38.3	37.5	2.95

**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, 30.2 in. and upwards, in an anticyclone lying over and to the westward of Norway.

Lowest, 29.6 in. and less, in a depression lying over the Bay of Biscay, the south of France, and the north of Spain.

Gradients slight but somewhat irregular. Barometer falling steadily on the west coast of our Islands and France, but rising elsewhere.

## TEMPERATURE

Highest, 43° at Nice, 41° at Lisbon, 45° at Sicily, 44° at Benghazi and Pirelli Point, and 43° at Porto, Shields, and Malin H.

Lowest, 21° at Stockholm, 23° at Haparanda, 27° at Munich, 28° at Belfast, 29° at Skudsmoes, and 30° at Tane and Roussels.

The maxima registered yesterday were below 45° in many parts of the United Kingdom.

## WIND

Chiefly E<sup>ly</sup>, and strong in force on several of the more exposed parts of our coast.

Light from the W<sup>nd</sup> in the west of Norway and from the N<sup>nd</sup> in Sweden.

Variable in Germany and the east of France; S<sup>ly</sup> at Biarritz.

## WEATHER

Dull in most parts of our Islands and France, with local showers.

Fine in Scandinavia and Denmark; foggy in Germany.

Rain fell yesterday in nearly all parts of the United Kingdom and France.

## SEA

High at Aberdeen, and rather rough on nearly all the more exposed parts of our coast.

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The depression over the Bay of Biscay appears to be increasing both in size and depth, and is inclined to move northwards. The gradients over our Islands are likely to become steeper and easterly gales are probable on many parts of our northern coasts.

## FORECASTS

For the 24 hours ending at NOON on 6<sup>th</sup> DEC<sup>r</sup> 1890.

### DISTRICTS.

### FORECASTS.

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

E<sup>ly</sup> strong winds and gales; cloudy, showery.

Same as N<sup>o</sup> 5.

E<sup>ly</sup> winds, light; dull, local showers.

E<sup>ly</sup> winds, moderate inland, strong on coast; cloudy, some showers.

### DISTRICTS.

### FORECASTS.

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

E<sup>ly</sup> winds, increasing in force; dull, some rain.

E<sup>ly</sup> winds, strong; dull, showery.

Same as N<sup>o</sup> 6 and 7.

E<sup>ly</sup> winds, freshening; dull, some rain.

### WARNINGS

The NORTH CONE has been hoisted this morning in districts 0 to 2 and 6, and rehoisted in districts 7 and 9.

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

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



# YESTERDAY'S 2 P.M. REPORTS.

	BAR:	THER:		WIND		WEA	SEA		BAR:	THER:		WIND		WEA	SEA
		D.	W.	D.	F.					D.	W.	D.	F.		
Skudesnaes ...	30.13	39	32	ENE	4	c	?		Holyhead ...	29.91	45	41	NE	4	c
Sumburgh Head ...	30.18	40	38	NE	3	c	3		Valencia ...	29.95	42	39	NE	3	om
Stornoway ...	30.18	39	38	NE	3	c	3		Scilly ...	29.76	48	45	NE	5	c
Aberdeen ...	30.09	41	38	ENE	5	cq p	6		Jersey ...	29.62	44	43	NE	3	o
Shields ...	29.94	44	41	NE	3	o	6		Dungeness ...	29.67	38	37	E	4	c
Ardrossan ...	30.05	41	40	NE	3	c	2		London ...	29.70	45	43	ENE	2	omgr
Malin Head ...	30.05	42	38	ENE	5	o	3		Yarmouth ...	29.72	42	41	E	5	ogd
Mullaghmore ...	30.03	43	40	ENE	6	6	5		Rochefort ...	29.67	40	39	ENE	3	m
Belmullet ...	30.04	42	40	E	2	6	*								

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

Weather cloudy, or overcast over the greater part of Europe, with fog at several of the German stations, rain in the eastern and southern parts of Great Britain, as well as in some parts of France, and snow at Krasie, Stockholm, Cracow, Lyons and Madrid. Fine in Ireland and the south of Scotland as well as at many of the Scandinavian and Spanish stations. Rain falling later in most parts of the United Kingdom and France.

Temperature highest 53° at Brindisi, 58° at Malta, 57° at Leria, 55° at Naples and Constantinople, above 50° at nearly all the Mediterranean stations. Lowest, 6° at Haparanda, 10° at Moscow, 13° at Uleaborg, 24° at Riga and Lwinamunde, and 26° at Hermand and Breslau, below the freezing point in many parts of northern, eastern, and central Europe, and also over Central Ireland. Daily maxima below 45° over the greater part of the United Kingdom and below 40° over Central France.

Wind moderate to strong from the NE<sup>th</sup> over our Islands, the eastern shores of the North Sea, the west and south of France, and the northern and central parts of Spain, N<sup>th</sup> in Sweden, but light from the S<sup>th</sup> over the greater part of Russia, and moderate from the same quarter or from SE. over Italy and the Adriatic. Light and variable over Central Europe and also in Algeria. No important change occurring during day.

Barometer highest 30.2 ins: and upwards in an anticyclone lying to the northward and northward of our Islands and also in another system lying over Russia. Lowest 29.4 ins: and less, in a depression over Portugal; 29.6 ins: and less, in a small disturbance lying near Paris, and 29.7 ins: and less, in two further systems lying respectively over the White Sea and over Eastern Germany. Depression over Spain subsequently travelling slowly northwards, small system near Paris moving westward.

### EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

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

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

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

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



# DAILY WEATHER REPORT.

for *Saturday, 6<sup>th</sup> December, 1890.*

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

STATIONS.	YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
	BAROM.  Reading at 32° F. and Sea Level.	TEMP.  Dry.	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 ...	30.08	10	Z	0	b	30.02	+ 24	23	23	0	S	2	0	*	28	7	-
	Hernösand ...	30.15	24	Z	0	b	30.15	+ 17	23	23	- 10	X	0	0	*	36	12	-
	Stockholm ...	30.03	83	NNE	2	b	30.16	+ 08	27	26	+ 6	NE	2	0	*	36	19	-
	Wisby ...	29.97	37	N	4	0	30.03	+ 06	33	31	- 1	ESE	4	0	*	37	32	-
	Bodö ...	30.10	42	NSW	4	c	29.99	+ 02	41	40	- 2	NSW	6	0	3	43	39	0.04
	Christiansund	30.25	37	ESE	1	b	30.23	- 02	36	2	- 2	NSW	1	0	3	?	30	-
	Skudeenes ...	30.21	34	E	1	b	30.25	+ 02	30	27	+ 1	N	1	0	2	36	28	-
	Christiania Fjord (Færder)	30.16	36	NSW	4	b	30.21	+ 02	36	34	+ 5	N	3	0	1	36	?	-
	Skagen (The Scaw)	30.16	34	ESE	1	b	30.19	+ 03	35	34	+ 4	E	1	0	2	32	30	-
	Fanø ...	30.15	26	NE	2	b	30.13	+ 03	28	28	- 2	NE	3	0	*	32	25	-
BRITISH ISLANDS.	Sumburgh Head	30.20	37	Z	0	b	30.25	+ 06	38	36	0	Z	0	0	2	40	34	-
	Stornoway ...	30.06	41	S	4	0	30.20	+ 15	29	29	- 10	N	2	0	3	43	26	-
	Wick ...	30.15	40	SE	3	0	30.25	+ 11	42	38	0	SW	1	0	1	44	37	-
	Nairn ...	30.12	37	E	2	c	30.23	+ 14	29	29	- 7	Z	0	0	1	39	29	-
	Aberdeen ...	30.16	40	ESE	4	oggy	30.25	+ 13	40	37	- 1	E	2	0	5	41	39	0.01
	Leith ...	30.09	41	E	2	c	30.18	+ 15	41	37	0	E	2	0	*	42	37	-
	Shields ...	30.03	43	ESE	6	op	30.15	+ 18	41	36	- 2	E	4	0	6	43	37	0.02
	Spurn Head ...	29.97	41	E	6	b	30.07	+ 18	41	38	- 1	E	5	0	4	42	38	0.02
	York ...	29.95	40	SSE	1	0	30.13	+ 20	37	36	- 3	E	1	0	*	43	35	0.04
	Loughborough	29.94	39	E	3	0	30.04	+ 16	37	34	0	E	2	0	*	40	36	0.04
GERMANY & HOLLAND.	Ardrossan ...	30.04	40	NE	3	c	30.17	+ 20	38	37	- 2	NE	2	om	1	41	37	-
	Malin Head ...	29.96	41	SSE	3	op	30.09	+ 19	41	37	- 2	ESE	5	og	2	44	40	0.04
	Mullaghmore ...	29.93	43	E	4	ogm	30.05	+ 18	41	39	- 1	ESE	5	b	4	43	41	-
	Belmullet ...	29.92	39	E	2	0	30.05	+ 20	42	40	+ 2	E	3	c	*	43	39	0.02
	Donaghadee ...	29.99	44	E	4	0	30.11	+ 21	41	39	- 3	E	6	c	4	46	40	0.31
	Liverpool (Bidston)	29.94	40	E	4	0	30.05	+ 18	37	34	- 2	E	3	0	3	41	35	-
	Holyhead ...	29.91	40	E	4	0	29.98	+ 15	38	35	- 3	E	6	og	5	42	37	-
	Parsonstown ...	29.88	40	Z	0	0	29.96	+ 18	41	38	0	NE	2	c	*	43	36	-
	Valencia ...	29.81	44	E	2	0	29.91	+ 18	41	40	- 1	NE	3	ogm	4	45	35	0.01
	Roche's Point...	29.81	43	E	5	c	29.87	+ 13	41	41	- 1	E	5	f	4	45	39	0.65
FRANCE AND BELGIUM.	Pembroke (St. Ann's Hd.)	29.81	40	E	4	0	29.89	+ 15	38	37	- 2	ESE	4	ots	3	41	38	0.18
	Scilly ...	29.65	44	ESE	5	cg	29.71	+ 11	45	44	0	ESE	4	c	4	47	42	0.30
	Prawle Point...	29.70	41	E	7	r	29.81	+ 15	44	44	0	E	7	r	6	44	39	1.08
	Jersey (St. Aubin's)	29.66	41	ESE	3	ogm	29.81	+ 13	39	37	+ 2	E	3	ogm	3	45	36	0.27
	Hurst Castle ...	29.76	41	E	7	m	29.90	+ 15	39	38	- 1	E	7	c	5	43	38	0.06
	Dungeness ...	29.81	40	E	7	c	29.89	+ 10	38	36	- 1	SE	6	0	4	40	36	-
	London ...	29.86	40	ESE	5	0	29.95	+ 12	38	35	+ 1	E	4	og	*	41	36	-
	Oxford ...	29.88	39	E	3	0	29.99	+ 15	36	34	0	ESE	3	og	*	39	36	-
	Cambridge ...	29.92	39	E	1	0	30.03	+ 15	37	35	- 1	E	1	og	*	40	31	-
	Yarmouth ...	29.92	40	ESE	7	oggy	30.06	+ 20	39	37	- 1	E	6	cg	5	41	38	-
PENINSULA.	Cuxhaven ...	30.05	31	NE	2	c	30.10	+ 07	32	31	- 2	NE	2	c	*	34	30	-
	Berlin ...	29.98	32	N	2	0	30.02	+ 07	33	32	+ 3	NNE	3	c	*	36	?	-
	Wiesbaden ...	*	*	*	*	*	29.92	+ 04	34	32	+ 1	Z	0	0	*	39	32	-
	Munich ...	29.83	28	SE	3	0	29.83	+ 01	28	28	+ 1	NE	4	m	*	28	27	-
	The Helder ...	30.04	33	E	2	b	30.08	+ 12	33	32	- 1	ESE	2	b	3	36	32	-
	Brussels (9 a.m.)	*	*	*	*	*	29.95	+ 10	32	30	+ 2	ESE	4	0	*	34	?	-
	Cape Gris Nez	29.80	32	E	5	m	29.90	+ 10	32	31	0	E	5	0	5	36	30	-
	Paris ...	29.72	32	ESE	1	c	29.87	+ 14	32	31	- 2	ESE	2	0	*	?	31	0.04
	Brest ...	29.65	40	SE	3	r	29.70	+ 14	40	38	0	E	3	0	3	45	36	0.43
	Lorient ...	29.61	39	E	4	m	29.78	+ 22	40	39	+ 3	E	2	m	4	43	37	0.12
FRANCE AND BELGIUM.	Rochefort ...	29.56	41	NE	3	r	29.75	+ 17	41	41	+ 9	NE	3	0	*	43	30	0.12
	Belfort ...	?	29	SW	1	f	?	?	25	?	- 3	SW	1	0	*	?	21	0.08
	Lyons ...	29.77	31	N	1	f	29.83	+ 08	27	27	- 5	NSW	1	f	*	40	27	-
	Nice ...	29.69	51	E	6	b	29.64	- 10	50	44	+ 1	ESE	5	r	4	54	46	-
	Perpignan ...	29.52	49	E	2	0	29.71	+ 18	47	46	+ 6	NSW	3	0	*	54	40	0.35
	Biarritz ...	29.56	49	NSW	6	r	29.72	+ 21	52	48	+ 12	NSW	4	r	4	?	45	1.30
	Corunna ...	29.81	*	*	*	*	29.77	+ 11	44	44	- 3	NE	3	r	4	55	43	0.08
	Lisbon ...	29.81	50	SW	3	b	29.77	+ 11	44	44	- 3	NE	3	r	4	55	43	0.08

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

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



# WEATHER CHARTS

for 8 a.m. on

Saturday, 6<sup>th</sup> December,

1890.

## BAROMETER, WIND AND SEA.

### EXPLANATION OF MAP.

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

Changes since previous morning are stated in words.

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

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

→ = forces 5 to 7; → = forces 1 to 4.

○ = dead calm.

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

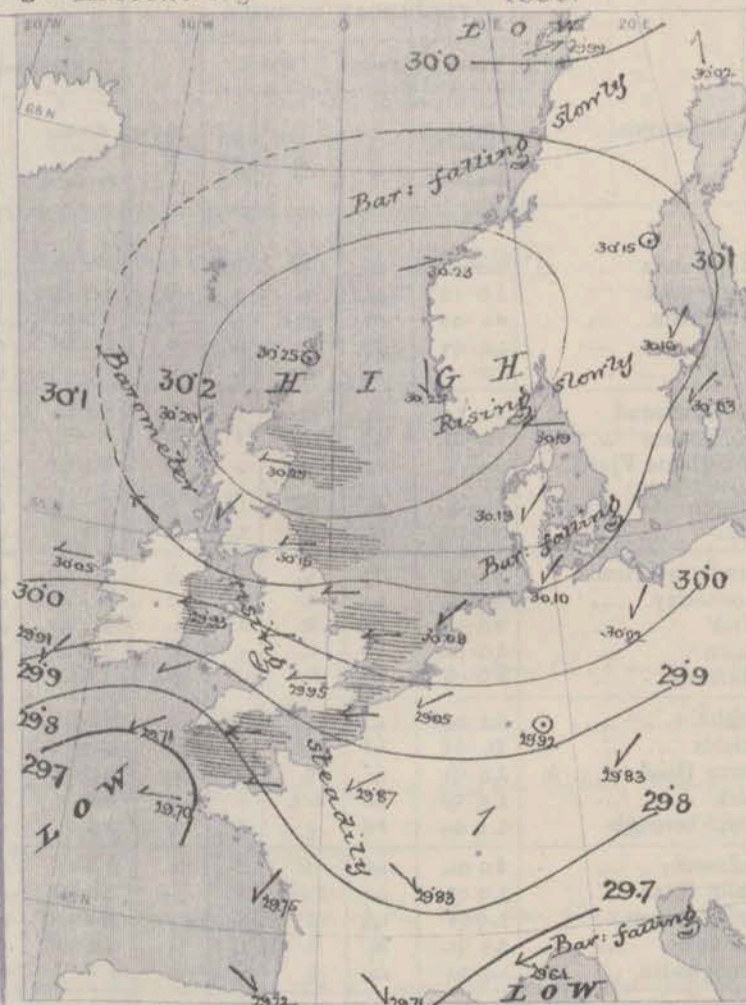
■ = Rough. ■ = High.

## MEAN HEIGHT OF THE BAROMETER

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

During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS.
Sumburgh Head	29.667
Stornoway	29.701
Wick	29.711
Nairn	29.739
Aberdeen	29.767
Leith	29.803
Shields	29.843
York	29.888
Loughborough	29.923
Ardrossan	29.819
Donaghadee	29.847
Holyhead	29.870
Liverpool	29.885
Parsonstown	29.909
Valencia	29.908
Roche's Point	29.915
Pembroke	29.918
Silly	29.962
Jersey	29.985
Hurst Castle	29.959
Dover	29.951
LONDON	29.954
Oxford	29.938
Cambridge	29.914
Yarmouth	29.914



## 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.

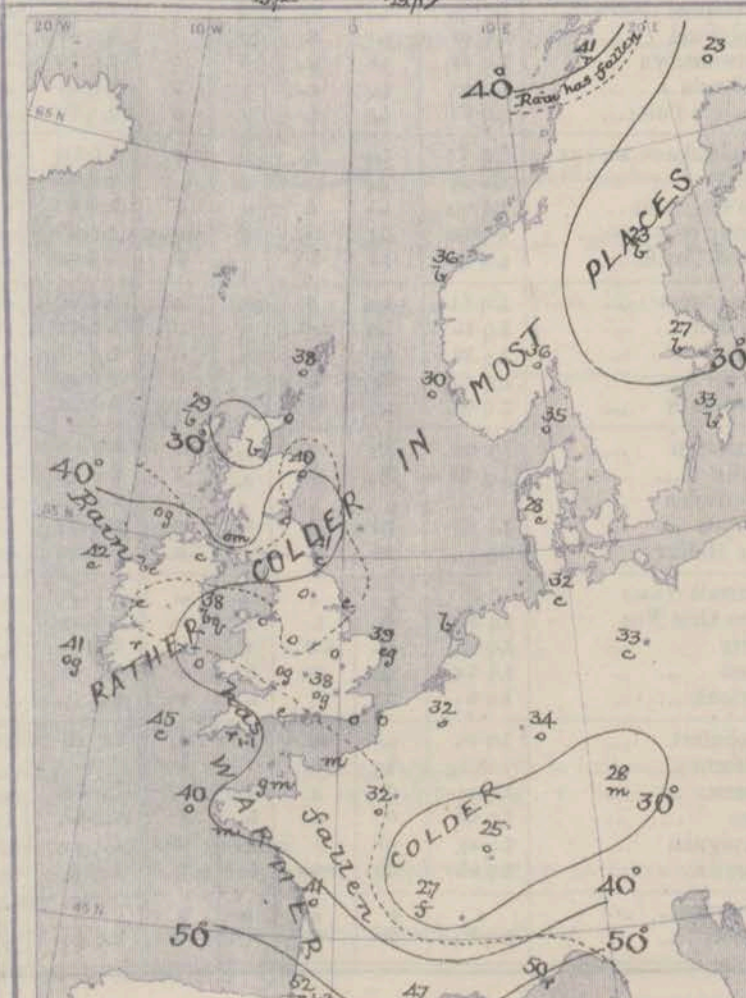
**RAINFALL**—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more are quoted in figures.

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

(For the month of December.)

STATIONS.	TEMPERATURE.				RAINFALL (Inches.)
	Daily Max.	Daily Min.	at 8 a.m. Dry.	at 8 a.m. Wet.	
Sumburgh Head	42.5	35.0	39.5	37.9	4.33
Stornoway	44.4	33.9	39.2	38.2	5.66
Wick	42.1	32.6	38.0	36.6	3.18
Nairn	41.7	32.8	37.0	35.5	2.08
Aberdeen	42.0	32.5	36.0	35.3	3.34
Leith	44.2	33.7	38.6	37.0	2.01
Shields	43.1	34.3	38.5	37.2	2.74
York	43.7	32.4	36.8	35.7	2.45
Loughborough	43.1	32.9	36.9	35.9	2.36
Ardrossan	44.6	36.0	40.1	38.7	4.04
Donaghadee	45.1	36.2	40.2	39.2	2.84
Holyhead	46.7	39.3	43.0	41.4	3.84
Liverpool	43.8	36.0	39.3	37.6	2.70
Parsonstown	44.8	33.2	37.0	36.6	3.02
Valencia	50.0	40.0	44.6	42.3	5.82
Roche's Point	48.0	39.0	42.9	41.5	4.74
Pembroke	47.1	40.6	43.9	42.3	4.06
Silly	49.8	43.8	47.1	45.4	4.10
Jersey	47.7	40.1	43.4	41.8	3.87
Hurst Castle	46.1	36.0	40.0	40.2	2.84
Dover	44.7	36.8	40.3	39.1	3.20
LONDON	44.7	34.6	38.6	37.4	2.14
Oxford	43.6	34.3	37.7	36.6	2.13
Cambridge	43.5	32.3	36.9	35.1	1.99
Yarmouth	42.1	34.2	38.3	37.6	2.95

**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, 30.25 in. to 30.10 in. in an anticyclone covering Scotland, the north of England, the North Sea, Denmark, and the southern half of Sweden, about 29.7 in. in a depression at the mouth of the Channel and in another off the southeast coast of France; 30.0 in. and less over Ireland. Gradients moderate for E winds over our Islands and the greater part of the Channel. Barometer rising except in the extreme north.

## TEMPERATURE

Highest, 52° at Biarritz, 47° at Rocher Point, 45° at Scilly, and 41° at Brest. Lowest, (1) 23° in the north of Sweden, 27° at Stockholm, 29° at Kinn and Stromway; (2) 25° at Belfast, 27° at Lyons, 28° at Munich, 31° at Berlin and Bremen, and 33° at Baden. In London the reading was 38°.

## WIND

E<sup>3</sup> over Ireland and England, fresh in the northeast and west, very strong and squally in the Channel and on our east coast. Light and variable over France, nearly calm over Scotland and the south of Norway.

## WEATHER

Fair in Scotland, the northeast of England and north of Ireland. Very dull elsewhere—rainy in the northwest of Norway and at some of our southwestern stations. Rainfall in past 24 hours was 1.30 in. at Biarritz, 1.08 in. at Rocher Point, and 0.65 in. at Rocher Point.

## SEA

Rough in the east and south, rather rough at Holyhead, moderate over the Bay of Biscay, slight in the far north.

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The anticyclone in the north seems likely to spread southwards and southwards and to cause colder weather over Ireland and England.

# FORECASTS

For the 24 hours ending at NOON on 7<sup>th</sup> DEC<sup>r</sup> 1890.

## DISTRICTS.

## FORECASTS.

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

Very light breezes, chiefly SE<sup>2</sup>; fair, cold.

E<sup>2</sup> winds, moderate and fresh; fair.

Same as N° 5

Same as N° 2.

E<sup>3</sup> winds, strong, squally, perhaps slight rain at times, dull.

## DISTRICTS.

## FORECASTS.

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

Same as N° 0

Same as N° 2

Same as N° 5

Same as N° 2

E<sup>3</sup> winds, fresh, squally, fair.

## 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 ...	30.23	36	32	ESE	1	c	2		Holyhead ...	29.88	40	38	ESE	1	c
Sumburgh Head ...	30.20	39	37	SE	0	b	3		Valencia ...	29.75	43	41	NNE	3	cm
Stornoway ...	30.07	43	40	SE	4	c	4		Scilly ...	29.61	47	44	E	6	cgt
Aberdeen ...	30.14	41	37	SE	5	cgg	7		Jersey ...	29.67	41	40	E	3	o
Shields ...	29.99	42	40	ESE	7	r	7		Dungeness ...	29.77	40	39	E	6	c
Ardrossan ...	30.00	41	39	NE	3	c	2		London ...	29.84	41	39	E	3	ogm
Malin Head ...	29.91	44	41	SE	5	o	3		Yarmouth ...	29.89	40	39	ESE	5	og
Mullaghmore ...	29.88	43	42	ESE	5	ogm	4		Rochefort ...	29.56	39	38	NNE	3	f
Belmullet ...	29.87	43	42	E	2	o	*								

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

Weather cloudy or overcast over the greater part of our Islands and the Continent, with fog over Germany and the south of Russia, passing showers in many parts of the United Kingdom, rain in the west of France, and snow at Moscow and Kharkov as well as at Madrid. Fine in Scandinavia and Denmark and also in Tunis and the south of Italy. Heavy rain falling during day at some of our southern and the French stations, the largest amounts being 1.3 in. at Biarritz, 1.1 in. at Pauillac, and 0.7 in. at Rochefort.

Temperature highest 58° at Rhineland and Malta, 57° at Languniani and La Calle, and 56° at Palermo and Algiers; above 50° at most of the Mediterranean stations. Lowest, 18° at Kuopio and Helsingfors, 19° at Archangel, 21° at Hango and Stockholm, 23° at Kaparanda, and 24° at Moscow; below the freezing point in many parts of northern and central Europe and as low as 33° at Madrid. Daily maxima below 45° over the greater part of the United Kingdom and France, but thermometer exceeding 50° over southern Europe.

Wind E<sup>3</sup> over our Islands, the North Sea, the Netherlands, Denmark, the Baltic, and the greater part of France, strong in force on many parts of our own coast as well as at London. Light or moderate from the N<sup>W</sup> in Sweden and Finland and also in Germany and Poland. Variable over Spain, Italy, Austria, and the south of Russia; S<sup>3</sup> in Algeria. Wind moderating later over the northern parts of the United Kingdom, but increasing from the E<sup>3</sup> in the south.

Barometer highest 30.1 in. to 30.2 in. and upwards in an anticyclone lying over Norway and the northern part of Denmark and the North Sea. Lowest 29.5 in. and less, in an elongated depression extending from Central Spain to Eastern Algeria, 29.6 in. and less, in a subsidiary system over the Bay of Biscay, 29.7 in. and less, over Lapland and the White Sea; 29.8 in. and less, in a shallow area lying over western Russia. Secondary depression over Bay of Biscay subsequently becoming more clearly defined; no other change of importance recorded.

## 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 7<sup>th</sup> DEC<sup>r</sup> 1890.  
 Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.

STATIONS.		YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
		BAROM.	TEMP.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Weather.	Sea. (0 to 12.)	SHADE TEMP.		Amount of Rainfall.	
		Reading at 2 <sup>nd</sup> P. and Sea Level.	Dry.	Dir.	Force. (0 to 12.)		Reading at 2 <sup>nd</sup> P. 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	28	S	2	0	29.91	- .11	24	23	+ 1	NW	4	b	*	30	5	—	
	Hernösand ...	30.02	28	L	0	0	30.08	- .07	30	28	+ 10	NNW	2	b	*	30	18	—	
	Stockholm ...	30.15	26	L	0	0	30.10	- .06	25	24	- 2	NNW	2	c	*	36	23	—	
	Wisby ...	30.15	33	NE	4	0	30.08	+ .05	35	33	+ 2	N	4	bc	*	36	28	—	
	Bodö ...	29.95	37	WSW	7	m	30.04	+ .05	38	34	- 3	W	4	0	2	41	34	0.08	
	Christiansund	30.25	39	SW	4	0	30.26	+ .03	39	36	+ 3	WSW	2	0	4	39	36	0.28	
	Skudesnaes ...	30.28	35	L	0	0	30.26	+ .01	30	30	0	NNW	1	b	2	37	30	—	
	Christiania Fjord (Fæder)	30.25	35	L	0	0	30.25	+ .04	28	28	- 8	NNW	2	b	1	36	27	—	
	Skagen (The Scaw)	30.25	28	L	0	0	30.25	+ .06	33	30	- 2	NW	1	0	0	36	27	—	
	Fanö ...	30.26	32	NE	2	0	30.30	+ .17	26	25	- 2	L	0	b	*	34	26	—	
BRITISH ISLANDS.	Sumburgh Head	30.30	39	L	0	0	30.28	+ .03	39	38	+ 1	L	0	0	1	41	39	—	
	Stornoway ...	30.25	31	N	2	0	30.24	+ .04	29	28	0	N	2	c	2	40	25	—	
	Wick ...	30.27	35	L	0	0	30.30	+ .05	36	35	- 6	NW	1	0	1	41	38	0.04	
	Nairn ...	30.28	28	L	0	0	30.28	+ .05	27	27	- 2	W	2	m	1	34	27	—	
	Aberdeen ...	30.29	29	ESE	1	0	30.31	+ .06	34	33	- 6	NNW	2	cmp	4	42	31	0.12	
	Leith ...	30.25	29	E	1	0	30.25	+ .07	35	35	- 6	L	0	cm	*	43	30	0.02	
	Shields ...	30.21	42	ESE	2	0	30.22	+ .07	41	38	0	E	3	c	4	43	39	0.03	
	Spurn Head ...	30.14	39	ENE	3	0	30.21	+ .14	39	35	- 2	E	4	bc	4	42	38	0.02	
	York ...	30.17	37	E	1	0	30.23	+ .10	35	35	- 2	E	1	bc	*	41	30	0.08	
	Loughborough	30.12	35	ENE	1	0	30.19	+ .15	26	26	- 11	L	0	b	*	42	26	—	
GERMANY & HOLLAND.	Ardrossan ...	30.22	39	NE	1	0	30.20	+ .03	37	36	- 1	ENE	2	om	1	43	36	—	
	Malin Head ...	30.15	42	SSE	4	0	30.15	+ .06	38	36	- 3	SSE	2	bc	2	43	38	—	
	Mullaghmore ...	30.11	42	E	6	0	30.13	+ .08	38	37	- 3	ESE	4	c	3	42	38	—	
	Belmullet ...	30.11	42	NE	4	0	30.09	+ .04	35	34	- 7	E	1	b	*	42	34	—	
	Donaghadee ...	30.17	44	E	6	0	30.18	+ .07	40	39	- 1	ESE	4	r	2	44	40	0.08	
	Liverpool (Bidston)	30.13	38	E	3	0	30.18	+ .13	34	33	- 3	E	3	bc	2	40	34	—	
	Holyhead ...	30.09	39	E	5	0	30.15	+ .17	35	34	- 3	E	3	b	*	41	35	—	
	Parsonstown ...	30.04	39	L	0	0	30.09	+ .13	35	32	- 6	SE	1	b	*	42	35	—	
	Valencia ...	29.94	41	ENE	5	0	29.95	+ .04	42	41	+ 1	E	6	bc	5	44	39	—	
	Roche's Point...	29.94	42	E	5	0	30.00	+ .13	43	42	+ 2	E	5	0	4	43	38	0.50	
FRANCE AND BELGIUM.	Pembroke (St. Ann's Hd.)	30.00	39	E	5	0	30.06	+ .17	35	34	- 3	E	4	c	3	40	33	0.10	
	Scilly ...	29.82	47	ENE	4	0	29.90	+ .19	44	43	- 1	E	5	c	5	49	42	0.07	
	Prawle Point ...	29.94	41	E	7	0	30.00	+ .19	41	39	- 3	E	7	agu	6	44	38	0.34	
	Jersey (St. Aubin's)	29.93	37	ESE	4	0	30.02	+ .21	36	33	- 3	E	4	cm	3	39	35	0.01	
	Hurst Castle ...	30.06	29	ENE	7	0	30.06	+ .16	39	37	0	E	7	c	5	39	38	—	
	Dungeness ...	30.00	38	SE	6	0	30.09	+ .20	36	34	- 2	E	5	b	3	39	35	—	
	London ...	30.07	38	ESE	3	0	30.13	+ .18	33	31	- 5	ESE	4	bc	*	39	33	—	
	Oxford ...	30.11	34	E	2	0	30.14	+ .15	34	32	- 2	NE	3	0	*	38	29	—	
	Cambridge ...	30.11	32	NE	1	0	30.18	+ .15	31	30	- 6	NE	1	bc	*	39	25	—	
	Yarmouth ...	30.08	39	E	6	0	30.16	+ .10	37	35	- 2	ESE	5	c	5	40	35	—	
PENINSULA.	Cuxhaven ...	30.16	32	NE	3	0	30.28	+ .18	31	30	- 1	E	2	b	*	35	30	—	
	Berlin ...	30.14	33	NE	2	0	30.26	+ .24	31	30	- 2	SE	2	a	*	34	30	—	
	Wiesbaden ...	*	*	*	*	*	30.12	+ .20	30	28	- 4	NE	3	bc	*	36	30	—	
	Munich ...	29.92	28	E	6	0	30.00	+ .17	28	27	0	E	6	m	*	30	26	—	
	The Helder ...	30.17	32	E	2	0	30.25	+ .17	28	27	- 5	E	1	f	1	38	28	—	
	Brussels (9 a.m.)	*	*	*	*	*	30.14	+ .19	25	24	- 7	ENE	3	b	*	35	24	—	
	Cape Gris Nez	30.04	33	?	5	0	30.10	+ .20	26	?	- 6	E	2	a	4	36	26	—	
	Paris ...	29.97	34	NE	2	0	30.04	+ .17	32	31	0	ENE	2	0	*	35	32	—	
	Brest ...	29.87	40	E	1	0	29.91	+ .21	36	35	- 4	E	3	0	3	42	31	—	
	Lorient ...	29.86	38	E	3	0	29.91	+ .13	33	32	- 7	E	4	0	5	41	32	—	
FRANCE AND BELGIUM.	Rochefort ...	29.93	40	NE	4	0	29.88	+ .13	31	30	- 10	E	5	m	?	48	25	—	
	Belfort ...	29.77	29	SW	1	0	29.81	?	24	?	- 1	NN	1	0	*	37	20	—	
	Lyons ...	29.93	29	NNE	1	0	30.02	+ .19	28	27	+ 1	N	1	m	*	30	27	—	
	Nice ...	29.69	46	NE	4	0	29.83	+ .19	42	39	- 8	E	2	b	2	52	41	—	
	Perpignan ...	29.76	50	NN	2	0	29.86	+ .15	34	34	- 13	L	0	b	*	55	33	—	
	Biarritz ...	29.87	50	WSW	5	0	29.76	+ .04	37	34	- 15	SE	3	c	2	54	36	0.32	
	Corunna ...	*	*	*	*	*	29.62	- .13	49	?	+ 6	ENE	1	0	4	54	41	—	
	Lisbon ...	29.65	50	NNE	4	0	29.55	- .22	51	50	+ 7	SE	3	0	8	52	44	0.91	

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,

7<sup>th</sup> December,

1890.

## BAROMETER, WIND AND SEA.

### EXPLANATION OF MAP.

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

Changes since previous morning are stated in words.

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

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

→→ = forces 6 to 7; →→ = forces 1 to 4.

○ = dead calm.

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

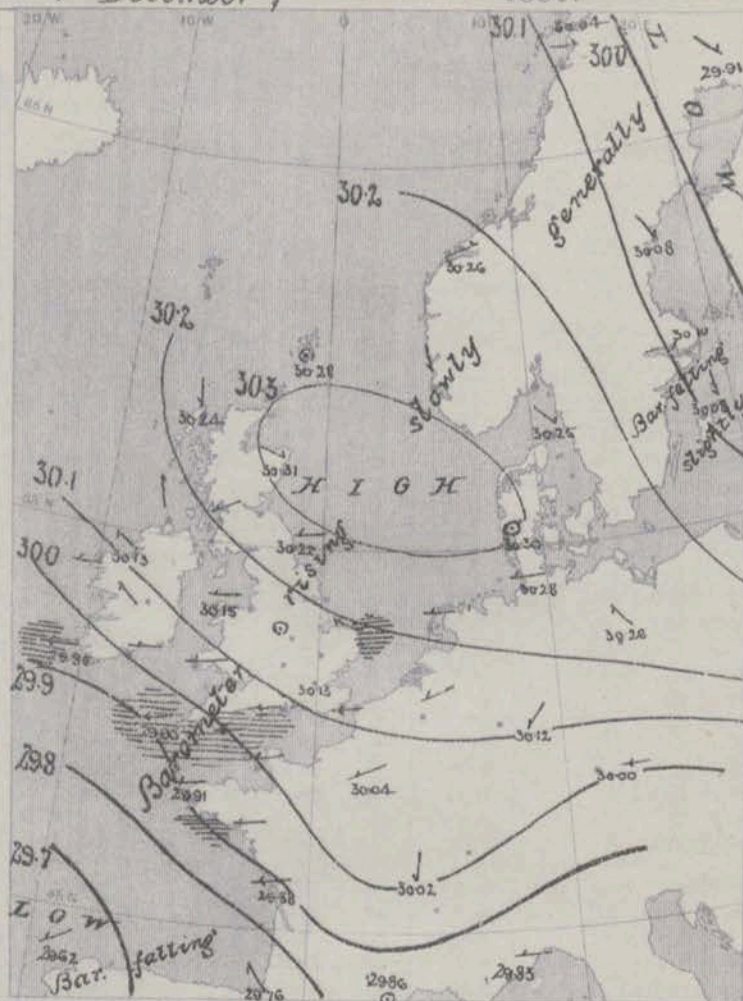
☼ = Rough. ☼ = High.

## MEAN HEIGHT OF THE BAROMETER

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

During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS.
Sumburgh Head	29.667
Stornoway	29.701
Wick	29.711
Nairn	29.739
Aberdeen	29.757
Leith	29.803
Shields	29.843
York	29.888
Loughborough	29.923
Ardrossan	29.819
Donaghadee	29.847
Holyhead	29.879
Liverpool	29.895
Parsonstown	29.909
Valencia	29.908
Roche's Point	29.915
Pembroke	29.918
Silly	29.952
Jersey	29.985
Hurst Castle	29.959
Dover	29.957
LONDON	29.951
Oxford	29.954
Cambridge	29.938
Yarmouth	29.914



## 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.

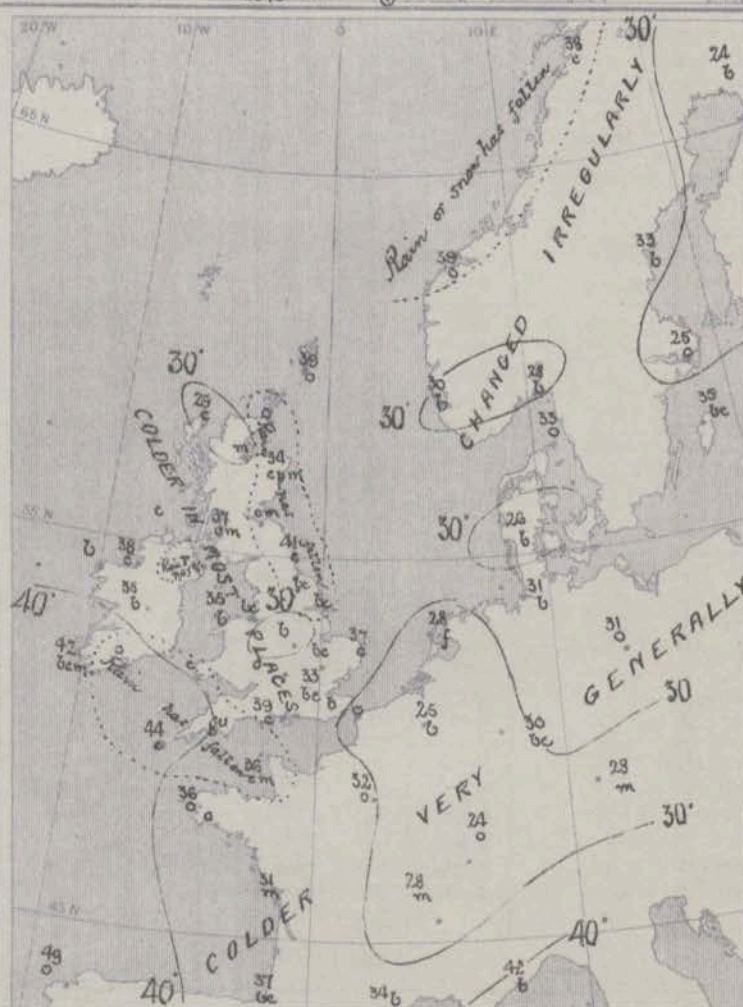
**RAINFALL**—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more are quoted in figures.

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

(For the month of December.)

STATIONS.	TEMPERATURE.				RAINFALL (Inches.)
	Daily Max.	Daily Min.	At 8 a.m.		
			Dry	Wet.	
Sumburgh Head.....	42.5	35.0	39.5	37.9	4.33
Stornoway.....	44.4	33.9	39.2	38.2	5.66
Wick.....	42.1	32.6	38.0	36.6	3.18
Nairn.....	41.7	32.8	37.0	35.5	2.08
Aberdeen.....	42.0	32.5	36.9	35.3	3.34
Leith.....	44.2	33.7	38.6	37.0	2.01
Shields.....	43.1	34.3	38.6	37.2	2.74
York.....	42.7	32.4	36.8	35.7	2.45
Loughborough.....	43.1	32.9	36.9	35.9	2.36
Ardrossan.....	44.6	36.0	40.1	38.7	4.04
Donaghadee.....	46.1	39.2	40.2	39.2	2.84
Holyhead.....	46.7	39.3	43.0	41.4	3.84
Liverpool.....	43.8	36.0	39.3	37.6	2.70
Parsonstown.....	44.8	33.2	37.0	36.6	3.02
Valencia.....	50.0	40.0	44.6	42.3	5.82
Roche's Point.....	48.0	39.0	42.9	41.5	4.74
Pembroke.....	47.1	40.0	43.0	42.5	4.06
Silly.....	40.8	43.8	47.1	45.4	4.10
Jersey.....	47.7	40.1	43.4	41.8	3.87
Hurst Castle.....	46.1	39.9	40.9	40.2	2.84
Dover.....	44.7	39.8	40.3	39.1	3.20
LONDON.....	44.7	34.6	38.5	37.4	2.14
Oxford.....	43.6	34.3	37.7	36.0	2.13
Cambridge.....	43.6	32.2	36.9	35.1	1.09
Yarmouth.....	42.4	34.2	38.3	37.5	2.95

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 in. to 30.3 in. in a large anticyclone covering the North Sea and the greater part of our Islands as well as Scandinavia and Denmark.  
 Lowest, 29.8 in. over Russia and Finland, 29.6 in. and less, in a depression approaching Portugal from the Atlantic.  
 Gradients moderate in most places, but slight over the North Sea, Iceland, Scandinavia and Denmark.  
 Barometer falling over Russia and in Portugal, almost steady (after rising) in our Islands.

## TEMPERATURE

Highest, 51° at Lisbon, 44° at Selly, and 42° at Valencia Island.  
 Lowest, (1) 21° at Haparanda, 25° at Stockholm, 26° at Paris and Loughborough, and 27° at Paris; (2) 28° at Belfast, 25° at Brussels, 31° at Berlin, 32° at Paris.  
 It is lower over our Islands generally and in the west of France than of late.

## WIND

Variable over Spain, SW at Portugal, E over England and southern half of Ireland, SE in the north of Ireland, very variable in Scotland, W over the northern half of Norway, NW over the Gulf of Bothnia, N in eastern Germany.  
 The E wind is very strong in the Channel.

## WEATHER

Fair over the greater part of United Kingdom, but with slight showers locally. In London the sky is clearer than of late.  
 Rain has fallen generally at the northern and southern stations.

## SEA

Rough on our southwest, south, and southeast coasts, moderate in northeast, slight or smooth elsewhere.

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

# FORECASTS

For the 24 hours ending at NOON on 8<sup>th</sup> DEC<sup>r</sup> 1890.

## DISTRICTS.

## FORECASTS.

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

NONE ISSUED

## DISTRICTS.

## FORECASTS.

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

NONE ISSUED.

## WARNINGS

NONE ISSUED.

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



# YESTERDAY'S 2 P.M. REPORTS.

	BAR:	THER:		WIND		WEA.	SEA		BAR:	THER:		WIND		WEA.	SEA
		D.	W.	D.	F.					D.	W.	D.	F.		
Skudesnaes ...	30.28	36	23	NNW	2	c	2	Holyhead ...	30.04	40	37	E	6	b	5
Sumburgh Head ...	30.28	39	37	Z	0	o	2	Valencia ...	29.93	41	40	NE	4	o	4
Stornoway ...	30.24	39	37	Z	0	b	2	Scilly ...	29.80	49	47	ESE	3	bc	5
Aberdeen ...	30.27	41	39	ENE	2	cp	4	Jersey ...	29.89	38	37	E	4	om	3
Shields ...	30.17	42	37	ESE	3	c	5	Dungeness ...	29.99	38	35	SE	6	o	4
Ardrossan ...	30.20	42	42	NE	1	om	1	London ...	30.04	39	36	ESE	4	o	8
Mulin Head ...	30.14	42	38	SE	4	o	2	Yarmouth ...	30.07	29	36	E	6	bc	5
Mullaghmore ...	30.09	42	40	E	6	c	4	Rochefort ...	29.87	32	31	NE	3	c	?
Belmullet ...	30.08	42	39	E	3	bc	*								

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

Weather fair at some of our own northwestern and northern stations as well as in Sweden, Finland, Spain, Eastern Algeria and the south of Italy. Dull elsewhere, with rain in the southwest of our Islands and some parts of Southern Europe, and snow at Petersburg and Moscow. Rain falling during day in the northeastern parts of the United Kingdom and snow in the south of Russia.

Temperature highest 61° at Malta, 58° at Brindisi, 55° at Palermo, and 54° at Longueira and Tunis; above 50° over the central and southern parts of the Mediterranean generally. Lowest 3° at Uleaborg, 14° at Archangel, 13° at Helsinki, 22° at Hongk and Moscow; below the freezing point over nearly the whole of Russia and Central Europe, as well as in the inland parts of Scotland and Spain. Daily maxima below 40° in the south and southeast of England, as well as at most of the French stations, and as low as 34° at Kavin, but thermometer exceeding 50° over Southern Europe generally, and exceeding 60° in Algeria and the south of Italy.

Wind light or moderate from the NE<sup>th</sup> over Denmark the Baltic and North Germany. E<sup>th</sup> over the greater part of our Islands and France, strong in force on many of the English coasts. Light from the N<sup>th</sup> in the south and east of France, variable over nearly the whole of southern and eastern Europe as well as in Algeria. E<sup>th</sup> breezes setting in later over Italy, but no important change occurring elsewhere.

Barometer highest 30.2 in and upwards, in a large anticyclone extending from the northwest of Scotland to central Scandinavia. Lowest 29.7 in: and less, in a large depression lying over Russia and also in an equally large system lying over the Mediterranean; 29.7 in: and less, in a smaller disturbance over the northern parts of the Bay of Biscay. Mediterranean depression subsequently moving slowly northwards; disturbance over Bay of Biscay partially filling up.

### 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 *Monday, 8<sup>th</sup> December,* 1890.  
 Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.

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STATIONS.	YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
	Barom.  Reading at 32° F. and Sea Level.	Temp.  Dry.	Wind.		Weather.	Barometer.		Shade Temp.			Wind.		Weather.	Sea. (0 to 5).	Shade Temp.		Amount of Rainfall.	
			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 ...	30.05	11	Z	0	b	29.94	+ .33	19			Z	0	c			30	9	
Hernösand ...	30.19	20	Z	0	b	30.18	+ .10	20	19	- 13	Z	0	b			37	18	
Stockholm ...	30.18	25	W	2	b	30.25	+ .15	21	20	- 14	W	2	b			30	?	
Wisby ...	30.12	37	E	4	c	30.16	+ .08	36	32	+ 1	E	4	b			37	30	
Bodö ...	30.04	41	W	4	o	30.03	- .01	42	40	+ 4	W	4	c			?	24	0.02
Christiansund ...	30.24	41	W	3	o	30.24	- .02	41	39	+ 2	W	1	o			41	39	0.04
Skudesnaes ...	30.28	32	Z	0	b	30.28	+ .02	36	34	+ 6	SSE	2	c			36	28	
Christiania Fjord (Færd)	30.27	31	NW	4	b	30.32	+ .07	31	29	+ 3	NW	3	o			32	?	
Skagen (The Scaw)	30.26	32	Z	0	b	30.29	+ .04	30	29	- 3	NE	1	f			36	30	
Fanø ...	30.27	25	Z	0	b	30.25	- .05	27	27	+ 1	Z	0	m			30	23	
Sumburgh Head	30.25	40	Z	0	c	30.17	- .11	40	39	+ 1	SSE	1	c			42	36	0.05
Stornoway ...	30.16	37	SE	3	c	30.03	- .19	40	38	+ 11	W	3	c			41	26	
Wick ...	30.34	40	S	2	o	30.16	- .14	41	39	+ 5	S	3	o			43	35	0.05
Nairn ...	30.22	30	Z	0	b	30.13	- .15	30	29	+ 3	Z	0	b			33	27	
Aberdeen ...	30.25	38	SSE	1	b	30.17	- .14	40	37	+ 6	SSE	2	ogp			41	33	0.04
Leith ...	30.21	37	E	1	o	30.14	- .11	36	35	+ 1	ESE	1	om			41	33	
Shields ...	30.20	38	SSE	1	o	30.11	- .11	41	38	0	SE	5	op			42	35	0.07
Spurn Head ...	30.18	39	ESE	5	o	30.04	- .17	40	36	+ 1	ESE	5	c			40	37	
York ...	30.20	37	E	1	o	30.08	- .15	37	36	+ 2	E	1	c			40	34	
Loughborough	30.17	33	E	2	o	30.03	- .16	35	33	+ 9	ESE	2	o			36	26	
BRITISH ISLANDS.																		
Ardrossan ...	30.18	39	ESE	2	om	30.11	- .09	34	33	- 3	ESE	2	o			41	31	
Malin Head ...	30.11	37	SSE	3	c	30.02	- .13	36	34	- 2	SSE	4	o			40	35	
Mullaghmore ...	30.08	40	ESE	5	o	29.99	- .14	37	34	- 1	SE	5	b			41	36	
Belmullet ...	30.04	36	E	1	b	29.95	- .14	36	34	+ 1	ESE	3	o			40	33	
Donaghadee ...	30.15	41	ESE	5	o	30.10	- .08	40	39	0	ESE	4	c			43	39	0.01
Liverpool (Bidalon)	30.16	35	ESE	3	o	30.06	- .12	36	33	+ 2	E	3	o			37	33	
Holyhead ...	30.11	35	E	3	b	30.04	- .11	34	32	- 1	ESE	2	b			37	30	
Parsonstown ...	30.04	32	Z	0	b	30.00	- .09	35	32	0	Z	0	b			39	31	
Valencia ...	29.94	42	E	5	og	29.90	- .05	43	41	+ 1	ESE	3	om			45	40	
Roche's Point...	29.97	42	ESE	5	p	29.94	- .06	42	39	- 1	ESE	6	o			43	40	0.10
Pembroke (St. Ann's Hd.)	30.02	37	ESE	4	c	29.97	- .09	35	33	0	E	4	ogm			38	32	
Scilly ...	29.87	44	E	5	o	29.84	- .06	41	40	- 3	E	5	og			44	39	
Prawle Point ...	29.95	41	E	7	o	29.90	- .10	37	35	- 4	ESE	6	ogm			41	35	
Jersey (St. Aubin's)	29.95	38	E	5	b	29.89	- .13	35	32	- 1	E	3	b			40	33	
Hurst Castle ...	30.04	38	E	7	c	29.93	- .13	36	34	- 3	NE	6	c			39	34	
Dungeness ...	30.05	36	E	5	b	29.92	- .17	35	33	- 1	SE	5	o			39	33	
London ...	30.09	33	ESE	3	c	29.96	- .17	33	31	0	ESE	1	o			40	32	
Oxford ...	30.10	32	NE	3	b	29.98	- .16	33	32	- 1	NE	2	og			35	31	
Cambridge ...	30.14	35	NE	1	o	30.01	- .17	38	37	+ 7	E	1	o			38	29	
Yarmouth ...	30.14	38	ESE	6	c	30.01	- .13	35	33	- 2	ESE	6	c			38	34	
GERMANY & HOLLAND.																		
Cuxhaven ...	30.29	30	ESE	3	b	30.24	- .04	31	29	0	E	2	o			32	29	
Berlin ...	30.24	30	Z	0	o	30.22	- .04	30	29	- 1	SW	2	c			32	28	
Wiesbaden ...	*	*	*	*	*	30.12	- .00	25	24	- 5	NE	2	b			36	25	
Munich ...	30.04	26	NE	5	o	30.06	+ .06	24	23	- 4	E	5	c			36	25	
The Helder ...	30.23	30	E	2	c	30.12	- .13	27	26	- 1	E	3	c			34	27	
FRANCE AND BELGIUM.																		
Brussels (9 a.m.)	*	*	*	*	*	30.02	- .12	21	21	- 4	E	3	b			32	21	
Cape Gris Nez	30.05	32	E	3	o	29.95	- .15	28	28	+ 2	E	4	o			32	26	
Paris ...	30.00	32	ESE	2	o	29.90	- .14	26	25	- 6	ESE	2	b			32	26	
Brest ...	29.88	37	ESE	4	b	29.81	- .10	31	30	- 5	E	3	b			41	28	
Lorient ...	29.81	36	E	6	b	29.78	- .13	31	29	- 2	ESE	5	c			39	30	
Rochefort ...	29.81	33	ESE	4	o	29.73	- .22	33	31	+ 2	E	4	o			36	25	
Belfort ...	29.90	30	W	1	o	29.91	+ .10	25	?	+ 1	N	1	b			34	18	
Lyons ...	29.93	29	W	1	o	29.96	- .06	29	28	+ 1	NE	1	b			31	28	
Nice ...	29.92	46	NE	4	c	29.97	+ .14	43	41	+ 1	E	3	b			50	41	0.12
Perpignan ...	29.83	50	E	1	o	29.78	- .08	48	45	+ 14	SW	1	o			52	?	
Biarritz ...	29.71	44	SE	3	b	29.70	- .06	39	37	+ 2	SE	3	b			46	36	
PENINSULA.																		
Corunna ...	*	*	*	*	*	*	*	*	*	*	*	*	*					
Lisbon ...	29.50	52	SW	6	b	29.66	+ .11	48	47	- 3	NW	1	c			55	46	0.24

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, 8<sup>th</sup> December,

1890.

## BAROMETER, WIND AND SEA.

### EXPLANATION OF MAP

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

Changes since previous morning are stated in words.

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

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

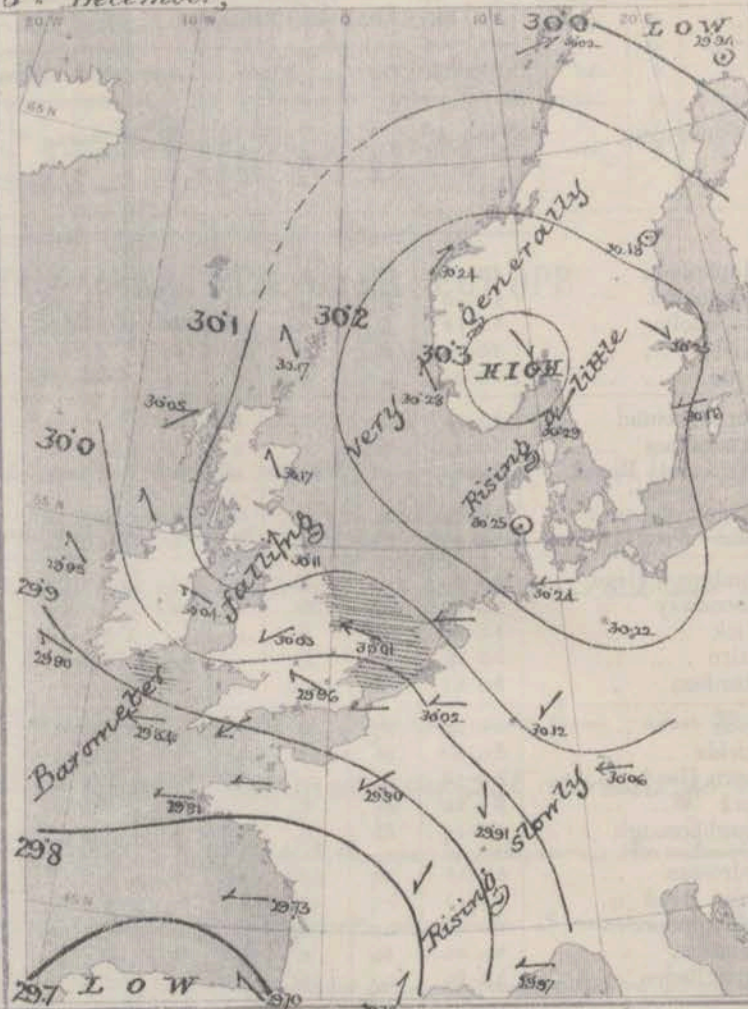
**SEA DISTURBANCE**—Where considerable, is shown thus:

■ = Rough. ■ = High.

## MEAN HEIGHT OF THE BAROMETER

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

STATIONS.	MEAN READINGS.
Sumburgh Head .....	29.687
Sornoway .....	29.701
Wick .....	29.711
Nairn .....	29.739
Aberdeen .....	29.757
Leith .....	29.803
Shields .....	29.843
York .....	29.888
Loughborough .....	29.923
Ardrossan .....	29.819
Donaghadee .....	29.847
Holyhead .....	29.879
Liverpool .....	29.803
Parsonstown .....	29.909
Valencia .....	29.908
Roche's Point .....	29.915
Pembroke .....	29.918
Silly .....	29.952
Jersey .....	29.955
Hurst Castle .....	29.959
Dover .....	29.957
LONDON .....	29.951
Oxford .....	29.954
Cambridge .....	29.938
Yarmouth .....	29.914



## 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.

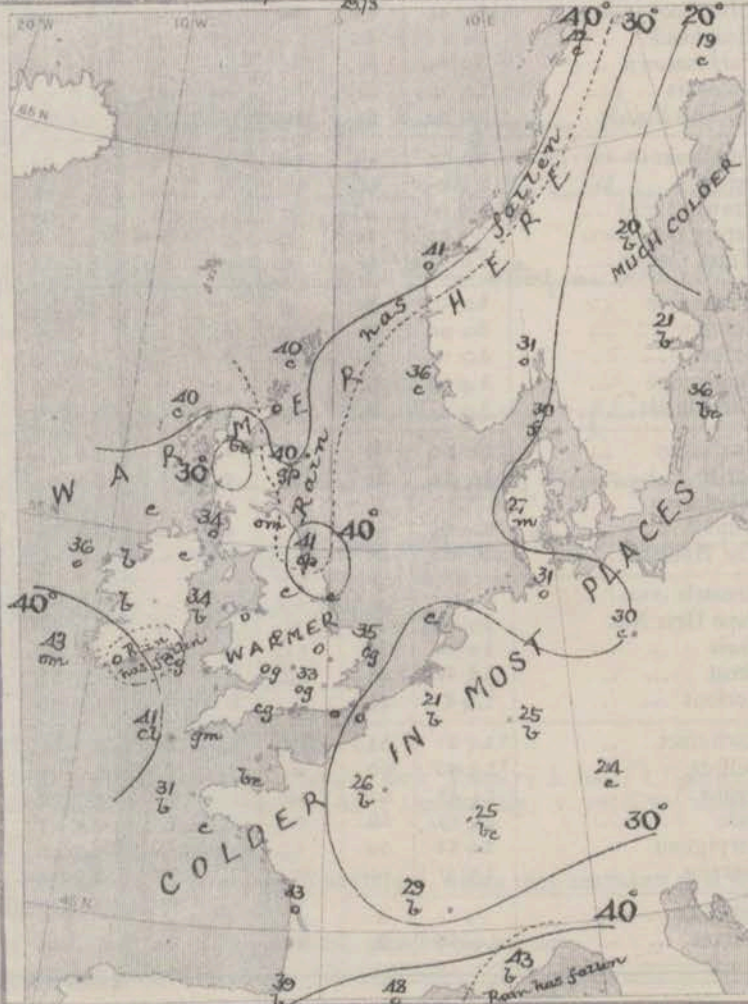
**RAINFALL**—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more are quoted in figures.

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

(For the month of December.)

STATIONS.	TEMPERATURE.				RAINFALL (Inches.)
	Daily Max.	Daily Min.	At 8 a.m. Dry.	Wet.	
Sumburgh Head .....	42.5	35.0	39.5	37.0	4.33
Sornoway .....	44.4	33.0	39.2	38.2	5.66
Wick .....	42.1	32.6	38.0	36.6	3.18
Nairn .....	41.7	22.8	37.0	35.5	2.08
Aberdeen .....	42.0	32.5	36.0	35.3	3.34
Leith .....	44.2	33.7	38.6	37.0	2.01
Shields .....	43.1	34.3	38.5	37.2	2.74
York .....	42.7	32.4	36.8	35.7	2.45
Loughborough .....	43.1	32.9	36.9	35.9	2.30
Ardrossan .....	44.6	35.0	40.1	38.7	4.04
Donaghadee .....	46.1	35.2	40.2	39.2	2.84
Holyhead .....	46.7	30.3	43.0	41.4	3.84
Liverpool .....	43.5	35.0	39.3	37.0	2.70
Parsonstown .....	44.8	33.2	37.9	36.6	3.02
Valencia .....	50.0	40.0	44.6	42.3	6.82
Roche's Point .....	48.0	39.0	42.9	41.5	4.74
Pembroke .....	47.1	40.6	43.9	42.5	4.08
Silly .....	49.8	43.8	47.1	45.4	4.10
Jersey .....	47.7	40.1	43.4	41.8	3.87
Hurst Castle .....	46.1	36.5	40.0	40.2	2.84
Dover .....	44.7	36.8	40.3	39.1	3.20
LONDON .....	44.7	34.6	38.5	37.4	2.14
Oxford .....	43.6	34.3	37.7	36.6	2.13
Cambridge .....	43.5	32.3	36.9	36.1	1.99
Yarmouth .....	42.4	31.2	38.5	37.5	2.95

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





# GENERAL SITUATION AT 8 A.M.

## PRESSURE

*Highest*, 30.3 in: to 30.1 in: over Scandinavia, Denmark, the North Sea, and Scotland.

*Lowest*, 29.7 in: and less, over the Iberian Peninsula; 30.0 in: and less, over England.

*Gradients* are moderate in most places, slight over the North Sea.

*Barometer* is falling very generally, but slowly, rising at Lisbon.

## TEMPERATURE

*Highest*, 49° at Lisbon and Tarpignan, 43° at Valmiera, Ireland, 42° at Porto, and 40° at Styrnaway and Lumburg Hts.

*Lowest*, (1) 19° at Haparanda, 20° at Hernösand; (2) 21° at Brussels, 24° at Munich and Belfast, and 26° at Paris.

In London the reading was 33°, at Berlin 30°.

## WIND

SW<sup>3</sup>, strong in the north of Norway; SE<sup>2</sup>, moderate to strong, in Ireland and Scotland; E<sup>2</sup>, moderate over England, but strong in the Channel and on our southeast coasts; E<sup>1</sup>, moderate over the Bay of Biscay.

At Lisbon the wind has shifted to NW.

## WEATHER

Fine and bright at many of the Continental stations, cloudy and gloomy over our Islands as a whole, with very slight snow in London and at Oxford, lightning at Kelly.

## SEA

Somewhat rough on our northeastern, southeastern, and southwestern coasts, moderate to slight elsewhere.

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

No great change is indicated for the coming twenty-four hours.

## FORECASTS

For the 24 hours ending at NOON on 9<sup>th</sup> DEC<sup>r</sup> 1890.

### DISTRICTS.

### FORECASTS.

0 SCOTLAND  
NORTH

1 SCOTLAND  
EAST

2 ENGLAND  
N.E.

3 ENGLAND  
EAST

4 MIDLAND  
COUNTIES

5 ENGLAND  
SOUTH

SE<sup>2</sup> and SW<sup>2</sup> winds, moderate;  
some rain.

E<sup>2</sup> and SE<sup>2</sup> winds; drizzle,  
slight cold showers.

E<sup>2</sup> winds, strong to moderate;  
some cold showers.

### DISTRICTS.

### FORECASTS.

6 SCOTLAND  
WEST

7 ENGLAND  
N.W.

8 ENGLAND  
S.W.

9 IRELAND  
NORTH

10 IRELAND  
SOUTH

SE<sup>2</sup> winds, moderate; fair as a whole.

Same as No 5

SE<sup>2</sup> and S<sup>2</sup> winds; fair to unsettled,  
and perhaps, rainy.

### WARNINGS

The SOUTH CONE has been lowered  
again on our southwest coasts 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 ...	30.29	26	33	N.W.	1	b	2	Holyhead ...	30.13	36	33	E.	3	b	3
Sumburgh Head ...								Valencia ...							
Stornoway ...	30.21	31	33	W.	0	c	2	Scilly ...							
Aberdeen ...								Jersey ...	29.93	40	36	ESE.	5	b	4
Shields ...								Dungeness ...	30.06	36	34	E.	5	b	3
Ardrossan ...								London ...							x
Malin Head ...	30.12	40	37	ESE.	4	c	2	Yarmouth ...							
Mullaghmore ...								Rochefort ...	29.32	35	33	E.	5	c	2
Belmullet ...	30.04	40	36	ESE.	2	b	*								

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

Weather fine in most parts of the United Kingdom, but dull in the extreme north of Scotland, and showery at Aberdeen and Prunk Point. Fine also in Sweden, Denmark, North Germany and the Netherlands, as well as in the south of France, and at some of the Italian and Algerian stations, but dull elsewhere, with rain at Palermo and Malta, and snow at Kiusio. Showers falling later at many of our own western and northern stations; lightning seen at Scilly at night.

Temperature highest 58° at Brindisi, Tunis and Malta, 54° at San Fernando, Nemours and Algiers, and 53° at Tessa, a little above 50° over the central and southern parts of the Mediterranean generally, as well as on the Spanish coast. Lowest 8° at Archangel, 18° at Moscow and Breslau, 19° at Kiev, and 21° at St. Petersburg, Warsaw and Zemberg; below 32° over the central parts of Great Britain. Daily maxima below 40° in the southern, central and eastern parts of England, and very little above 32° in Central Scotland.

Wind E. over Ireland and England, the Netherlands and France, with a moderate gale at some of the Channel stations. Light from the NW in the north of Scotland, and from the same quarter or from the N. over Scandinavia, Russia and eastern Germany. Light and variable over Spain, Italy and Austria; SE. or S. in Algeria. Subsequently shifting to the SE. in Scotland.

Barometer highest 30.2 ins. to 30.3 ins. and upwards in a large anticyclone covering the North Sea, Denmark, the south of Norway, the north and northeast parts of St. Britain, and the N. of Germany, 30.0 ins. and upwards in a smaller system lying over eastern Algeria. Lowest 29.6 ins. and less in a depression lying off the Portuguese coast, 29.7 ins. and less in a small disturbance over the southern parts of the Adriatic, 29.8 ins. and less in two shallow systems lying respectively over Finland and central Russia. Slight fall of barometer taking place over western Europe during day.

### SUMMARY OF CHANGES IN THE WEATHER OVER THE BRITISH ISLANDS AND THEIR NEIGHBOURHOOD FROM THE 30<sup>TH</sup> NOV. TO 6<sup>TH</sup> DEC. 1890.

The severe frost which prevailed over our Islands during the latter half of last week gave way completely during the earlier part of that now under notice. The thermometer became high for the time of year, 50° to 55° at our western and northern stations during a day or two, and S. to S.W. gales and strong winds prevailed; in the east and southeast temperature remained somewhat low, though the frost broke up completely, and the wind became light and variable. On Tuesday strong NE. and N. winds began to set in on our western and northern coasts, accompanied by a fall of temperature, cold rain, and in some places wet snow. These winds spread gradually in a SE. direction, and on Thursday were blowing all over the Kingdom with wet raw weather, occasionally reaching the force of a gale in the east and northeast. On Friday and Saturday NE. and E. winds remained general over the Channel, England and Ireland, but in Scotland there were light and variable airs. Temperature was rather low generally, and although the weather became drier in the east and southeast, it continued very dark and gloomy. Showers fell on all our western coasts, and in some southwestern localities the rainfall was heavy.

### 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 9th December. 1890.  
Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.

STATIONS.		YESTERDAY EVENING.					5 A.M. TO DAY.										PAST 24 HOURS.		
		Barom.  Reading at 32° F. and Sea Level.	TEMP.  Dry.	WIND.		Weather.	Barometer  Reading at 32° F. and Sea Level.	Difference from 5 a.m. yesterday.	SHADE TEMP.		WIND.		Weather.	Sea. (10 to 15.)	SEAUN TEMP.		Amount of Rainfall.		
				Dir.	Force. (10 to 15.)				Dry.	Wet.	Dir.	Force (10 to 15.)			Max.	Min.			
SCANDINAVIA.	Haparanda ...	30.05	7	2	0	6	30.17	+2.3	0	0	-1.5	2	0	6	*	2.0	?	—	
	Hernösand ...	30.23	21	2	0	6	30.28	+1.0	22	21	+2	2	0	6	*	2.5	16	—	
	Stockholm ...	30.26	26	2	0	6	30.31	+0.6	26	26	+5	NW	2	6	*	2.0	21	—	
	Wisby ...	30.21	35	E	4	6	30.27	+1.1	36	34	0	NW	4	0	*	3.7	32	—	
	Bodö ...	30.11	43	W	6	7	30.10	+0.7	42	40	0	SW	4	2	*	4.0	39	2.09	
	Christiansund ...	30.29	40	SE	2	0	30.28	+0.4	38	35	-3	2	0	0	3	4.1	36	—	
	Skudesnaes ...	30.32	38	SE	6	0	30.33	+0.5	36	32	0	ENE	4	0	3	3.9	34	—	
	Christiania Fjord (Fæder) ...	30.35	35	N	2	0	30.36	+0.4	35	33	+4	2	0	0	1	?	?	—	
	Skagen (The Seaw) ...	30.34	35	2	0	0	30.35	+0.6	32	31	+2	2	0	0	0	?	30	—	
	Fanö ...	30.29	30	E	3	0	30.30	+0.5	29	28	+2	E	4	6	*	3.2	27	—	
BRITISH ISLANDS.	Sumburgh Head ...	30.15	41	SE	2	7	30.14	-0.3	40	39	0	2	1	0	3	4.4	39	0.04	
	Stornoway ...	30.05	39	SW	1	C	30.03	-0.2	35	34	-5	N	2	C	3	4.0	30	—	
	Wick ...	30.12	44	2	4	0	30.12	-0.4	42	41	+1	2	0	0	3	4.5	39	0.05	
	Nairn ...	30.08	27	2	0	6	30.04	-0.9	39	38	+9	E	2	C	1	3.9	31	—	
	Aberdeen ...	30.12	41	SE	3	0.9	30.09	-0.8	40	39	+3	SE	5	0.99	5	4.3	39	0.02	
	Leith ...	30.05	41	SE	1	0	30.04	-1.0	36	35	0	SE	1	om	*	4.2	35	—	
	Shields ...	30.02	42	ENE	4	0	30.04	-0.7	36	35	-5	WNW	1	d	3	4.3	33	—	
	Spurn Head ...	29.96	39	ENE	6	0	30.05	+0.1	38	36	-2	2	om	*	4.0	36	—		
	York ...	30.00	37	E	1	0	30.07	-0.1	36	35	-1	ENE	1	0	*	4.0	34	—	
	Loughborough ...	29.97	38	ENE	2	0	30.07	+0.4	30	30	-5	2	0	6	*	3.5	30	—	
GERMANY & HOLLAND.	Ardrossan ...	30.02	40	ENE	1	om	30.03	-0.8	34	33	0	ENE	3	om	2	4.0	31	0.01	
	Malin Head ...	29.97	37	SE	3	0	29.96	-0.6	38	37	+2	ENE	2	op	1	4.2	30	0.02	
	Mullaghmore ...	29.95	37	SE	3	6	29.98	-0.1	37	36	0	2	C	2	3.9	34	—		
	Belmullet ...	29.92	36	SE	4	0	30.01	+0.6	34	34	-2	E	1	of	*	3.9	32	—	
	Donaghadee ...	29.98	43	ENE	4	0	29.98	-1.2	32	32	-8	WNW	3	6	2	4.3	29	0.06	
	Liverpool (Bidston) ...	29.94	34	E	2	0	30.05	-0.1	29	28	-7	SE	2	C	2	3.8	29	—	
	Holyhead ...	29.93	35	E	3	gom	30.00	-0.4	35	33	+1	SE	1	mg	2	3.8	33	—	
	Parsonstown ...	29.94	35	2	0	a	30.01	+0.1	29	29	-6	2	0	6	*	3.7	29	—	
	Valencia ...	29.85	40	ENE	3	0.9	29.95	+0.5	43	40	0	E	2	0	3	4.3	35	—	
	Roche's Point ...	29.89	37	ENE	5	0	29.98	+0.4	39	36	-3	E	4	0	4	4.3	35	—	
FRANCE AND BELGIUM.	Pembroke (St. Ann's Hd.) ...	29.91	36	ENE	3	C	30.02	+0.5	36	35	+1	ENE	2	om	1	3.8	34	—	
	Scilly ...	29.84	42	NW	3	C	29.90	+0.6	44	42	+3	ENE	3	6	4	4.4	39	—	
	Prawle Point ...	29.88	37	ENE	3	0	29.96	+0.6	37	37	0	NW	4	om	3	4.0	33	—	
	Jersey (St. Aubin's) ...	29.88	37	E	3	6m	29.94	+0.5	40	38	+5	ENE	2	om	2	4.0	34	—	
	Hurst Castle ...	29.90	35	E	4	6m	30.00	+0.7	35	35	-1	NW	4	om	2	3.6	29	0.01	
	Dungeness ...	29.91	37	SE	3	C	30.02	+1.0	39	38	+4	SE	2	6	2	3.9	34	—	
	London ...	29.93	35	SE	1	0.9	30.05	+0.9	35	34	+2	ENE	1	ogf	*	3.6	33	—	
	Oxford ...	29.96	25	E	1	6	30.07	+0.9	22	22	-11	ENE	1	0	*	3.3	22	0.01	
	Cambridge ...	29.96	34	E	1	0	30.05	+0.4	34	33	-4	2	0	0	*	3.6	31	—	
	Yarmouth ...	29.96	36	SE	5	C	30.05	+0.4	40	39	+5	ENE	4	C	4	4.0	34	—	
PENINSULA.	Cuxhaven ...	30.28	29	ENE	3	6	30.25	+0.1	28	27	-3	ENE	3	m	*	3.2	26	—	
	Berlin ...	30.26	33	2	0	C	30.32	+1.0	32	31	+2	SE	2	C	*	3.4	?	—	
	Wiesbaden ...	30.21	31	2	0	*	30.21	+0.9	25	24	0	NE	2	6	*	3.2	25	—	
	Munich ...	30.09	18	E	3	6	30.11	+0.5	17	17	-7	E	5	m	*	2.7	12	—	
	The Heider ...	30.10	26	E	3	6	30.13	+0.1	24	24	-3	ENE	2	6	2	2.8	24	—	
	Brussels (9 a.m.) ...	30.09	25	2	0	*	30.09	+0.7	25	23	+4	SE	2	6	*	3.4	?	—	
	Cape Gris Nez ...	30.00	31	31	31	30.00	+0.5	31	31	+3	NE	1	C	2	3.4	27	—		
	Paris ...	29.93	35	E	1	6	30.03	+1.3	26	25	0	ENE	1	6	*	3.8	25	—	
	Brest ...	29.80	37	E	2	6	?	?	36	36	+5	NW	1	0	2	3.9	28	—	
	Lorient ...	29.81	38	ENE	2	0	29.89	+1.1	35	35	+4	ENE	2	6	2	3.6	30	0.04	
FRANCE AND BELGIUM.	Rochefort ...	29.78	43	ENE	3	6	29.90	+1.7	41	41	+8	SE	4	6	?	4.5	?	—	
	Belfort ...	30.01	26	SW	1	0	30.04	+1.3	25	18	0	SW	1	0	*	3.0	18	—	
	Lyons ...	30.25	31	N	1	6	30.08	+1.2	30	28	+1	NE	1	6	*	3.9	28	—	
	Nice ...	29.95	44	NE	4	6	29.97	0.0	42	39	-1	E	4	6	2	5.4	41	—	
	Perpignan ...	29.86	52	SE	3	7	29.97	+1.9	50	48	+2	NE	2	0	*	5.3	46	0.24	
	Biarritz ...	29.76	52	2	4	6	29.92	+1.2	48	43	+9	2	6	1	5.9	?	—		
PENINSULA.	Corunna ...	30.08	33	SW	4	6	30.08	+1.42	52	50	+4	W	3	6	?	5.7	?	—	
	Lisbon ...	29.92	33	SW	4	6	30.08	+1.42	52	50	+4	W	3	6	?	5.7	?	—	

For Explanation of Columns, see bottom of p. 1.

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



# WEATHER CHARTS

for 8 a.m. on

Tuesday, 9<sup>th</sup> December.

1890.

## BAROMETER, WIND AND SEA.

### EXPLANATION OF MAP

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

Changes since previous morning are stated in words.

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

their barbs and feathers refer to force thus—

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

→ = forces 5 to 7; → = forces 1 to 4.

○ = dead calm.

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

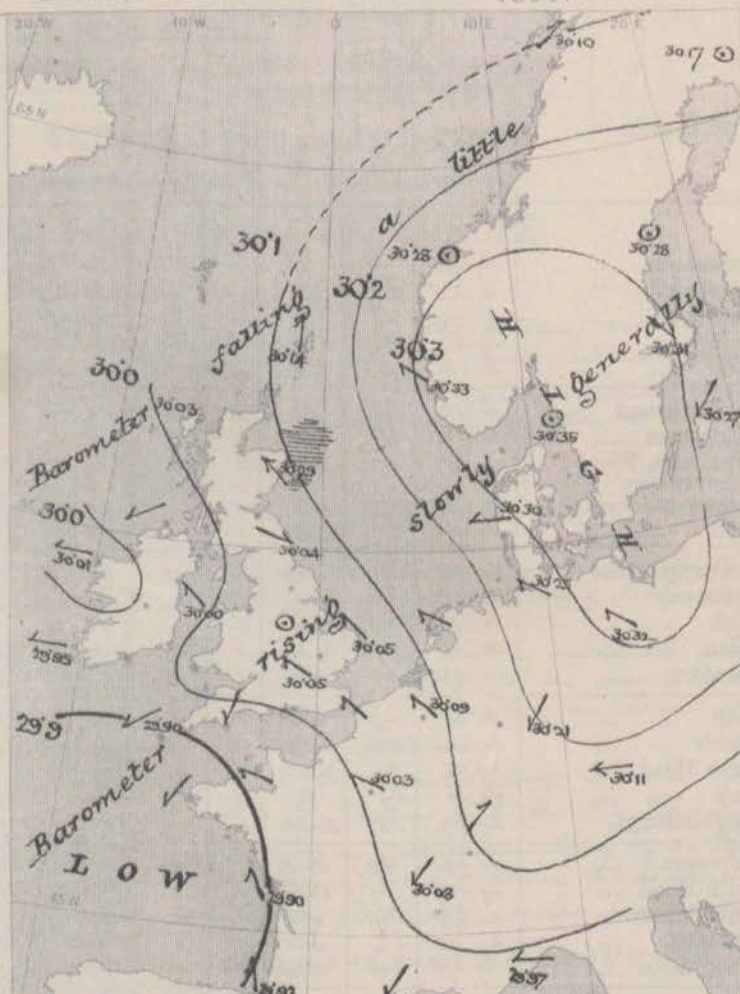
— Rough. — High.

## MEAN HEIGHT OF THE BAROMETER

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

During the 15 Years; 1871—1885.

STATIONS.	MEAN READINGS.
Sumburgh Head	29.067
Sornoway	29.701
Wick	29.711
Nairn	29.730
Aberdeen	29.757
Leith	29.803
Shields	29.843
York	29.888
Loughborough	29.923
Ardrossan	29.819
Donaghadee	29.847
Holyhead	29.879
Liverpool	29.895
Parsonstown	29.903
Valencia	29.908
Roche's Point	29.915
Pembroke	29.918
Sally	29.952
Jersey	29.985
Hurst Castle	29.959
Dover	29.937
LONDON	29.951
Oxford	29.954
Cambridge	29.938
Yarmouth	29.914



## 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.

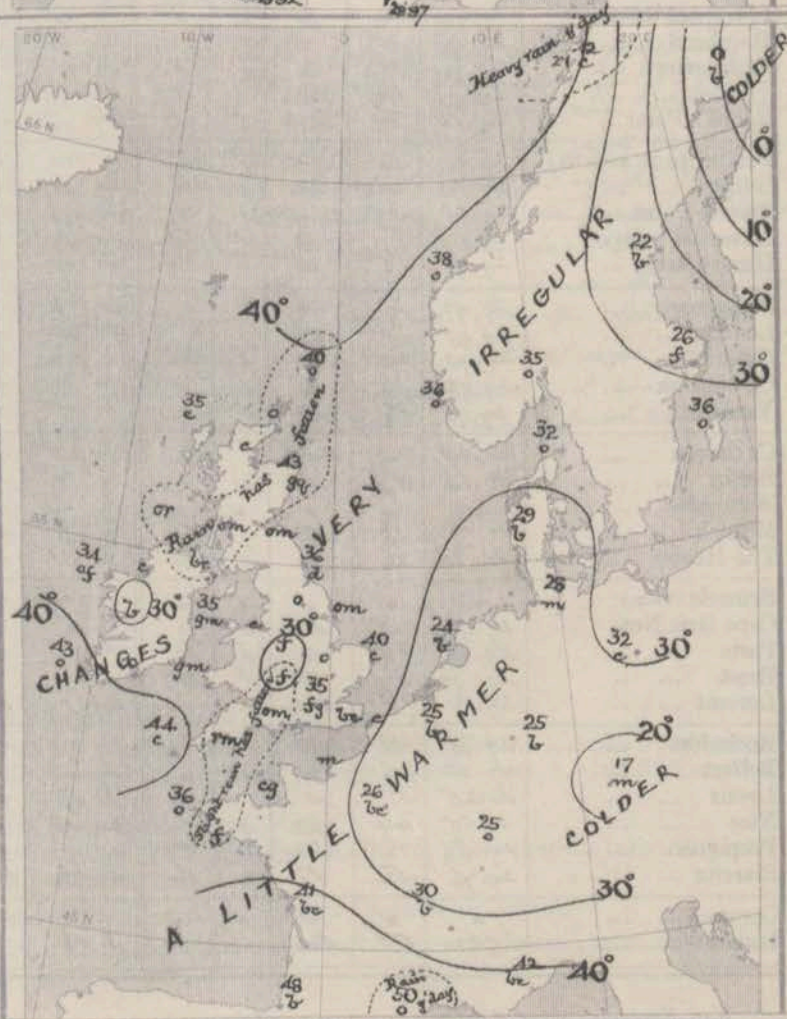
**RAINFALL**—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more are quoted in figures.

### MEANS OF TEMPERATURE IN SHADE, AND RAINFALL

(For the month of December.)

STATIONS.	TEMPERATURE				RAINFALL (Inches.)
	Daily Max.	Daily Min.	at 8 a.m.	at 8 a.m.	
Sumburgh Head	42.5	35.0	39.5	37.9	4.33
Sornoway	44.4	33.9	39.2	38.2	5.00
Wick	42.1	32.6	38.0	36.6	3.18
Nairn	41.7	32.8	37.0	35.5	2.08
Aberdeen	42.0	32.5	36.9	35.3	3.34
Leith	44.2	39.7	38.6	37.0	2.01
Shields	43.1	34.3	38.5	37.2	2.74
York	43.7	32.4	36.8	35.7	2.45
Loughborough	43.1	32.9	35.9	35.9	2.36
Ardrossan	44.6	36.0	40.1	38.7	4.04
Donaghadee	45.1	36.2	40.2	39.2	2.84
Holyhead	46.7	39.3	43.0	41.4	3.84
Liverpool	43.8	36.0	39.3	37.0	2.70
Parsonstown	44.8	33.2	37.9	36.6	3.02
Valencia	50.0	49.0	44.6	42.3	5.82
Roche's Point	48.0	39.0	42.0	41.5	4.74
Pembroke	47.1	40.6	43.0	42.5	4.06
Sally	49.8	43.8	47.1	45.4	4.10
Jersey	47.7	40.1	43.4	41.8	3.87
Hurst Castle	46.1	36.9	40.0	40.2	2.84
Dover	44.7	36.8	40.3	39.1	3.20
LONDON	44.7	34.0	38.5	37.4	2.14
Oxford	44.6	34.3	37.7	36.0	2.13
Cambridge	43.5	32.3	36.9	36.1	1.99
Yarmouth	42.4	31.9	38.3	37.5	2.05

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





# GENERAL SITUATION AT 8 A.M.

## PRESSURE

Highest, 30.3 in: and upwards, in an anticyclone lying over Denmark, North Germany, and the southern parts of Scandinavia.  
Lowest, 29.3 in: and less, in a shallow depression lying over the Bay of Biscay.

## TEMPERATURE

Gradients slight. Barometer rising generally, but falling a little in Scotland and over the west of Norway.  
Highest, 50° at Perpignan, 48° at Biarritz, 44° at Reilly, 43° at Aberdeen and Valencia Island, and 42° at Bodo, Miel, and Nice.  
Lowest, 0 (Zero) at Haparanda, 17° at Munich, 22° at Helsingfors and Olof, 24° at the Helder, and 25° at Brussels and Belfort.  
That occurred last night in many parts of the United Kingdom.

## WIND

Chiefly E<sup>3</sup> or SE<sup>3</sup>, and light or moderate in force, but northerly at some of the Channel, and S<sup>3</sup> in the north of Scotland and the south-west of France.  
In the northern parts of Scandinavia calms or light SW<sup>3</sup> breezes are reported.

## WEATHER

Cloudy or overcast in our Islands and also in Norway with mist or fog in many places, and rain at Malin Head and Ballyk.  
Fine over the greater part of Sweden, Denmark, Germany, the Netherlands and France.  
Slight rain fell yesterday in isolated parts of the United Kingdom and snow at Oxford.

## SEA

Slight or smooth generally but rather rough at Aberdeen.

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The anticyclone over Scandinavia and Denmark appears to be moving slowly southwards, but there are at present no indications of any decided change in the weather over our Islands.

# FORECASTS

For the 24 hours ending at NOON on 10<sup>th</sup> DEC<sup>r</sup> 1890.

## DISTRICTS.

## FORECASTS.

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

S<sup>3</sup> winds, light; cloudy, slight rain locally  
SE<sup>3</sup> winds, light; dull, misty, slight rain locally.  
E<sup>3</sup> winds, light; dull, with mist or fog in many places.

## DISTRICTS.

## FORECASTS.

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

} Same as Nos 1 and 2.  
E<sup>3</sup> winds, light or moderate; dull, misty, slight rain locally.  
Light breezes, chiefly E<sup>3</sup>; cloudy, rain locally.  
Same as No 8.

## WARNINGS

NONE ISSUED.

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



# YESTERDAY'S 2 P.M. REPORTS.

	THER: WIND								THER: WIND						
	BAR:	D.	W.	D.	F.	WEA.	SEA		BAR:	D.	W.	D.	F.	WEA.	SEA
Skudesnaes ...	30.30	39	SE	SE	4	c	3	Holyhead ...	29.96	37	SE	SE	1	omg	1
Sumburgh Head ...	30.16	42	SE	SE	1	c	2	Valencia ...	29.87	42	SE	SE	4	om	4
Scornoway ...	30.05	40	SE	SE	4	c	4	Scilly ...	29.86	43	SE	SE	3	c	4
Aberdeen ...	30.14	42	SE	SE	2	c	4	Jersey ...	29.85	39	SE	SE	4	om	3
Shields ...	30.25	42	SE	SE	4	c	4	Dungeness ...	29.90	38	SE	SE	5	c	3
Ardrossan ...	30.05	39	SE	SE	1	om	1	London ...	29.78	36	SE	SE	1	omg	*
Malin Head ...	29.97	38	SE	SE	4	c	2	Yarmouth ...	29.78	36	SE	SE	6	c	5
Mullaghmore ...	29.95	39	SE	SE	6	c	4	Rochefort ...							
Belmullet ...	29.92	39	SE	SE	4	c	*								

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

Weather in morning finer than of late in many places, sky being more or less clear over the greater part of Sweden, the Netherlands, France, western Germany, the Iberian Peninsula, and western Algeria; cloudy or overcast and gloomy elsewhere, with showers on our northeast coasts and snow at Lemberg. Local showers over the western and northern parts of the Kingdom and in Norway later.

Temperatures rather <sup>in</sup> excess of the mean over the extreme western and northwestern countries, but below the mean over Spain, France, and Central Europe. Morning values exceeding 50° at some of the Mediterranean stations and at Porto only, exceeding 40° on our southeastern coast, in the Helig, Shetlands, and northwest of Norway. As low as -1° F. at Archangel, +6° at Kiofia, 13° at Ranthorpe and Moscow, 19° at Kapanawa and Kelenfor, 20° at Kermisand, St. Petersburg, Munich, Prague and Vienna, 26° at Paris, 30° at Berlin, 33° in London and 35° at Bournemouth, not much change later - night very cold at our inland stations.

Wind mainly SE<sup>3</sup> and E<sup>3</sup> over the British Islands, the Netherlands, France, and the Bay of Biscay, and blowing strongly at the English Channel stations; mainly N<sup>3</sup> to NW<sup>3</sup>, light over the Baltic Provinces, Eastern Prussia, and Southern Russia. Very variable elsewhere, but light S<sup>3</sup> in the north of Scotland, and a moderate gale from SW. at Bodo. E<sup>3</sup> wind in Channel moderating considerably later.

Barometer highest, 30.3 ins: and more to 30.1 ins: in a large anticyclone of irregular form lying over Scandinavia, Denmark, the Baltic, Germany, the North Sea, and northeastern parts of our Islands; lowest 29.7 ins: and less, in a large depression over Central Russia and in a shallower system over the Iberian Peninsula - Spanish depression moving northwards later, but apparently filling up.

### 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, 10<sup>th</sup> December, 1890.*  
*Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.*

STATIONS.	YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
	BAROM.  Reading at 32° F. and Sea Level.	TEMP.  Dry.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Weather.	Sea. (0 to 12.)	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 ...	30.01	24	SW	2	bc	29.94	- 23	26	25	+ 26	WNW	2	0	*	- 2	-	
	Hernösand ...	30.28	15	Z	0	0	30.23	- 05	28	26	+ 6	Z	0	0	*	12	-	
	Stockholm ...	30.34	27	Z	0	0	30.36	+ 05	22	22	- 4	Z	0	0	*	28	-	
	Wisby ...	30.24	34	N	4	0	30.25	- 02	35	33	- 1	NNE	2	0	*	34	-	
	Bodö ...	29.92	43	SW	9	0	30.05	- 05	41	39	- 1	WSW	7	0	4	43	0.08	
	Christiansund	30.30	41	SSW	3	bc	30.34	+ 06	41	37	+ 3	WSW	3	0	3	41	-	
	Skudesnaes ...	30.38	37	ESE	2	0	30.37	+ 04	36	33	0	E	4	0	3	37	-	
	Christiania Fjord (Færdar)	30.37	34	NW	2	0	30.39	+ 03	31	28	- 4	NW	2	0	1	36	-	
	Skagen (The Scaw)	30.37	32	NW	1	0	30.37	+ 02	33	31	+ 1	ENE	1	0	1	39	-	
	Fanö ...	30.36	28	W	2	0	30.37	+ 07	30	30	+ 1	E	2	0	*	32	-	
BRITISH ISLANDS.	Sumburgh Head	30.19	42	SE	2	0	30.18	+ 04	44	42	+ 4	SSE	3	0	4	44	0.05	
	Stornoway ...	30.03	40	SE	2	0	30.04	+ 01	43	41	+ 8	S	6	0	6	43	0.02	
	Wick ...	30.12	42	S	6	0	30.18	+ 06	37	35	- 5	W	1	0	1	44	0.05	
	Nairn ...	30.06	40	Z	0	0	30.15	+ 11	30	30	- 9	Z	0	0	0	40	-	
	Aberdeen ...	30.12	38	SW	2	ogp	30.23	+ 14	36	35	- 7	SW	1	ogm	4	43	0.03	
	Leith ...	30.12	34	SE	1	0	30.20	+ 16	33	32	- 3	Z	0	f	*	38	-	
	Shields ...	30.12	36	Z	0	om	30.21	+ 17	38	37	+ 2	Z	0	m	2	38	0.02	
	Spurn Head ...	30.13	38	NW	1	0	30.21	+ 16	40	38	+ 2	ENE	2	ogm	3	40	-	
	York ...	30.13	31	SSE	1	0	30.22	+ 15	37	37	+ 1	SSE	1	f	*	39	0.02	
	Loughborough	30.13	32	ENE	1	0	30.21	+ 14	35	34	+ 5	E	2	ogm	*	36	-	
GERMANY & HOLLAND.	Ardrossan ...	30.09	35	ENE	1	0	30.18	+ 15	34	34	0	ENE	3	om	2	35	-	
	Malin Head ...	30.02	39	SW	2	c	30.08	+ 12	35	33	- 3	S	3	0	1	40	-	
	Mullaghmore ...	30.02	39	S	1	cm	30.10	+ 12	38	35	+ 1	SE	4	0	2	42	-	
	Belmullet ...	30.07	37	SSE	2	0	30.07	+ 06	38	31	- 1	ESE	1	0	*	39	-	
	Donaghadee ...	30.08	35	E	3	0	30.14	+ 19	42	41	+ 10	SSE	3	0	1	42	-	
	Liverpool (Bidston)	30.11	29	SE	2	0	30.19	+ 14	34	34	+ 5	SE	3	0	2	34	-	
	Holyhead ...	30.08	38	Z	0	ogm	30.15	+ 15	37	35	+ 2	Z	0	ogm	0	39	-	
	Parsonstown ...	30.09	30	Z	0	0	30.13	+ 12	26	25	- 3	Z	0	c	*	37	-	
	Valencia ...	30.06	40	ESE	1	cm	30.08	+ 13	36	35	- 7	Z	0	bc	1	45	-	
	Roche's Point...	30.06	39	E	4	bc	30.09	+ 11	37	36	- 2	N	2	d	3	44	-	
FRANCE AND BELGIUM.	Pembroke (St. Ann's Hd.)	30.06	38	ENE	2	0	30.13	+ 11	40	39	+ 4	ENE	2	gm	2	40	0.01	
	Soilly ...	29.96	45	ENE	3	d	30.04	+ 14	48	46	+ 4	ESE	2	c	4	48	0.04	
	Prawle Point ...	30.02	41	NE	5	0	30.12	+ 16	41	41	+ 4	NE	4	fm	3	42	0.17	
	Jersey (St. Aubin's)	30.00	46	SE	3	ogm	30.12	+ 18	45	44	+ 5	Z	0	om	0	47	-	
	Hurst Castle ...	30.06	35	NE	4	m	30.16	+ 16	35	35	0	ENE	3	f	1	38	-	
	Dungeness ...	30.05	40	E	3	m	30.12	+ 10	37	36	- 2	E	3	0	1	43	-	
	London ...	30.11	38	E	1	om	30.18	+ 13	31	30	- 4	Z	0	f	*	39	-	
	Oxford ...	30.13	33	Z	0	f	30.21	+ 14	30	30	+ 8	Z	0	f	*	34	-	
	Cambridge ...	30.13	34	N	1	0	30.20	+ 15	28	27	- 6	N	1	of	*	37	-	
	Yarmouth ...	30.10	40	SE	3	bc	30.18	+ 13	37	36	- 3	ESE	3	c	3	41	-	
GERMANY & HOLLAND.	Cuxhaven ...	30.29	30	ESE	3	c	30.34	+ 09	30	28	+ 2	SE	2	0	*	31	-	
	Berlin ...	30.34	33	NW	2	0	30.33	+ 01	32	30	0	SE	2	0	*	36	-	
	Wiesbaden ...	*	*	*	*	*	30.25	+ 04	25	24	0	Z	0	0	*	30	-	
	Munich ...	30.17	16	E	3	bc	30.17	+ 06	19	19	+ 2	E	5	m	*	25	-	
	The Helder ...	30.19	28	ESE	1	0	30.25	+ 12	24	24	0	E	1	0	2	30	-	
	Brussels (9 a.m.)	*	*	*	*	*	30.20	+ 11	22	22	- 3	SE	1	0	*	36	-	
	Cape Gris Nez	30.04	31	E	2	m	30.17	+ 17	27	27	- 4	ESE	4	0	1	37	-	
	Paris ...	29.93	30	ENE	1	0	30.15	+ 12	21	21	- 5	NE	2	0	*	33	-	
	Brest ...	29.96	46	WSW	1	0	30.07	?	45	44	+ 9	E	2	0	2	46	-	
	Lorient ...	29.91	41	SSE	2	m	30.06	+ 17	41	41	+ 6	ESE	3	f	3	41	-	
FRANCE AND BELGIUM.	Rochefort ...	29.99	44	SE	3	0	30.03	+ 13	34	34	- 7	ESE	2	f	*	48	-	
	Belfort ...	30.15	32	NW	1	0	30.15	+ 11	25	?	0	NW	1	0	*	26	-	
	Lyons ...	30.12	31	N	1	0	30.17	+ 09	26	26	- 4	E	1	m	*	38	-	
	Nice ...	30.04	42	Z	0	0	30.07	+ 10	36	35	- 6	E	3	0	1	52	-	
	Perpignan ...	30.04	45	Z	0	0	30.04	+ 07	45	44	- 5	Z	0	0	*	55	-	
	Biarritz ...	29.97	52	NW	1	0	29.97	+ 05	50	45	+ 2	S	2	0	1	55	-	
	Corunna ...	*	*	*	*	*	30.13	+ 05	53	51	+ 1	NW	4	0	3	61	0.08	
	Lisbon ...	30.11	50	SW	4	c	30.13	+ 05	53	51	+ 1	NW	4	0	3	61	0.08	

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

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



# WEATHER CHARTS

for 8 a.m. on

Wednesday, 10<sup>th</sup> December,

1890.

## BAROMETER, WIND AND SEA.

### EXPLANATION OF MAP

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

Changes since previous morning are stated in words.

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

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

→ = forces 5 to 7; → = forces 1 to 4.

○ = dead calm.

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

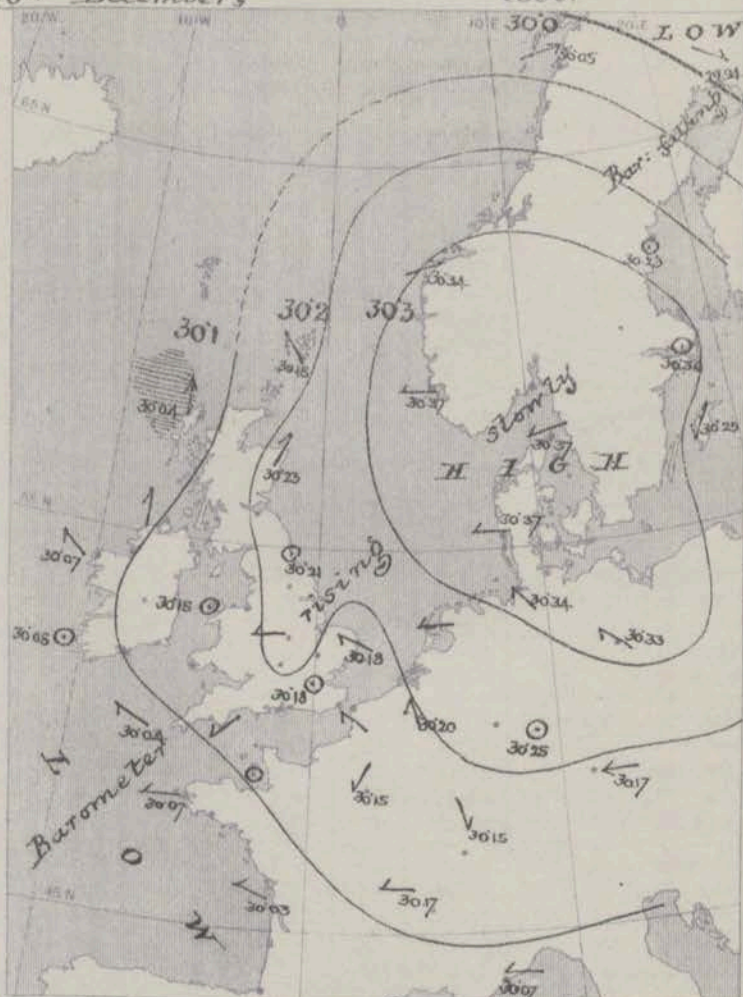
■ = Rough. ■ = High.

## MEAN HEIGHT OF THE BAROMETER

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

During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS.
	<i>in.</i>
Sumburgh Head .....	29.607
Stornoway .....	29.701
Wick .....	29.711
Nairn .....	29.739
Aberdeen .....	29.757
Leith .....	29.803
Shields .....	29.843
York .....	29.888
Loughborough .....	29.923
Ardrossan .....	29.819
Donaghadee .....	29.847
Holyhead .....	29.879
Liverpool .....	29.895
Parsonstown .....	29.900
Valencia .....	29.908
Roche's Point .....	29.915
Pembroke .....	29.918
Silly .....	29.962
Jersey .....	29.985
Hurst Castle .....	29.959
Dover .....	29.957
LONDON .....	29.951
Oxford .....	29.954
Cambridge .....	29.938
Yarmouth .....	29.914



## 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.

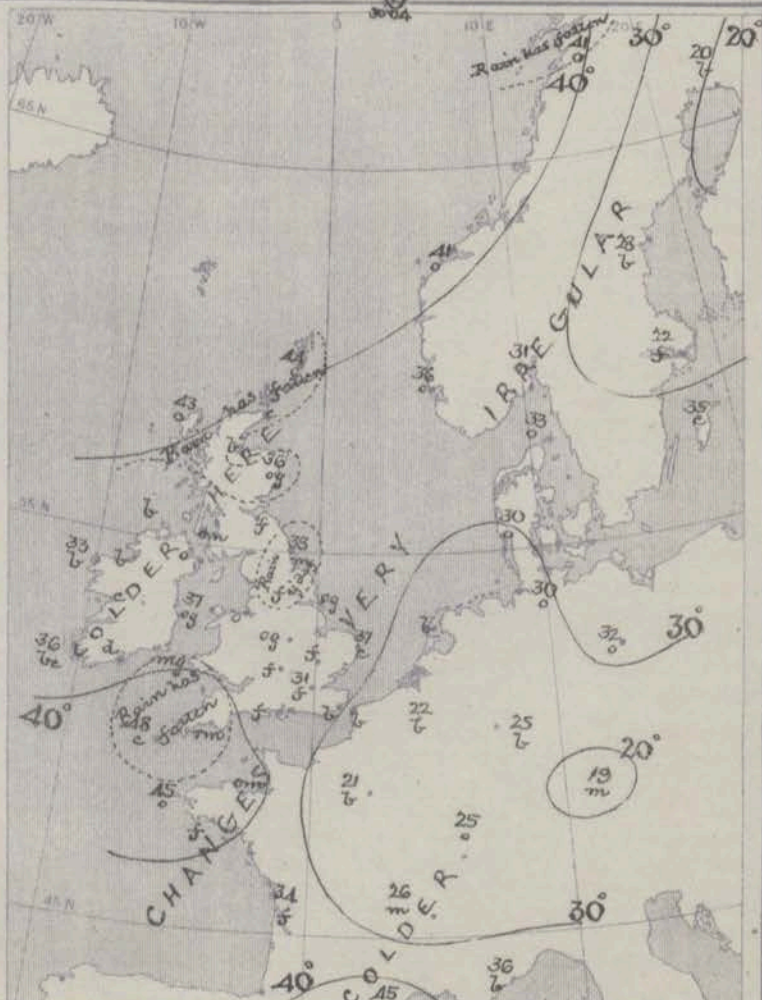
**RAINFALL**—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more are quoted in figures.

## MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of December.)

STATIONS.	TEMPERATURE.				RAINFALL (Inches.)
	Daily Max.	Daily Min.	at 8 a.m. Dry.	at 8 a.m. Wet.	
Sumburgh Head .....	42.5	35.0	39.5	37.9	4.33
Stornoway .....	44.4	33.9	39.2	38.2	5.66
Wick .....	42.1	32.6	38.0	36.6	3.18
Nairn .....	41.7	32.8	37.0	35.5	2.08
Aberdeen .....	42.0	32.5	36.9	35.3	3.34
Leith .....	44.2	33.7	38.6	37.0	2.01
Shields .....	43.1	34.3	38.5	37.2	2.74
York .....	42.7	32.4	36.8	35.7	2.45
Loughborough .....	43.1	32.9	36.9	35.9	2.36
Ardrossan .....	44.6	36.0	40.1	38.7	4.04
Donaghadee .....	45.1	36.2	40.2	39.2	2.84
Holyhead .....	46.7	39.3	43.0	41.4	3.84
Liverpool .....	43.8	36.0	39.3	37.6	2.70
Parsonstown .....	44.8	33.2	37.9	36.6	3.02
Valencia .....	50.0	40.0	44.6	42.3	5.82
Roche's Point .....	48.0	39.0	42.9	41.5	4.74
Pembroke .....	47.1	40.6	43.9	42.5	4.06
Silly .....	40.8	43.8	47.1	45.4	4.10
Jersey .....	47.7	40.1	43.4	41.8	3.87
Hurst Castle .....	46.1	36.9	40.9	40.2	2.84
Dover .....	44.7	36.8	40.3	39.1	3.20
LONDON .....	44.7	34.6	38.5	37.1	2.14
Oxford .....	45.6	34.3	37.7	36.0	2.13
Cambridge .....	43.6	32.3	36.9	36.1	1.99
Yarmouth .....	42.4	34.2	38.3	37.5	2.25

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





# GENERAL SITUATION AT 8 A.M.

## PRESSURE

Highest, 30.3 in. and upwards in a large anticyclone lying over Brunswick, North Germany, and the southern part of Scandinavia.  
Lowest, 30.0 in.; and less, in Lapland, 30.1 in.; and less, in a large area lying to the westward and southward of our Islands.

Gradient slight. Barometer rising generally, but falling in the north of Sweden.

## TEMPERATURE

Highest, 53° at Lisbon, 48° at Selly, 45° at Jersey and Perpignan, 44° at Lumburg, 43° at Rotterdam, and 42° at Donaghadee.

Lowest, 19° at Munich, 21° at Paris, Stockholm and Brussels, 24° at the Elster, and 25° at Niesbaden and Relfort.

Frost occurred last night in most parts of the United Kingdom.

## WIND

Light from the E. or S.E. over the greater part of Northern Europe, but calm over the central part of the United Kingdom and S. in the north of Scotland.

W in the north of Scandinavia, with a moderate gale at Bodö.

## WEATHER

Fine in the west of Ireland as well as on the southeast coast of England and over the Netherlands and north of Sweden.

Bull elsewhere, with fog or mist in many parts of the United Kingdom and France, and slight rain at Hook Point and Howle Point.

A little rain fell yesterday at several of our northern stations and also in the southwest of England.

## SEA

Slight or smooth generally, but rough at Stornoway.

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

There are at present no indications of any material change in the weather.

# FORECASTS

For the 24 hours ending at NOON on 11<sup>th</sup> DEC<sup>r</sup> 1890.

## DISTRICTS.

## FORECASTS.

0 SCOTLAND  
NORTH

S<sup>ly</sup> winds, moderate or fresh; dull,  
rain locally.

1 SCOTLAND  
EAST

{ Calms and S<sup>ly</sup> airs; dull, gloomy, foggy

2 ENGLAND  
N.E.

3 ENGLAND  
EAST

4 MIDLAND  
COUNTIES

5 ENGLAND  
SOUTH

{ Variable or E<sup>ly</sup> airs; dull,  
gloomy, foggy.

## DISTRICTS.

## FORECASTS.

6 SCOTLAND  
WEST

{ E<sup>ly</sup> and SE<sup>ly</sup> winds, light; dull,  
misty.

7 ENGLAND  
N.W.

8 ENGLAND  
S.W.

E<sup>ly</sup> winds, light; dull, misty, rain  
locally.

9 IRELAND  
NORTH

10 IRELAND  
SOUTH

{ E<sup>ly</sup> and SE<sup>ly</sup> winds, light or moderate;  
fair generally.

## WARNINGS

NONE ISSUED.

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



# YESTERDAY'S 2 P.M. REPORTS.

	BAR.	THER:		WIND		WEA.	SEA		BAR.	THER:		WIND		WEA.	SEA
		D.	W.	D.	F.					D.	W.	D.	F.		
Skudesnaes ...	30.34	36	38	E	4	0	3		Holyhead ...	30.05	38	SE	1	0 gm	4
Sumburgh Head ...	30.17	41	41	SE	2	0	3		Valencia ...	30.02	45	ESE	3	0 m	3
Stornoway ...	30.05	40	39	SE	2	0	2		Scilly ...	29.92	46	ESE	5	0	4
Aberdeen ...	30.09	42	40	SE	5	0	6		Jersey ...	29.90	44	ESE	2	0	2
Shields ...	30.09	38	36	ESE	2	0	3		Dungeness ...	30.03	42	E	2	0	1
Ardrossan ...	30.05	35	33	ESE	1	0 m	1		London ...	30.07	39	E	1	0 gf	3
Malin Head ...	30.00	40	39	SSW	2	0	1		Yarmouth ...	30.07	41	SE	3	0	3
Mullaghmore ...	30.02	42	40	S	1	0 m	2		Rochefort ...	29.99	44	SSW	3	0	7
Belmullet ...	30.04	39	37	SSW	2	0	*								

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

Weather fair as a whole, for the time of year, over the greater part both of our Islands and the Continent, clear and bright in some places, but dull and gloomy in most, with fog over England and Ireland and haze in many localities. Snow prevalent over Russia and Hungary, and rain in Tunis, at Corunna and Brest. Some rain during day in various parts of Scotland and on our southwestern coast; fog continuing over England during day.

Temperature changing very fitfully—rising over the southern and western regions, falling over Central and Eastern Europe. Morning readings all below 50° except on the coast of the Iberian Peninsula and on the southern shore of the Mediterranean, as low as 11° F. at Moscow, 14° at Kharkov, 15° at Warsaw, and below 20° at most of the other Russian stations; 17° at Munich, 22° at Ruda-Pesth, Domburg, Munster, Oxford, and Herrisford, 26° at Paris, 28° at Lons-le-Saunier, 32° at Berlin, and 35° in London. Rising to between 44° and 48° at our southwestern stations later, and to 40° and more in Scotland and the northwest of Norway, but remaining very cold over Central and Eastern Europe.

Wind variable in direction, and as a whole light to moderate in force. Chiefly E and SE over the British Isles, North Sea, France, and North Germany. Strong to fresh from between E and N. on the northern shore of the Mediterranean and Adriatic, moderate and variable from the W in the far south. Little or no change of importance observed later.

Barometer highest 30.3 in. and more, to 30.1 in. in a large anticyclone covering Denmark, Scandinavia, the North Sea, Baltic, and Germany; lowest 30.0 in. and less over Russia, about 29.9 in. in a shallow depression over the Bay of Biscay, 29.8 in. and less in another near Cagliari, and about 29.7 in. in another lying to the southward of Malta. Rising slowly over Western 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 11th. December.

1890.

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

		YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
		BAROM.	TEMP.	WIND.			BAROMETER.		SHADE TEMP.			WIND.				SHADE TEMP.			
STATIONS.		Reading at 29° F. and Sea Level.	Dry.	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.	Sea. (0 to 12.)	Max.	Min.	Amount of Rainfall.	
SCANDINAVIA.	Haparanda ...	30.15	24	2	0	bc	30.19	+25	19	10	-7	SSE	2	bc	0	?	?	—	
	Hernösand ...	30.25	30	2	0	o	30.21	+05	20	20	0	2	bc	0	0	32	10	—	
	Stockholm ...	30.35	21	1	2	o	30.35	-01	20	20	-2	WNW	2	o	0	21	19	—	
	Wisby ...	30.34	32	2	4	o	30.33	+08	32	30	-3	N	4	o	0	36	30	—	
	Bodö ...	30.17	38	2	0	o	30.13	+08	41	39	0	WN	4	o	2	41	36	0.04	
	Christiansund ...	30.34	38	SE	3	o	30.26	-08	34	31	-7	SE	2	bc	3	41	34	—	
	Skudesnaes ...	30.35	36	SE	4	o	30.32	-03	35	35	+3	SE	2	o	4	?	36	—	
	Christiania Fjord (Færd)	30.38	28	2	0	bc	30.36	-02	25	24	-6	N	2	bc	1	?	25	—	
	Skagen (The Scaw)	30.38	32	2	0	o	30.35	-03	31	30	-2	S	1	o	0	32	30	—	
	Faßø ...	30.40	29	SE	2	o	30.38	+01	30	29	-1	2	o	o	0	32	?	—	
BRITISH ISLANDS.	Sumburgh Head	30.16	43	SE	3	o	30.03	-15	44	43	0	SE	4	o	5	45	38	0.02	
	Stornoway ...	30.04	41	SW	6	o	29.84	-20	47	46	+4	SW	7	o	6	47	39	0.01	
	Wick ...	30.12	42	W	2	bc	30.02	-16	43	42	+6	S	5	o	3	44	35	—	
	Nairn ...	30.12	35	2	0	bc	29.99	-16	41	40	+11	SE	1	c	1	41	26	—	
	Aberdeen ...	30.19	43	SE	3	og	30.11	-12	40	38	+4	SE	4	og	4	44	36	0.01	
	Leith ...	30.17	35	2	0	bc	30.06	-14	37	35	+4	SW	1	c	0	39	32	—	
	Shields ...	30.21	39	2	0	bc	30.14	-07	37	32	-5	SE	3	c	2	41	31	—	
	Spurn Head ...	30.22	39	SE	3	o	30.20	-01	35	30	-5	SW	2	om	3	41	34	—	
	York ...	30.25	39	W	1	o	30.20	-05	31	30	-6	SE	1	o	0	39	30	—	
	Loughborough	30.23	36	NE	1	o	30.20	-01	31	31	-4	SE	1	ogm	0	38	30	—	
GERMANY & HOLLAND.	Ardrossan ...	30.14	37	ENE	1	o	30.05	-13	40	40	+6	E	3	o	3	42	34	—	
	Malin Head ...	30.03	36	SE	4	bc	29.89	-19	43	43	+8	S	4	om	2	45	34	—	
	Mullaghmore ...	30.01	42	SE	5	c	29.89	-22	47	45	+9	SW	5	rog	4	49	37	0.11	
	Belmullet ...	29.94	38	SE	2	bc	29.87	-20	42	42	+9	SE	1	o	0	45	32	0.12	
	Donaghadee ...	30.13	44	SE	3	bc	30.03	-14	45	45	+3	S	4	c	2	45	42	0.11	
	Liverpool (Bidston)	30.15	35	SE	4	o	30.12	-07	37	37	-1	SE	5	of	4	37	33	—	
	Holyhead ...	30.13	40	2	0	ogm	30.06	-09	45	44	+8	S	3	mog	2	45	36	—	
	Parsonstown ...	30.05	?	2	0	ogm	29.93	-20	45	44	+19	SE	1	T	0	46	38	0.12	
	Valencia ...	29.96	47	SE	5	c	29.90	-18	46	45	+10	W	1	Tm	1	50	35	0.58	
	Roche's Point...	30.06	48	SE	2	bc	29.94	-15	49	47	+12	S	5	o	4	49	37	—	
FRANCE AND BELGIUM.	Pembroke (St. Ann's Hd.)	30.12	41	E	4	m	30.05	-08	43	43	+3	ENE	4	om	4	45	39	0.03	
	Scilly ...	30.07	40	SE	2	bc	30.00	-04	48	48	0	SE	5	o	6	51	46	—	
	Prawle Point ...	30.15	46	NE	3	o	30.11	-01	45	44	+4	ENE	3	og	2	46	41	0.01	
	Jersey (St. Aubin's)	30.17	41	ENE	2	o	30.14	+02	36	36	-5	ENE	2	of	2	45	33	0.01	
	Hurst Castle ...	30.20	34	E	3	f	30.18	+02	28	28	-7	NE	3	f	1	37	27	—	
	Dungeness ...	30.18	37	E	3	bc	30.16	+04	34	32	-3	E	2	m	1	42	25	—	
	London ...	30.21	32	2	0	f	30.19	+01	28	27	-3	2	o	f	0	39	25	—	
	Oxford ...	30.24	34	NE	1	o	30.20	-01	28	28	-2	2	o	off	0	34	28	—	
	Cambridge ...	30.23	27	2	0	of	30.21	+01	25	28	+1	2	o	off	0	38	25	—	
	Yarmouth ...	30.19	37	ENE	3	bc	30.20	+02	35	34	-2	SE	2	cg	4	39	34	—	
GERMANY & HOLLAND.	Cuxhaven ...	30.37	32	E	3	o	30.40	+06	32	31	+2	ENE	3	o	0	32	30	—	
	Berlin ...	30.35	33	NE	4	o	30.38	+05	33	32	+1	2	o	o	0	34	32	—	
	Wiesbaden ...	30.38	33	NE	4	o	30.28	+08	24	22	-1	NE	2	bc	0	30	19	—	
	Munich ...	30.18	15	E	3	m	30.19	+02	13	13	-6	E	4	bc	0	23	12	—	
	The Helder ...	30.30	27	ENE	2	bc	30.27	+02	26	25	+2	ENE	2	bc	2	28	?	—	
	Brussels (9 a.m.)	30.21	28	ENE	2	bc	30.23	+02	17	17	-5	ENE	1	f	0	30	17	—	
	Cape Gris Nez	30.21	20	ENE	2	o	30.18	+03	24	23	-3	SE	2	m	1	36	23	—	
	Paris ...	30.10	45	ENE	1	m	30.09	+02	44	44	-1	ENE	3	o	2	45	32	—	
	Brest ...	30.13	42	ENE	1	f	30.12	+06	34	34	-7	ENE	1	f	3	45	34	0.04	
	Lorient ...	30.08	45	E	2	m	30.10	+07	32	32	-2	E	3	m	?	48	27	—	
FRANCE AND BELGIUM.	Rocheport ...	30.21	20	W	1	o	30.21	+06	21	13	-4	W	1	o	0	25	12	—	
	Belfort ...	30.17	28	WNW	1	f	30.17	0.0	25	24	-1	N	1	m	0	31	24	—	
	Lyons ...	30.02	42	NE	4	bc	30.01	-06	39	37	+3	E	4	bc	1	50	?	—	
	Nice ...	30.06	47	2	0	o	30.01	-03	49	44	+4	NW	2	bc	0	50	41	—	
	Perpignan ...	30.06	52	NW	4	o	30.08	+11	48	45	-2	SW	3	o	2	54	45	0.20	
	Biarritz ...	30.06	52	NW	4	o	30.08	+11	48	45	-2	SW	3	o	2	54	45	0.20	
	Corunna ...	30.20	30	NW	3	bc	30.19	+06	48	46	-5	SE	1	c	?	57	46	—	
	Lisbon ...	30.20	30	NW	3	bc	30.19	+06	48	46	-5	SE	1	c	?	57	46	—	
	Corunna ...	30.20	30	NW	3	bc	30.19	+06	48	46	-5	SE	1	c	?	57	46	—	
	Lisbon ...	30.20	30	NW	3	bc	30.19	+06	48	46	-5	SE	1	c	?	57	46	—	

For Explanation of Columns, see bottom of p. 1.

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



# WEATHER CHARTS

for 8 a.m. on

Thursday, 11<sup>th</sup> December,

1890.

## BAROMETER, WIND AND SEA.

### EXPLANATION OF MAP.

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

Changes since previous morning are stated in words.

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

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

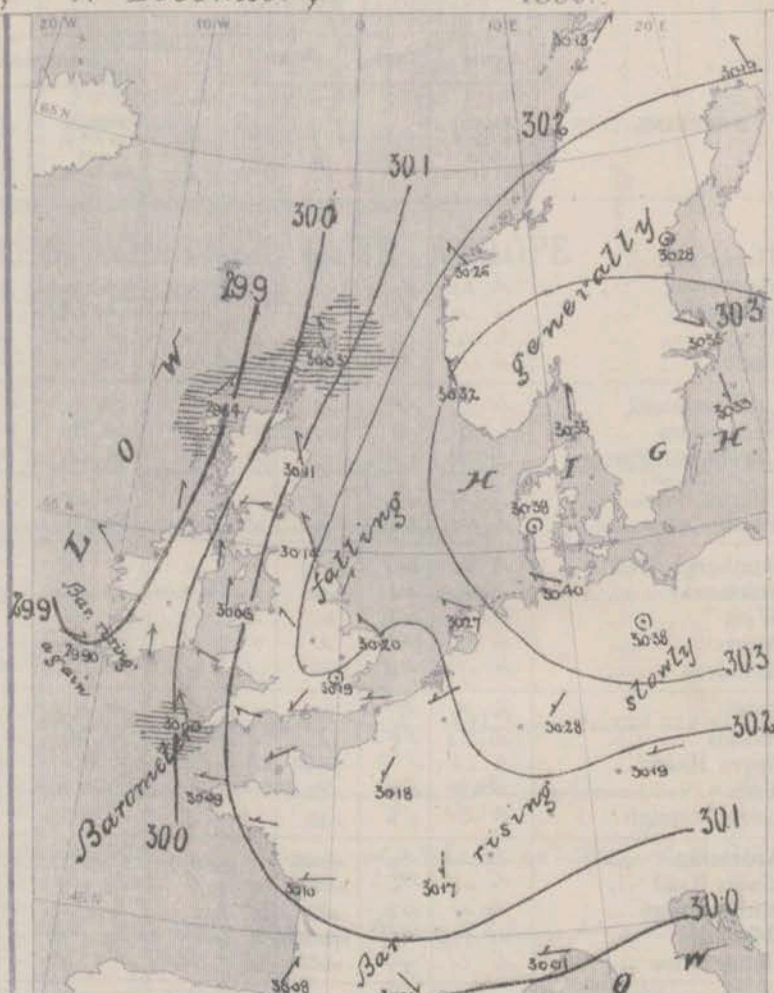
**SEA DISTURBANCE**—Where considerable, is shown thus:

— Rough. — High.

## MEAN HEIGHT OF THE BAROMETER

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

STATIONS.	MEAN READINGS.
Sumburgh Head	29.667
Stornoway	29.701
Wick	29.711
Nairn	29.739
Aberdeen	29.767
Leith	29.803
Shields	29.843
York	29.888
Loughborough	29.923
Androssan	29.819
Donaghadee	29.847
Holyhead	29.879
Liverpool	29.895
Parsonstown	29.909
Valencia	29.908
Roche's Point	29.915
Pembroke	29.918
Silly	29.962
Jersey	29.985
Hurst Castle	29.959
Dover	29.957
LONDON	29.951
Oxford	29.954
Cambridge	29.938
Yarmouth	29.914



## 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.

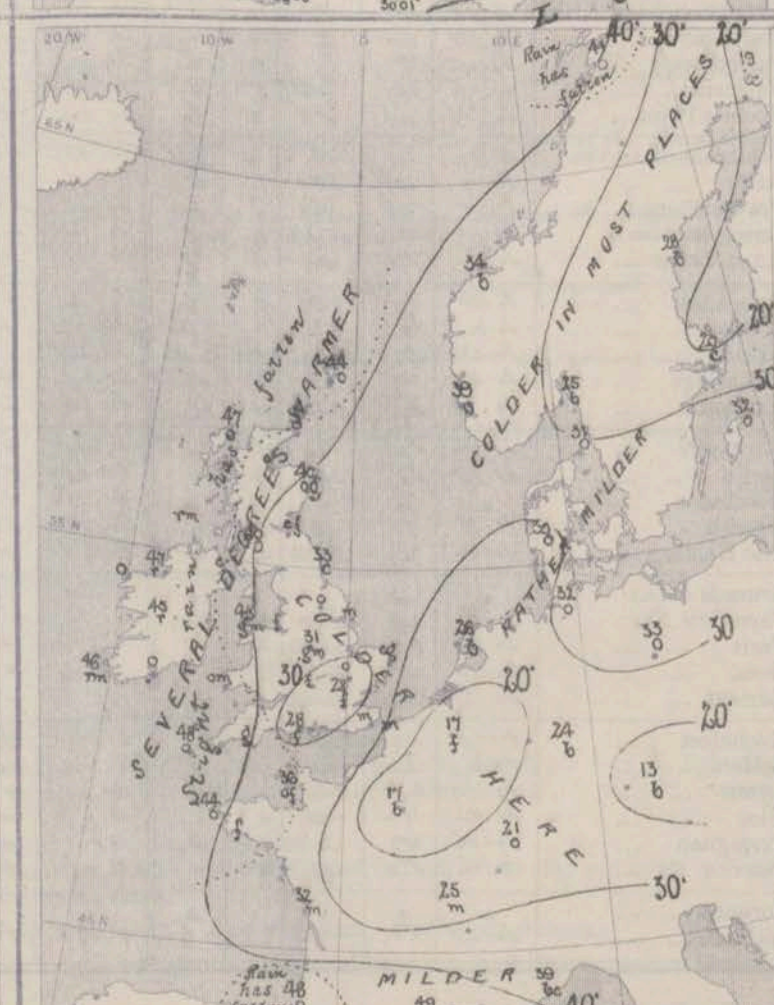
**RAINFALL**—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more are quoted in figures.

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

(For the month of December.)

STATIONS.	TEMPERATURE.				RAINFALL. (inches.)
	Daily Max.	Daily Min.	at 8 a.m.	at 8 a.m.	
Sumburgh Head	42.5	35.0	39.5	37.9	4.33
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Wick	42.1	32.6	38.0	36.6	3.18
Nairn	41.7	32.8	37.0	35.5	2.08
Aberdeen	42.0	32.5	36.9	35.3	3.34
Leith	44.2	33.7	38.6	37.0	2.01
Shields	43.1	31.3	38.5	37.2	2.74
York	42.7	32.4	36.8	35.7	2.45
Loughborough	43.1	32.9	36.9	35.9	2.36
Androssan	44.6	36.0	40.1	38.7	4.04
Donaghadee	43.1	36.2	40.2	39.2	2.84
Holyhead	40.7	39.3	43.0	41.4	3.84
Liverpool	43.8	36.0	39.3	37.6	2.70
Parsonstown	44.8	33.2	37.9	36.0	3.02
Valencia	50.0	40.0	44.0	42.3	5.82
Roche's Point	48.0	39.0	42.9	41.5	4.74
Pembroke	47.1	40.6	43.9	42.5	4.00
Silly	49.8	43.8	47.1	45.4	4.10
Jersey	47.7	40.1	43.4	41.8	3.87
Hurst Castle	46.1	36.9	40.9	40.2	2.84
Dover	44.7	36.8	40.3	39.1	3.20
LONDON	44.7	34.6	38.5	37.4	2.14
Oxford	43.0	34.3	37.7	36.0	2.13
Cambridge	43.5	32.3	36.9	36.1	1.09
Yarmouth	42.4	31.2	38.8	37.5	2.06

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





## GENERAL SITUATION AT 8 A.M.

## PRESSURE

Highest, 30.2 ins. and upwards, in an anticline lying over Dinmark, the Baltic, north Germany and the south of Scandinavia.  
Lowest, 29.2 ins. and less, in a large depression lying to the westward of our Islands.  
Gradients slight generally, but increasing in the north-west.  
Barometer falling at all but the German and southern French stations

TEMPERATURE

Highest, 49° at Rock Point and Capignan, 48° at Sully, Biarritz and Lisbon, 47° at Pomeroy and Millaghmore, and 46° at Valencia Island.  
Lowest, 13° at Munich, 17° at Brussels and Paris, 19° at Haparanda and Harer, 20° at Stockholm, and 21° at Belfast.

WIND

Light or moderate from the S<sup>W</sup> or SE<sup>W</sup> over the greater part of our Islands, but strong to a gale from the SW<sup>W</sup> in the Hebrides, and light from W. at Valentia Island. Light from the E<sup>W</sup> in the south-east of England and also over the greater part of France and Germany.

WEATHER

Thin in Scandinavia, Germany, the Netherlands, and the east and south of France.  
Cloudy or overcast elsewhere, with fog in many parts of England and also in the west of France, and rain in Ireland.  
Since yesterday morning rain has fallen at several of our western and extreme northern stations.

SEA

Rough off the north of Scotland and also at Sicily, but moderate to smooth elsewhere.

### PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The depressions which are now beginning to travel along our extreme western coast seem likely to occasion freshening S<sup>3</sup> winds and rainy weather in most of the western and northern districts. In the east and southeast, however, no very decided change is likely at present.

## FORECASTS

For the 24 hours ending at NOON on 12<sup>TH</sup> DEC<sup>R</sup> 1890.

DISTRICTS.		FORECASTS.	DISTRICTS.		FORECASTS.
†0	SCOTLAND NORTH	S <sup>3</sup> and SW <sup>1</sup> / <sub>2</sub> winds, strong, a gale in places; dull, some rain.	6	SCOTLAND WEST	{ S <sup>1</sup> and S <sup>2</sup> winds, freshening; dull, some rain.
1	SCOTLAND EAST	{ S <sup>1</sup> / <sub>2</sub> winds, freshening; fair to dull and some rain.	7	ENGLAND N.W.	
2	ENGLAND N.E.		8	ENGLAND S.W.	
3	ENGLAND EAST	{ E <sup>1</sup> and SE <sup>1</sup> / <sub>2</sub> winds, light; dull, local fogs.	†9	IRELAND NORTH	{ S <sup>1</sup> / <sub>2</sub> winds, fresh or strong, dull, some rain.
4	MIDLAND COUNTIES		†10	IRELAND SOUTH	
5	ENGLAND SOUTH			WARNINGS	



# 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 ...	30.41	37	34	SE	4	0	3		Holyhead ...	30.13	40	34	SE	1	om. 2
Sumburgh Head ...	30.17	44	43	SE	3	0	4		Valencia ...	30.02	46	44	SE	5	om. 4
Stornoway ...	30.07	43	41	SE	6	0	6		Scilly ...	30.06	51	49	SE	2	bc
Aberdeen ...	30.20	39	38	SE	1	om	4		Jersey ...	30.14	44	43	SE	1	f. 0
Shields ...	30.22	40	39	SE	2	f	2		Dungeness ...	30.18	38	36	SE	2	bc
Ardrossan ...	30.15	36	35	SE	1	of	1		London ...	30.20	36	35	SE	2	of 2
Malin Head ...	30.07	38	36	SE	3	bc	1		Yarmouth ...	30.19	38	36	SE	3	bc
Mullaghmore ...	30.05	43	38	SE	5	bc	3		Rochefort ...	30.07	48	46	SE	2	?
Belmullet ...	30.01	37	34	SE	2	bc	*								

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

Weather quiet generally, and in many localities fine, bright, and dry; fog very prevalent over Great Britain, the Channel, and west of France, as well as in some parts of northern Europe, haze in many other places, much cloud over eastern and southeastern Europe, and snow at Moscow and Prague. Some rain at many of our western, southeastern, and extreme northern stations later, a considerable fall (0.6 in.) at Valencia, and 0.2 in. at Biscaya. Droue fog over southeast of England all day.

Temperature somewhat low except in extreme northwest; morning readings exceeding 50° over the southern parts of the Mediterranean and at Lisbon; and above 40° in the Hebrides, Shetlands and northwest of Norway. Below 40° over the greater part of our Islands, and below 30° over central, eastern, and northern Europe. Lowest morning <sup>values</sup> (1) 5° F. at Kiev, 10° at Moscow, 14° at St. Petersburg, and below 20° at almost all other Russian stations; (2) 19° at Munich and Münster, 20° at Prague, 21° at Paris, 22° at Brussels, 26° at Constantinople, 30° at Nain and Oxford, 31° in London, 32° at Berlin. Rising decidedly in the west of our Islands later, and touching 51° at Scilly, 50° at Valencia Island, but not exceeding 39° in London, 34° at Berlin, and 27° at Paris all day.

Wind moderate to strong from the W<sup>st</sup> over Lapland and north of Finland; light to moderate from SE. and S. on our western and northern coasts, E<sup>st</sup> over the Bay of Biscay, very variable elsewhere, and calm in many places. SE wind freshening in the west later, and beginning to spread eastward a little, but not reaching the eastern parts of England.

Barometer highest, 30.4 in. and more to 30.1 in. in a large complex anticyclone covering nearly the whole of eastern, central, and northwestern Europe; lowest 29.3 in. and less, over the Kola Peninsula and east of Lapland, as well as over Greece and the southeastern parts of the Mediterranean. Gradients moderate (for W<sup>st</sup> winds) in the far north, slight and variable elsewhere, but mainly for E<sup>st</sup> winds over Southern and western Europe. Falling steadily at our western stations 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 *Friday, 12<sup>th</sup> December, 1890.*  
*Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.*

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

STATIONS.	YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
	BAROM.  Reading at 32° F. and Sea Level.	TEMP.  Dry.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Weather.	Sea. (0 to 5.)	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 ...	30.02	21	Sw	2	b	29.93	- .26	19	18	0	20	0	b	*	28	14	-	
Hernösand ...	30.23	16	Z	0	b	30.23	+ .05	18	15	- 15	NW	2	b	*	31	12	-	
Stockholm ...	30.38	22	Z	0	f	30.35	- .03	24	24	+ 4	N	2	f	*	31	18	-	
Wisby ...	30.34	31	NW	4	o	30.34	+ .01	33	32	+ 1	N	4	o	*	31	20	-	
Bodö ...	29.99	4.1	Sw	6	o	29.90	- .23	44	42	+ 3	SSW	7	f	4	31	07	0.14	
Christiansund ...	30.16	37	ESE	3	b	30.13	- .13	39	35	+ 5	SSW	2	c	3	39	34	-	
Skudesnaes ...	30.31	26	SSE	6	o	30.28	- .04	37	36	- 2	SE	4	o	4	39	36	0.04	
Christiania Fjord (Færder) ...	30.34	27	Z	0	b	30.32	- .04	29	28	+ 4	Z	0	o	1	31	29	-	
Skagen (The Scaw) ...	30.34	30	Sw	2	o	30.35	- .00	30	29	- 1	Sw	3	o	2	31	28	-	
Fanö ...	30.36	30	SE	3	o	30.34	- .04	30	28	0	E	2	o	*	30	28	-	
Sumburgh Head ...	30.00	45	SSE	4	o	30.03	- .00	45	44	+ 1	S	3	o	5	45	38	-	
Stornoway ...	29.89	46	Sw	7	o	30.03	+ .19	43	43	- 4	Sw	2	r	3	47	40	0.10	
Wick ...	30.00	42	Sw	4	o	30.06	+ .06	43	42	0	N	2	bc	1	45	40	-	
Nairn ...	29.98	40	Sw	1	c	30.05	+ .06	34	33	- 7	Z	0	b	1	42	34	-	
Aberdeen ...	30.09	41	SSE	3	og	30.14	+ .03	40	38	0	S	2	om	3	42	40	-	
Leith ...	30.07	39	Z	0	o	30.12	+ .06	38	38	+ 1	NE	1	of	*	39	31	-	
Shields ...	30.13	31	SSE	2	f	30.15	+ .01	32	31	- 1	S	3	c	2	33	28	-	
Spurn Head ...	30.15	37	SE	3	o	30.15	- .05	35	33	0	SSE	3	om	3	37	34	-	
York ...	30.06	32	SSE	1	o	30.19	- .01	34	33	+ 3	ESE	1	o	*	38	30	-	
Loughborough ...	30.16	32	E	1	o	30.18	- .02	29	28	- 2	E	1	og	*	32	28	-	
BRITISH ISLANDS.																		
Ardrossan ...	30.04	40	NE	1	b	30.13	+ .08	35	35	- 5	ESE	2	of	1	41	34	-	
Malin Head ...	29.93	44	SW	2	or	30.03	+ .14	44	43	+ 1	S	3	or	2	46	42	0.26	
Mullaghmore ...	29.92	45	SE	2	or	30.04	+ .16	44	43	- 3	NE	4	or	3	47	43	0.86	
Belmullet ...	29.92	42	E	1	o	30.08	+ .21	42	42	0	NE	1	o	*	45	38	0.12	
Donaghadee ...	30.02	45	SW	6	o	30.14	+ .11	43	42	- 2	SSE	3	o	2	47	42	0.09	
Liverpool (Bidston) ...	30.08	31	ESE	5	o	30.13	+ .01	27	26	- 6	ESE	4	o	3	34	26	-	
Holyhead ...	30.02	45	Z	0	ogm	30.09	+ .03	41	41	- 4	ESE	1	ogm	2	47	39	-	
Parsonstown ...	29.90	47	Z	0	r	30.05	+ .12	42	41	- 3	SE	1	og	*	48	42	0.42	
Valencia ...	29.89	46	NNE	1	og	30.06	+ .16	46	43	0	NNE	3	c	2	48	43	0.12	
Roche's Point ...	29.86	51	SSE	6	p	30.03	+ .09	46	44	- 3	SE	5	c	4	51	45	0.40	
Pembroke (St. Ann's Hd.) ...	30.00	41	Sw	5	m	30.07	+ .02	34	33	- 9	E	4	cgm	4	44	34	-	
Scilly ...	29.91	48	SE	5	cfr	29.96	- .04	45	42	- 3	E	4	bc	6	49	42	0.01	
Prawle Point ...	30.02	43	E	4	b	30.04	- .07	36	35	- 9	ESE	5	cgm	4	46	34	-	
Jersey (St. Aubin's) ...	30.05	35	E	3	o	30.02	- .12	30	29	- 6	ESE	4	cgm	3	41	29	-	
Hurst Castle ...	30.09	32	NE	3	f	30.09	- .09	31	30	+ 3	NE	3	cgm	1	36	28	-	
Dungeness ...	30.10	37	SE	3	m	30.07	- .09	29	28	- 5	SE	3	c	1	41	28	-	
London ...	30.13	31	ESE	1	om	30.13	- .06	25	24	- 3	Z	0	f	*	33	25	-	
Oxford ...	30.15	31	ESE	1	o	30.16	- .04	25	25	- 3	NE	1	bm	*	34	25	-	
Cambridge ...	30.15	32	E	1	o	30.16	- .05	24	23	- 5	E	1	bc	*	32	23	-	
Yarmouth ...	30.14	35	SE	3	c	30.15	- .05	35	34	0	ESE	4	c	4	36	33	-	
GERMANY & HOLLAND.																		
Cuxhaven ...	30.36	32	E	3	o	30.32	- .08	32	30	0	E	3	o	*	32	30	-	
Berlin ...	30.34	33	Z	0	o	30.32	- .06	30	28	- 3	E	3	c	*	34	28	-	
Wiesbaden ...	*	*	*	*	*	30.19	- .09	23	22	- 1	NE	2	b	*	32	23	-	
Munich ...	30.13	18	E	5	b	30.09	- .10	10	9	- 3	NE	4	b	*	27	9	-	
The Helder ...	30.24	27	ESE	1	b	30.22	- .05	24	24	- 2	ESE	1	b	1	27	23	-	
FRANCE AND BELGIUM.																		
Brussels (9 a.m.) ...	*	*	*	*	*	30.15	- .08	15	15	- 2	E	1	b	*	31	15	-	
Cape Gris Nez ...	30.10	26	SE	3	m	30.12	- .06	21	20	- 3	E	3	b	2	34	19	-	
Paris ...	30.13	19	ESE	2	b	30.06	- .12	22	21	+ 5	E	3	o	*	28	16	-	
Brest ...	30.00	39	SE	2	m	29.96	- .13	35	34	- 9	E	2	f	4	46	33	-	
Lorient ...	30.02	?	Z	0	f	29.95	- .17	24	24	- 9	E	2	f	3	39	25	-	
Rochefort ...	30.01	33	NE	3	b	29.90	- .20	28	?	- 4	E	5	m	*	45	18	-	
Belfort ...	30.12	20	W	1	c	29.98	- .23	25	18	+ 4	N	1	c	*	28	14	-	
Lyons ...	30.13	26	NW	4	bc	30.01	- .16	24	24	- 1	NNE	1	m	*	28	20	-	
Nice ...	30.00	42	Z	0	b	29.88	- .13	37	34	- 2	NE	4	c	2	50	36	-	
Perpignan ...	30.02	43	Z	0	b	29.90	- .11	40	39	- 9	Sw	1	o	*	35	32	-	
Biarritz ...	29.97	50	Z	0	o	29.86	- .22	48	46	0	SSW	3	o	3	54	43	-	
PENINSULA.																		
Corunna ...	*	*	*	*	*	29.98	- .21	50	48	+ 2	WNW	3	c	3	57	48	0.49	
Lisbon ...	30.01	36	WNW	3	o													

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, 12<sup>th</sup> December,

1890.

## BAROMETER, WIND AND SEA.

### EXPLANATION OF MAP.

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

Changes since previous morning are stated in words.

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

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

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

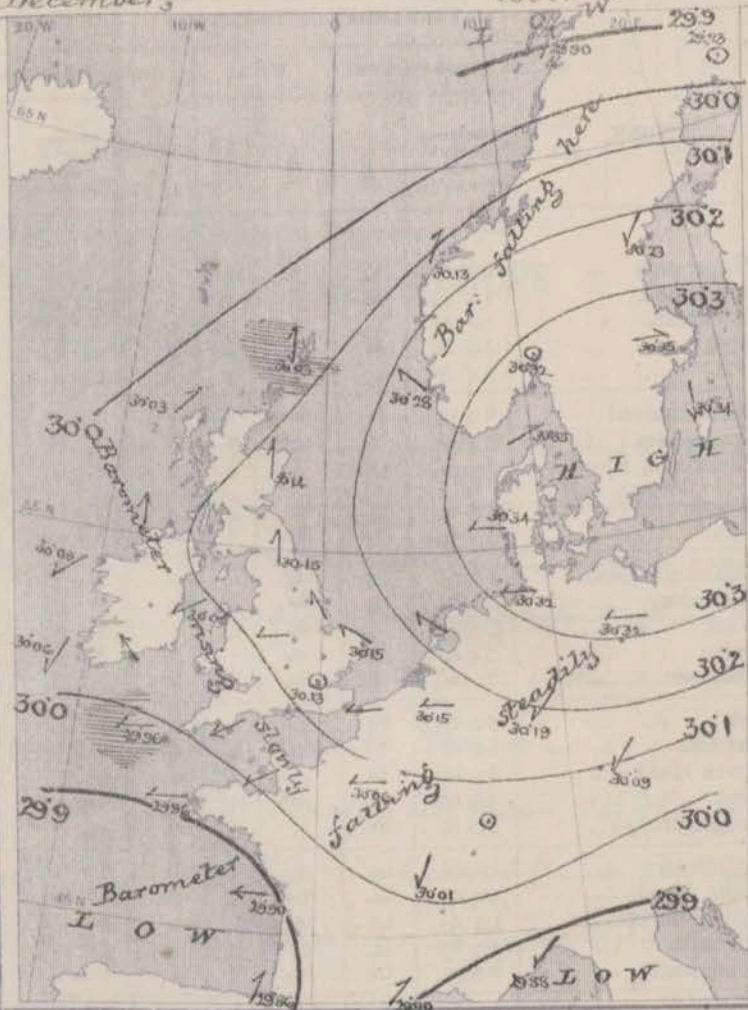
▨ = Rough. ▨ = High.

## MEAN HEIGHT OF THE BAROMETER

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

During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS.
Sumburgh Head .....	29.667
Stornoway .....	29.701
Wick .....	29.711
Nairn .....	29.739
Aberdeen .....	29.767
Leith .....	29.809
Shields .....	29.843
York .....	29.888
Loughborough .....	29.923
Ardrossan .....	29.819
Donaghadee .....	29.847
Holyhead .....	29.879
Liverpool .....	29.895
Parsonstown .....	29.909
Valencia .....	29.908
Roche's Point .....	29.915
Pembroke .....	29.918
Silly .....	29.962
Jersey .....	29.985
Hurst Castle .....	29.959
Dover .....	29.957
LONDON .....	29.951
Oxford .....	29.954
Cambridge .....	29.938
Yarmouth .....	29.914



## 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.

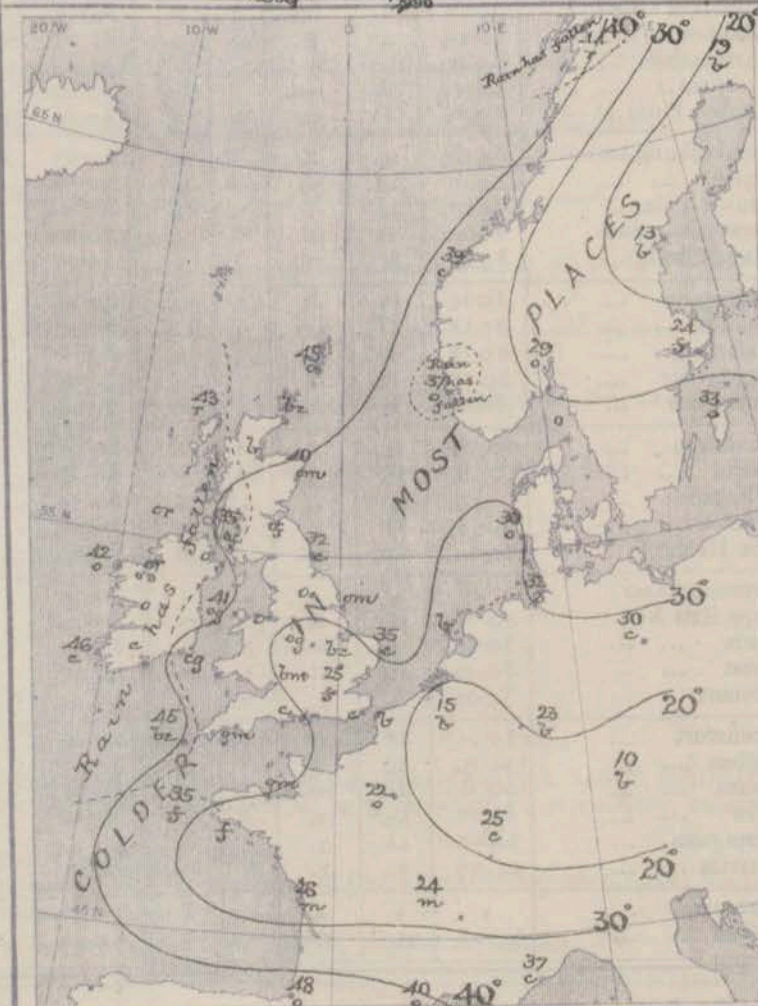
**RAINFALL**—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more are quoted in figures.

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

(For the month of December.)

STATIONS.	TEMPERATURE.				RAINFALL (Inches.)
	Daily Max.	Daily Min.	at 8 a.m. Dry.	Wet.	
Sumburgh Head .....	42.5	35.0	39.5	37.9	4.33
Stornoway .....	41.4	33.9	39.2	38.2	5.68
Wick .....	42.1	32.6	38.0	36.6	3.18
Nairn .....	41.7	32.8	37.0	35.5	2.08
Aberdeen .....	42.0	32.5	36.9	35.3	3.34
Leith .....	44.2	33.7	38.6	37.0	2.01
Shields .....	43.1	31.3	38.5	37.2	2.74
York .....	42.7	32.4	36.8	35.7	2.45
Loughborough .....	43.1	32.9	36.0	35.9	2.36
Ardrossan .....	44.6	36.0	40.1	38.7	4.04
Donaghadee .....	45.1	36.2	40.2	39.2	2.84
Holyhead .....	46.7	39.3	43.0	41.4	3.84
Liverpool .....	43.8	36.0	39.3	37.6	2.70
Parsonstown .....	44.8	33.2	37.0	36.6	3.02
Valencia .....	50.0	40.0	44.6	42.3	5.82
Roche's Point .....	48.0	39.0	42.9	41.5	4.74
Pembroke .....	47.1	40.6	43.9	42.5	4.06
Silly .....	49.8	43.8	47.1	45.4	4.10
Jersey .....	47.7	40.1	43.4	41.8	3.87
Hurst Castle .....	46.1	36.9	40.9	40.2	2.84
Dover .....	44.7	36.8	40.3	39.1	3.20
LONDON .....	44.7	34.6	38.5	37.4	2.14
Oxford .....	43.4	34.3	37.7	36.0	2.13
Cambridge .....	43.5	32.3	36.9	36.1	1.99
Yarmouth .....	42.4	34.2	38.3	37.5	2.95

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





# GENERAL SITUATION AT 8 A.M.

## PRESSURE

Highest, 30.3 in. and upwards, in a large anticyclone lying over Denmark, the Baltic, North Germany, and the south of Scandinavia.  
Lowest, 29.9 in. and less, in the north of Scandinavia and also in a depression lying over the Bay of Biscay and the north of Spain.

## TEMPERATURE

Gradients slight. Barometer rising in most parts of the United Kingdom, but falling at our southern and the Continental stations.  
Highest, 50° at Linton, 48° at Barmby, 46° at Helmsley and Rotherhithe and 45° at Lumbury Head and Dally.  
Lowest, 10° at Munich, 13° at Hornsea, 15° at Brussels, 18° at Haparanda and Harve, 21° at Cape Fin Rey and 22° at Paris.  
Sharp frost occurred over England last night, the thermometer falling to 23° at Cambridge and 25° in London and at Oxford.

## WIND

Chiefly E<sup>3</sup>, but S<sup>3</sup> or SW<sup>3</sup> in Scotland and the west of Norway and W<sup>1</sup> at Linton.  
Light or moderate in force generally, but fresh at some of our southern and the French stations.

## WEATHER

Fine in some parts of our midland and south-eastern counties, as well as in the north of Scotland, the Netherlands, Germany, as the north of Spain.  
Cloudy or overcast elsewhere, with fog or mist in many places, and rain in the north of Ireland as well as at Bodo.  
Rain fell yesterday at most of our western stations, the largest amount being 0.9 in. at Mullaghmore.

## SEA

Moderate to smooth generally, but rough at Gully and rather rough at Lumbury Head.

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

There are at present no signs of any important change in the weather, but the large depression over the Bay of Biscay may possibly occasion freshening E<sup>3</sup> winds on our southern coasts.

# FORECASTS

For the 24 hours ending at NOON on 13<sup>th</sup> DEC<sup>r</sup> 1890.

## DISTRICTS.

## FORECASTS.

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

S<sup>2</sup> and SW<sup>2</sup> winds, light; fair generally.  
S<sup>2</sup> and SE<sup>2</sup> winds, light; dull, some mist or fog.  
E<sup>2</sup> winds, light; cold foggy.

## DISTRICTS.

## FORECASTS.

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

E<sup>2</sup> winds, light; dull, some mist or fog.  
E<sup>2</sup> winds, fresh; dull, rain locally.  
E<sup>2</sup> and SE<sup>2</sup> winds, moderate; fair generally.

## WARNINGS

The SOUTH CONE has been lowered this morning in district 10 and parts of 0 and 9.

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



# YESTERDAY'S 2 P.M. REPORTS.

THER: WIND								THER: WIND							
	BAR:	D.	W.	D.	F.	WEA	SEA		BAR:	D.	W.	D.	F.	WEA	SEA
Skudesnaes ...	30.30	37	35	SSW	4	0	4	Holyhead ...	30.03	46	44	S	3	c	2
Sumburgh Head ...	30.00	44	43	SSW	4	0	5	Valencia ...	29.86	48	46	NNE	2	cv	2
Stornoway ...	29.88	47	46	SW	7	0	6	Scilly ...	29.91	49	48	SE	6	c	6
Aberdeen ...	20.09	45	38	S	2	0 gm	5	Jersey ...	30.07	36	35	E	3	cm	3
Shields ...	30.14	32	31	SSW	3	0	2	Dungeness ...	30.11	38	36	E	1	m	1
Ardrossan ...	30.03	41	40	E	1	0	3	London ...	30.15	33	32	N	0	f	3
Malin Head ...	29.89	46	45	SSW	4	0	3	Yarmouth ...	30.16	36	34	SE	3	c	3
Mullaghmore ...	29.93	46	45	N	4	0	4	Rochefort ...	30.05	40	39	E	3	b	4
Belmullet ...	29.88	45	45	SSW	2	0	*								

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

Weather unsettled and rainy over Ireland and the west of Scotland, dull and very foggy over England, many parts of the North Sea and France, fine and bright over Northern Europe, Holland, and many parts of France, Germany, Spain, and the countries on the northern shores of the Mediterranean. Much rain over Algeria, snow in the southwest of Russia and Hungary. Rainfall somewhat considerable in Ireland.

Temperatures still rather high in the extreme west and northwest, lower elsewhere. Morning readings exceeding 40° on the Atlantic coasts of Europe and the British Isles, and exceeding 50° at Brindisi, Malta, and Algiers; much lower elsewhere. Lowest readings 18° at Moscow, 10° at Warsaw, 13° at Kiev, 14° at Lemberg and Casow, and 15° at Kiovia; (2) 3° F. at Nicolaiiff, 6° at Odessa, 16° at Hermannstadt; (3) 17° at Paris and Brussels, 21° at Belfast, 28° at Hunt Castle, London, and Oxford. Not exceeding 28° at Lyons, Belfast and Paris all day, but rising to between 32° and 35° over the inland parts of England as well as at the German stations.

Wind moderate to fresh from the S.W. over Portugal, the western parts of our Islands, the N.E. of Scotland, and the northwest of Norway. Mainly E. to N. over southern Europe, very variable and light elsewhere, calms reported in many places. The S.W. wind in the east dying down later, and a N. breeze appearing at Valencia.

Barometer highest 30.4 in. to 30.1 in. over nearly the whole of Continental Europe; lowest, 29.9 in. and less, over the northeast of Russia, the extreme western parts of the British Islands and over the Mediterranean. Rising a little at our southernmost stations later, but no general change of importance observed.

### EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

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

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

The evening observations are taken at 6 p.m. in France and our Islands with the exception of Oxford, where they are taken at 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, 13<sup>th</sup> December, 1890.*  
*Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.*

Issued by the Meteorological Office, 53, Victoria Street, London. R. H. SCOTT, Secretary.

STATIONS.	YESTERDAY EVENING.						8 A.M. TO DAY.										PAST 24 HOURS.		
	BAROM.	TEMP.	WIND.		Weather.	BAROMETER.	SHADE TEMP.			WIND.		Weather.	Sea. (0 to 5.)	SHADE TEMP.					
	Reading at 32° F. and Sea Level.	Dry.	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 ...	29.88	26	Z	0	bc	29.72	-21	28	27	+9	SE	2	bc	*	28	14	-	
	Hernösand ...	30.13	10	W	2	b	30.01	-22	13	12	0	SW	2	b	*	18	9	-	
	Stockholm ...	30.28	28	W	2	0	30.16	-19	28	27	+4	SW	2	0	*	28	18	-	
	Wisby ...	30.30	32	NW	2	0	30.23	-11	31	30	-2	NW	4	0	*	34	28	-	
	Bodö ...	29.76	42	SW	4	r	29.65	-25	41	39	-3	SW	6	0	4	45	41	0.28	
	Christiansund	30.06	42	SW	5	0	29.99	-14	42	38	+3	SW	5	0	4	43	?	-	
	Skudesnaes ...	30.24	39	SSE	4	r	30.15	-13	41	37	+4	S	4	0	4	37	34	0.08	
	Christiania Fjord (Fæder)	30.26	26	NW	2	0	30.16	-16	21	21	-8	Z	0	0	1	30	16	-	
	Skagen (The Scaw)	30.30	32	SE	2	0	30.23	-12	33	31	+3	NW	3	0	3	?	?	-	
	Fanö ...	30.33	28	SE	4	0	30.26	-08	27	26	-3	SE	4	b	*	32	23	-	
BRITISH ISLANDS.	Sumburgh Head	30.03	45	S	1	r	29.96	-07	43	42	-2	S	2	0	3	46	41	0.41	
	Stornoway ...	30.07	41	Z	0	0	29.87	-16	44	43	+1	SW	6	r	6	44	37	0.05	
	Wick ...	30.06	42	SW	2	bc	29.94	-12	40	39	-3	S	2	bc	1	41	36	-	
	Nairn ...	30.07	38	Z	0	0	29.93	-12	33	32	-1	Z	0	bc	1	45	30	0.01	
	Aberdeen ...	30.14	37	SSE	2	bc	30.03	-11	36	35	-4	S	2	ogm	3	40	36	-	
	Leith ...	30.15	37	NW	1	0	30.02	-10	30	30	-8	SW	1	om	*	38	27	-	
	Shields ...	30.18	32	S	1	0	30.07	-08	30	30	-2	SSE	3	0	2	34	27	-	
	Spurn Head ...	30.18	36	ESE	3	0	30.12	-03	34	33	-1	S	2	bm	3	37	32	-	
	York ...	30.19	31	S	1	0	30.12	-07	32	31	-2	S	1	0	*	35	30	-	
	Loughborough	30.19	32	ENE	1	0	30.14	-04	30	29	+1	Z	0	om	*	32	29	-	
BRITISH ISLANDS.	Ardrossan ...	30.15	35	ENE	1	of	30.02	-11	27	27	-8	ENE	1	of	2	37	27	-	
	Malin Head ...	30.08	43	S	3	om	29.88	-15	38	36	-6	SSE	3	bcm	2	45	36	0.04	
	Mullaghmore ...	30.08	43	SSE	2	om	29.87	-17	39	36	-5	SSE	5	c	4	44	37	0.02	
	Belmullet ...	30.07	41	E	1	of	29.77	-31	37	36	-5	SSE	3	c	*	46	36	-	
	Donaghadee ...	30.15	42	SW	2	0	29.97	-17	42	41	-1	S	4	0	2	43	40	-	
	Liverpool (Bishop)	30.16	25	ESE	2	bc	30.06	-07	26	25	-1	SE	4	bc	3	28	24	-	
	Holyhead ...	30.13	40	ENE	1	ogm	30.04	-05	35	34	-6	SW	2	ogm	1	43	32	-	
	Parsonstown ...	30.10	37	Z	0	b	29.91	-12	35	34	-7	SE	1	bc	*	43	30	-	
	Valencia ...	30.06	43	E	2	b	29.80	-26	47	45	+1	SE	6	cmu	6	47	40	0.01	
	Roche's Point...	30.11	43	E	3	c	29.90	-13	46	42	0	S	6	0	5	46	41	-	
BRITISH ISLANDS.	Pembroke (St. Ann's Hd.)	30.14	31	NE	2	b	30.03	-04	36	35	+2	SE	3	cm	3	36	30	-	
	Scilly ...	30.04	42	NE	3	c	29.95	-01	42	40	-3	ESE	4	bc	4	46	39	-	
	Prawle Point ...	30.11	37	ENE	5	c	30.03	-01	37	37	+1	ENE	4	og	3	37	31	-	
	Jersey (St. Aubin's)	30.06	33	E	4	om	30.05	+03	38	31	0	E	3	bm	3	39	29	-	
	Hurst Castle ...	30.12	32	NE	4	m	30.08	-01	27	27	-4	ENE	3	m	1	36	26	-	
	Dungeness ...	30.09	35	E	3	bc	30.08	+01	34	31	+5	ESE	3	b	2	35	28	-	
	London ...	30.14	32	E	2	0	30.11	-02	25	25	0	Z	0	f	*	34	24	-	
	Oxford ...	30.18	31	ENE	1	0	30.12	-04	23	23	-2	Z	0	f	*	33	23	-	
	Cambridge ...	30.18	32	E	1	0	30.14	-02	20	19	-4	Z	0	f	*	34	19	-	
	Yarmouth ...	30.16	36	SE	4	bc	30.13	-02	30	34	+1	SE	3	b	3	36	33	-	
GERMANY & HOLLAND.	Cuxhaven ...	30.32	32	ESE	2	m	30.29	-03	30	29	-2	ESE	3	f	*	33	28	-	
	Berlin ...	30.32	33	E	3	0	30.26	-06	32	31	+2	E	2	0	*	34	30	-	
	Wiesbaden ...	*	*	*	*	*	30.18	-01	21	20	-2	NE	2	b	*	34	21	-	
	Munich ...	30.10	14	E	2	b	30.08	-01	8	8	-2	E	5	0	*	23	7	-	
	The Helder ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
FRANCE AND BELGIUM.	Brussels (9 a.m.)	*	*	*	*	*	30.15	-00	23	22	+8	SE	2	b	*	28	?	-	
	Cape Gris Nez	30.12	24	E	3	m	30.11	-01	26	25	+5	ESE	1	b	0	30	19	-	
	Paris ...	30.08	24	N	2	b	30.08	+02	18	17	-4	NE	2	b	*	30	17	-	
	Brest ...	30.04	35	ENE	1	0	30.04	+08	32	30	-3	ESE	1	0	3	45	28	-	
	Lorient ...	29.99	29	ENE	3	m	30.02	+07	25	24	0	ENE	2	b	4	34	23	-	
FRANCE AND BELGIUM.	Rochefort ...	29.90	27	E	5	f	29.94	+04	26	26	-2	ENE	3	m	2	32	?	-	
	Belfort ...	29.95	19	NW	1	bc	29.98	-00	23	?	-2	NW	1	bc	*	25	12	-	
	Lyons ...	30.02	26	NW	2	0	30.03	+02	23	23	-1	N	2	?	*	27	23	-	
	Nice ...	29.85	40	NE	5	c	29.91	+09	33	27	-4	NE	5	b	7	43	32	-	
	Perpignan ...	29.82	49	Z	0	b	29.94	+04	38	37	-2	NE	1	r	*	49	35	-	
	Biarritz ...	29.81	47	SE	3	m	29.86	-00	39	37	-9	SE	3	0	3	52	36	0.12	
PENINSULA.	Corunna ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
	Lisbon ...	29.95	30	E	4	b	29.97	-01	44	45	-1	N	3	bc	?	54	48	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 *Saturday, 15<sup>th</sup> December,* 1890.

## BAROMETER, WIND AND SEA.

### EXPLANATION OF MAP.

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

Changes since previous morning are stated in words.

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

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

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

○ = dead calm.

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

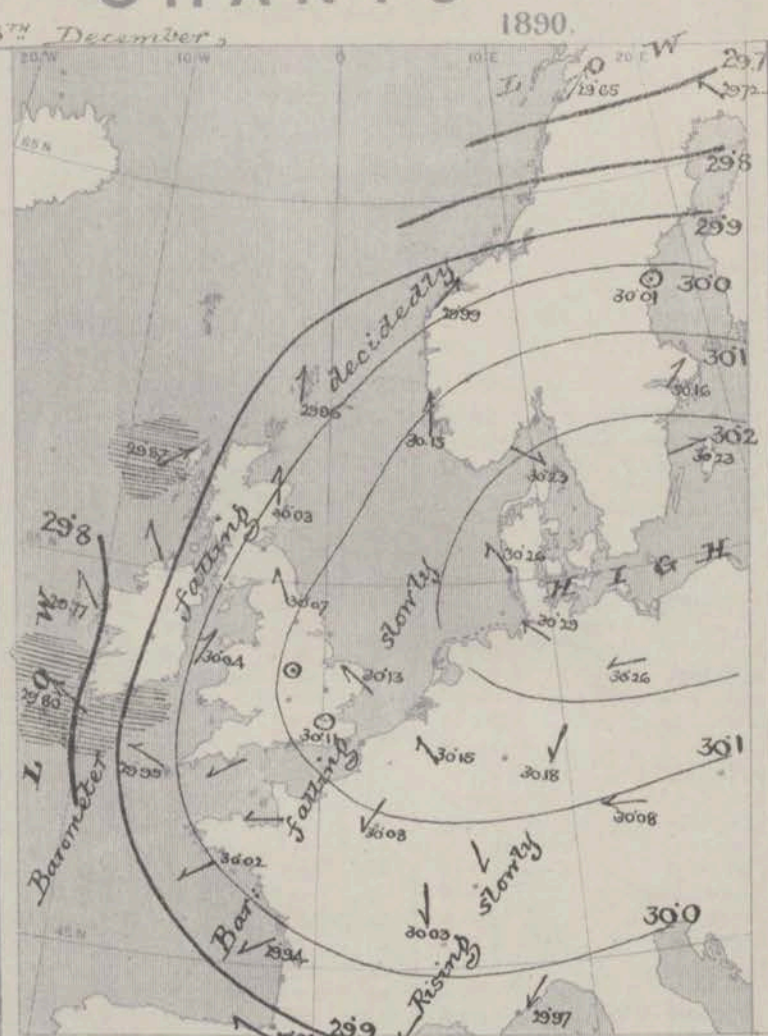
▨ = Rough. ▨ = High.

## MEAN HEIGHT OF THE BAROMETER

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

During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS.
Sumburgh Head	29.667
Stornoway	29.701
Wick	29.711
Nairn	29.730
Aberdeen	29.757
Leith	29.803
Shields	29.843
York	29.888
Loughborough	29.923
Ardrossan	29.819
Donaghadee	29.847
Holyhead	29.879
Liverpool	29.893
Parsonstown	29.909
Valencia	29.908
Roche's Point	29.913
Pembroke	29.918
Sally	29.962
Jersey	29.985
Hurst Castle	29.959
Dover	29.951
LONDON	29.954
Oxford	29.954
Cambridge	29.938
Yarmouth	29.914



## 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.

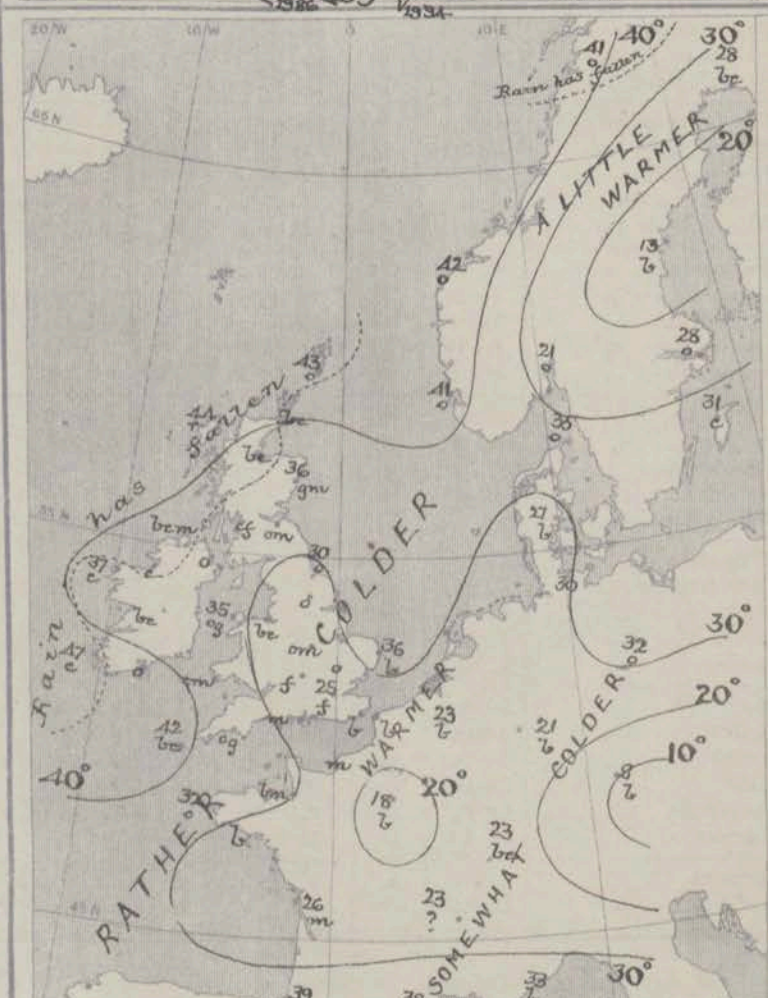
**RAINFALL**—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more are quoted in figures.

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

(For the month of December.)

STATIONS.	TEMPERATURE.				RAINFALL (Inches.)
	Daily Max.	Daily Min.	Dry, at 8 a.m.	Wet, at 8 a.m.	
Sumburgh Head	42.5	35.0	39.5	37.9	4.33
Stornoway	41.4	33.9	39.2	38.2	5.06
Wick	42.1	32.6	38.0	36.6	3.18
Nairn	41.7	32.8	37.0	35.5	2.08
Aberdeen	42.0	32.5	36.9	35.3	3.34
Leith	44.2	33.7	38.6	37.0	2.01
Shields	43.1	34.3	38.5	37.2	2.74
York	42.7	32.4	36.8	35.7	2.45
Loughborough	43.1	32.9	38.0	35.9	2.36
Ardrossan	44.0	36.0	40.1	38.7	4.04
Donaghadee	45.1	36.2	40.2	39.2	2.84
Holyhead	46.7	39.3	43.0	41.4	3.84
Liverpool	43.8	36.0	39.3	37.6	2.70
Parsonstown	44.8	33.2	37.9	36.0	3.02
Valencia	50.0	40.0	44.6	42.3	5.82
Roche's Point	48.0	39.0	42.0	41.5	4.74
Pembroke	47.1	40.6	43.9	42.5	4.00
Sally	49.8	43.8	47.1	45.4	4.10
Jersey	47.7	40.1	43.4	41.8	3.87
Hurst Castle	46.1	38.0	40.9	40.2	2.84
Dover	44.7	36.8	40.3	39.1	3.20
LONDON	44.7	34.6	38.5	37.4	2.14
Oxford	45.6	34.3	37.7	36.6	2.13
Cambridge	43.5	32.3	36.9	36.1	1.99
Yarmouth	42.4	34.2	38.3	37.5	2.95

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 undulating plane lying over Denmark, the Baltic, North Germany, and the north of Sweden.  
Lowest, 29.7 in. and less, in the north of Scandinavia; 29.8 in. and less in a depression lying to the southward of our Islands.  
Gradients slight generally, but increasing in the extreme west.

## TEMPERATURE

Barometer falling at all but the French stations, - quickly in the west of Ireland.  
Highest, 49° at Lisbon, 47° at Valencia Island, 46° at Rochefort, 44° at Bismarck, 43° at Limerick, 42° at Christchurch and Selly.  
Lowest, 8° at Munich, 13° at Herneville, 18° at Paris, 20° at Havre and Cambridge, 21° at Wiesbaden, and 23° at Oxford, Belfast and Lyons.  
Sharp frost was experienced over England last night, at Oxford the sheltered thermometer fell to 23° and at Cambridge to 13°.

## WIND

Light from the E<sup>nd</sup> or NE<sup>nd</sup> over France, Germany, and the extreme south of England.  
Strong from the SE<sup>nd</sup> in the west and south of Ireland, and from the SW<sup>nd</sup> in the Hebrides.  
Light S. on the east coast of Great Britain; SW<sup>nd</sup> in Scandinavia.

## WEATHER

Fair on the whole, but dull in many parts of our Islands and Scandinavia, as well as in the west of France.  
Fog prevails in the south of England and also at Anderson and mist is reported in many other localities.  
A little rain fell yesterday in the northern parts of Ireland and Scotland.

## SEA

Rough off the south of Ireland and also at Stornoway, but moderate to smooth elsewhere.

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

A large depression is apparently about to skirt the Irish and Scotch coasts, and a considerable increase of wind from the SE<sup>nd</sup> and S<sup>nd</sup> is probable in the extreme west and north. Over the eastern and southeastern parts of the United Kingdom no important change in the weather is likely at present.

## FORECASTS

For the 24 hours ending at NOON on 14<sup>th</sup> DEC<sup>r</sup> 1890.

### DISTRICTS.

### FORECASTS.

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

S<sup>nd</sup> and SW<sup>nd</sup> winds, increasing in force; a gale in places; drizzle, some rain.  
S<sup>nd</sup> winds, freshening; fair to drizzle and some rain.  
S<sup>nd</sup> winds, light or moderate; drizzle, misty.  
E<sup>nd</sup> and SE<sup>nd</sup> winds, light; fair generally, but local fogs.

### DISTRICTS.

### FORECASTS.

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

SE<sup>nd</sup> winds, freshening considerably; drizzle, some rain.  
SE<sup>nd</sup> to S<sup>nd</sup> strong winds and gales; drizzle, some rain.

### WARNINGS

The SOUTH CONE has been hoisted this morning in district 10 and parts of 0 and 2.

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



# YESTERDAY'S 2 P.M. REPORTS.

	BAR:	THER:		WIND		WEA	SEA		BAR:	THER:		WIND		WEA	SEA
		D.	W.	D.	F.					D.	W.	D.	F.		
Skudesnaes ...	30.27	39	37	SE	4	0	4	Holyhead ...	30.11	42	41	NNE	1	0gm	1
Sumburgh Head ...	30.02	45	44	S	1	0	4	Valencia ...	30.09	45	44	E	1	0gm	1
Stornoway ...	30.05	43	43	SW	2	0	3	Scilly ...	30.01	45	42	E	4	bc	6
Aberdeen ...	30.14	32	36	S	2	cm	3	Jersey ...	30.03	51	50	ESE	3	0	3
Shields ...	30.17	34	32	S	3	0	2	Dungeness ...	30.09	35	34	ESE	3	c	2
Ardrossan ...	30.14	36	35	W	0	0	0	London ...	30.14	34	32	ESE	2	of	8
Mulin Head ...	30.07	44	43	SW	2	0	2	Yarmouth ...	30.14	35	34	ESE	4	c	4
Mullaghmore ...	30.08	44	43	NNE	2	cm	2	Rochefort ...	29.85	31	31	E	4	f	4
Belmullet ...	30.09	46	45	NNE	2	bc	*								

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

Weather very quiet both over the British Islands and Continental Europe — fine and bright over the southeastern countries, and in a few parts of our Islands, dull or foggy elsewhere, and somewhat unsettled in the south of Spain. Slight snow reported at Nicolaïeff, rain at San Fernando and also at Stornoway and Bodo. Rain falling in extreme north and northwest later and fog over London clearing.

Temperature continuing highest (50° and more) over Algeria and on the Atlantic coasts of Spain and Portugal, and exceeding 40° on our own western coast and at Bodo, much lower elsewhere. Hard frost over the inland parts of the Continent and England, the lowest morning values being — (1) —1° at Kiev, +5° at Hermannstadt, 10° at Kharkov, 14° at Lemberg and Moscow, and 15° at Petersburg; (2) 10° at Munich, 15° at Brussels, 15° at Bregenz and Buda-Pesth and 20° at Vienna, Münster, and Le Mans, 22° at Paris, and 25° at Oxford and in London. Frost scarcely melting over England during day and remaining firm on the Continent.

Wind S<sup>3</sup> and SW<sup>3</sup> on the extreme northwestern and northern coast. Mainly E<sup>2</sup> to N<sup>1</sup> over the Mediterranean, and E<sup>2</sup> over western and southeastern Europe as well as in the northwest of Germany. Variable in direction elsewhere, and light to moderate in force.

Barometer highest 30.4 in. and more to 30.1 in. in a large anticyclone covering all but the extreme northern, western, and southern parts of Europe; lowest 29.9 in. and less, over Lapland and the White Sea, as well as over the Bay of Biscay and Mediterranean. Gradient moderate over the most northern countries, slight to almost nil elsewhere. No great change during day.

### EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

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

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

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

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



# DAILY WEATHER REPORT.

for Sunday 14<sup>th</sup> DEC<sup>r</sup> 1890.  
Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.

STATIONS.		YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
		BAROM.  Reading at 32° F. and Sea Level.	TEMP.  Dry.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Sea. (0 to 12.)	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 ...	29.66	28	W	4	b	29.69	-0.03	28	27	0	SW	2	c	*	30	28	—	
	Hernösand ...	29.99	31	Z	0	c	29.97	-0.04	28	27	+15	Z	0	bc	*	32	7	—	
	Stockholm ...	30.14	27	Z	0	b	30.15	-0.01	27	26	-1	W	2	f	*	30	23	—	
	Wisby ...	30.19	25	WSW	4	o	30.20	-0.03	35	30	+4	W	4	o	*	36	28	—	
	Bodö ...	29.77	39	W	6	o	29.67	+0.02	41	39	0	SW	4	o	2	41	36	0.20	
	Christiansund	29.99	42	SW	4	o	29.85	-0.14	41	37	-1	SW	1	o	5	43	29	—	
	Skudesnaes ...	30.10	40	SSE	6	o	30.07	-0.08	41	37	0	S	8	o	5	41	39	—	
	Christiania Fjord (Færder)	30.15	22	N	3	m	30.14	-0.02	26	26	+5	N	2	f	1	?	21	—	
	Skagen (The Seaw)	30.17	32	SW	3	o	30.16	-0.07	33	32	0	SW	8	o	3	39	30	—	
	Fanö ...	30.25	29	SSE	2	o	30.23	-0.03	30	29	+3	SSE	2	o	*	30	25	—	
BRITISH ISLANDS.	Sumburgh Head	29.87	42	S	3	o	29.75	-0.21	43	42	0	SW	2	o	4	44	37	—	
	Stornoway ...	29.77	42	SW	6	o	29.76	-0.11	44	44	0	SW	7	o	6	44	39	0.04	
	Wick ...	29.80	39	S	4	c	29.81	-0.13	39	38	-1	SW	2	bc	1	40	35	—	
	Nairn ...	29.85	30	Z	0	bc	29.84	-0.09	40	37	+7	WSW	4	o	2	40	28	—	
	Aberdeen ...	29.95	32	SSW	3	b	29.95	-0.08	31	30	-5	SSW	3	bc	3	36	29	—	
	Leith ...	29.99	27	W	1	o	29.99	-0.03	28	28	-2	Z	0	bc	*	32	23	—	
	Shields ...	30.02	31	SSE	2	b	30.06	-0.01	24	24	-6	S	2	bc	2	33	28	—	
	Spurn Head ...	30.05	36	NE	3	b	30.08	-0.04	35	33	+1	S	2	bc	*	38	33	—	
	York ...	30.05	31	ESE	1	o	30.10	-0.02	23	23	-9	Z	0	f	*	34	20	—	
	Loughborough	30.07	21	SE	1	f	30.10	-0.04	14	14	-16	WNW	1	bf	*	32	14	—	
GERMANY & HOLLAND.	Ardrossan ...	29.96	35	ESE	3	o	29.99	-0.03	35	34	+8	Z	0	of	2	37	27	—	
	Malin Head ...	29.80	37	S	4	c	29.90	+0.02	37	36	-1	S	5	o	2	38	35	—	
	Mullaghmore ...	29.75	42	SE	6	c	29.92	+0.05	43	40	+4	SSW	2	o	3	43	38	—	
	Belmullet ...	29.69	42	SSE	6	o	29.91	+0.14	42	41	+5	E	1	o	*	42	36	0.20	
	Donaghadee ...	29.91	41	S	4	o	30.00	+0.03	41	40	-1	S	2	c	1	42	39	—	
	Liverpool (Bidston)	30.01	28	SE	3	b	30.05	-0.01	25	24	-1	SSE	3	bc	1	29	25	—	
	Holyhead ...	29.95	34	SE	3	o	30.02	-0.02	31	30	-4	SSE	1	bc	1	38	31	—	
	Parsonstown ...	29.79	41	Z	0	b	29.93	+0.02	38	36	+3	SE	1	b	*	42	34	—	
	Valencia ...	29.66	47	SE	7	o	29.87	+0.07	47	45	0	ESE	4	c	4	48	45	0.01	
	Roche's Point...	29.78	45	S	6	o	29.93	+0.03	46	43	0	SSE	5	o	5	46	44	—	
FRANCE AND BELGIUM.	Pembroke (St. Ann's Hd.)	29.89	41	SE	4	c	29.98	-0.05	37	35	+1	E	4	cm	4	42	35	—	
	Scilly ...	29.84	42	SSE	5	c	29.89	-0.06	42	39	0	ESE	4	bc	4	43	38	—	
	Prawle Point...	29.95	39	ESE	3	b	29.98	-0.05	38	35	+1	ESE	3	bc	2	42	33	—	
	Jersey (St. Aubin's)	29.99	34	SE	3	b	30.00	-0.05	31	30	-2	ESE	3	bc	3	36	28	—	
	Hurst Castle ...	30.01	33	ESE	3	b	30.01	-0.07	26	26	-1	NE	3	bc	1	40	25	—	
	Dungeness ...	30.03	35	ESE	3	bc	30.01	-0.07	31	29	-3	SSE	3	bc	1	38	30	—	
	London ...	30.05	29	ESE	1	bf	30.06	-0.05	19	18	-6	E	1	b	*	35	18	—	
	Oxford ...	30.06	21	Z	0	f	30.08	-0.04	16	16	-7	N	1	b	*	24	16	—	
	Cambridge ...	30.07	24	Z	0	f	30.08	-0.06	18	18	-2	N	1	b	*	28	14	—	
	Yarmouth ...	30.08	37	SE	3	bc	30.07	-0.06	36	34	0	ESE	3	b	3	38	33	—	
PENINSULA.	Cuxhaven ...	30.25	32	ESE	2	m	30.25	-0.04	32	31	+2	E	2	o	*	33	30	—	
	Berlin ...	30.25	32	NE	3	o	30.28	+0.02	23	21	-9	ESE	3	o	*	32	21	—	
	Wiesbaden ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
	Munich ...	30.06	10	E	4	b	29.98	-0.10	5	5	-3	SE	2	m	*	19	5	—	
	The Helder ...	30.15	26	ESE	1	b	30.15	-0.10	22	20	-2	ESE	1	b	1	27	2	—	
	Brussels (9 a.m.)	*	*	*	*	*	30.09	-0.06	19	17	-4	ESE	1	b	*	31	17	—	
	Cape Gris Nez	30.04	25	ESE	2	m	30.03	-0.08	21	21	-5	ESE	2	m	2	32	19	—	
	Paris ...	30.07	21	E	2	b	30.02	-0.06	16	15	-2	NW	1	b	*	30	15	—	
	Brest ...	29.90	40	SE	3	o	29.89	-0.15	32	29	0	ESE	4	b	3	46	24	—	
	Lorient ...	29.96	30	E	2	b	29.96	-0.06	25	25	0	E	3	m	4	34	25	—	
PENINSULA.	Rochefort ...	29.95	24	ESE	4	o	29.84	-0.05	30	29	+4	E	3	b	?	30	19	—	
	Belfort ...	16	NW	1	bc	?	?	15	12	-8	NW	1	b	*	23	8	—		
	Lyons ...	30.04	26	ENE	1	m	30.00	-0.03	22	21	-1	N	2	m	*	28	?	—	
	Nice ...	29.88	38	E	4	b	29.83	-0.14	35	26	+2	NE	5	b	3	43	30	—	
	Perpignan ...	29.94	37	Z	0	o	29.82	-0.12	31	31	-7	SW	2	b	*	42	30	0.12	
	Biarritz ...	29.93	40	ENE	3	bc	29.83	-0.08	29	28	-10	NE	3	m	2	45	27	—	

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

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







# GENERAL SITUATION AT 8 A.M.

PRESSURE	Highest, 30.2 ins. and upwards, over Denmark, the Baltic, and the extreme south of Sweden. Lowest, 29.7 ins. and less, in a depression lying over the north of Scandinavia, and also in another system lying off the north of Spain. Gradients slight. Barometer rising a little over Ireland and England, but falling elsewhere.
TEMPERATURE	Highest, 50° at Liebow, 49° at Garmna, 47° at Valencea Island, 46° at Rocherbuit, and 44° at Stornoway. Lowest, 5° at Munich, 14° at Loughborough, 15° at Belfast, 16° at Oxford and Paris, and 18° at Cambridge and Havre. Hard frost prevailed over England last night; in London the thermometer fell to 18° in the screen and to 9° on the grass.
WIND	Light to moderate from the E <sup>W</sup> or SE <sup>W</sup> over the southern parts of the United Kingdom and the north and west of France. S or SW in the north of our Islands and the west of Norway, with a moderate gale at Stornoway. Light from E. over the Netherlands, variable over the central part of the United Kingdom.
WEATHER	Fine over the greater part of Western Europe, but foggy at some of the English stations, and dull on our extreme north and northwest coasts as well as in Norway, Denmark and the south of Sweden. Rain falling at Garmna and Liebow. A little rain fell yesterday in the Hebrides and west of Ireland.
SEA	Rough at Stornoway, and rather rough at Rocherbuit, as well as on the west coast of Norway, moderate to smooth elsewhere.

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

## FORECASTS

For the 24 hours ending at NOON on 15 DEC: 1890.

DISTRICTS.	FORECASTS.	DISTRICTS.	FORECASTS.
0 SCOTLAND NORTH	NONE ISSUED.	6 SCOTLAND WEST	NONE ISSUED.
1 SCOTLAND EAST		7 ENGLAND N.W.	
2 ENGLAND N.E.		8 ENGLAND S.W.	
3 ENGLAND EAST		9 IRELAND NORTH	
4 MIDLAND COUNTIES		10 IRELAND SOUTH	
5 ENGLAND SOUTH		WARNINGS	The SOUTH CONE is still flying in district 10 and parts of 0 and 3.

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.

	THER: WIND								THER: WIND						
	BAR:	D.	W.	D.	F.	WEA.	SEA		BAR:	D.	W.	D.	F.	WEA.	SEA
Skudesnaes ...	29.12	89	37	SSE	5	o	4	Holyhead ...	29.98	34	33	SSE	3	ogm	2
Sumburgh Head ...	29.92	42	42	S	3	o	3	Valencia ...	29.69	48	45	SE	7	o	6
Stornoway ...	29.81	41	29	SW	5	o	5	Scilly ...	29.87	42	40	SSE	5	c	4
Aberdeen ...	29.96	35	33	S	3	bc	3	Jersey ...	30.01	36	34	ESE	3	b	3
Shields ...	30.03	32	32	SSE	3	bc m	2	Dungeness ...	30.04	36	33	ESE	2	b	2
Ardrossan ...	29.96	35	34	ENE	2	o	1	London ...	30.08	35	34	ESE	1	f	3
Malin Head ...	29.80	38	36	S	4	om	2	Yarmouth ...	30.08	38	36	SE	3	b	3
Mullaghmore ...	29.79	42	39	SE	6	og	4	Rocheport ...	29.98	27	27	SE	3	o	1
Belmullet ...	29.69	42	41	SSE	4	r	*								

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

Weather in morning fine and bright over the greater part of central and southwestern Europe, very dull elsewhere; foggy in many parts of England and the Netherlands, raining in the Hebrides, and also very generally over Algeria, at Malta and Brindisi; snow falling over Central Russia and at Besancon. Rainfall somewhat heavy, later over Algeria, Tunis, and the southern parts of Italy, as well as at Bodo; smaller quantities in extreme west and northwest of our Islands, snow in the south of France.

Temperature very low even for some of year, except in the extreme northeast of our Islands and Norway. Morning readings exceeding 50° at Afula, Malta and Algiers only; exceeding 40° on the coasts of the Spanish Peninsula, the southwest and extreme north of our Islands and the west of Norway. Much lower elsewhere; 5° to 10° F. over Central and southern Russia, below 20° over Hungary, south Germany and at Paris, and below 30° over nearly all the remainder of Europe and our own south Midland counties, very little change later.

Wind (1) strong from NE. and N. over the Mediterranean, light S over Tunis; (2) light E over the Bay of Biscay, moderate S in the west and north of our Islands, strong SW over Norway, light over Sweden, Finland and the north of Russia; very variable elsewhere. The S wind becoming rather more general in our Islands for a time later on; little change elsewhere.

Barometer highest 30.4 ins. to 30.0 ins. in a large anticyclone covering eastern central, and the greater part of western and northwestern Europe; lowest 29.7 ins. and less over Lapland and the Kola Peninsula, and also in a well marked depression lying over Algeria; 29.8 ins. and less, off the west of Ireland. Falling up in the latter region during the day, little change elsewhere.

### EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

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

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

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

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# DAILY WEATHER REPORT.

for *Monday, 15<sup>th</sup> December, 1890.*  
*Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.*

STATIONS.	YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
	Barom.	Temp.	Wind.		Weather.	Barometrical.		Shade Temp.		Difference from 8 a.m. yesterday.	Wind.		Force.	Weather.	Sea.	Shade Temp.		Amount of Rainfall.
	Reading at 32° F. and Sea Level.	Dry.	Dir.	Force.		Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.		Dir.	Force.				Max.	Min.	
SCANDINAVIA.	Haparanda ...	29.63	27	E	2	6	29.50	-1.9	31	31	+3	S	2	5	*	32	23	-
	Hernösand ...	29.68	24	E	0	60	29.76	-2.1	24	23	-4	SE	0	60	*	36	12	-
	Stockholm ...	30.01	31	SSW	2	0	29.98	-1.7	30	28	+3	NNE	2	0	*	34	23	-
	Wishby ...	30.04	32	WSW	4	0	30.07	-1.2	32	29	-3	WSW	4	0	*	34	32	-
	Bodo ...	29.51	42	SE	6	5	29.53	-1.4	31	27	-10	N	4	0	2	34	25	0.75
	Christiansund ...	29.64	42	SE	4	0	29.94	+0.7	42	39	+1	SSW	2	0	4	36	29	-
	Skudesnaes ...	29.82	41	SE	4	0	29.92	-1.5	39	36	-2	SE	6	0	6	41	37	0.16
	Christiania Fjord (Farder) ...	29.95	37	WSW	5	0	29.98	-1.6	36	33	+10	SE	5	0	4	37	?	-
	Skagen (The Seaw) ...	30.02	32	WSW	4	0	30.02	-1.4	31	29	-2	SE	0	0	2	33	28	-
	Fanö ...	30.05	25	SE	2	6	29.93	-2.0	19	19	-11	SE	4	6	*	32	19	-
BRITISH ISLANDS.	Sumburgh Head ...	29.54	42	SW	4	0	29.90	+1.5	43	41	0	NE	2	6	3	45	35	0.34
	Stornoway ...	29.80	42	W	4	0	29.85	+1.0	44	43	0	N	7	0	6	47	39	0.08
	Wick ...	29.68	42	NW	4	0	29.82	+0.1	42	41	+3	N	4	60	1	44	38	0.43
	Nairn ...	29.79	43	WSW	2	0	29.78	-0.6	43	40	+3	W	2	0	2	44	38	0.11
	Aberdeen ...	29.79	37	SSW	2	0	29.74	-2.1	40	38	+9	NW	3	60	4	41	31	0.13
	Leith ...	29.89	37	W	4	0	29.75	-2.4	39	37	+11	W	3	0	*	40	27	0.01
	Shields ...	29.99	29	S	1	60	29.72	-3.4	37	35	+13	WNW	2	0	2	37	22	-
	Spurn Head ...	30.03	23	SE	0	6	29.73	-3.7	30	30	+7	SE	0	6	*	30	21	-
	York ...	30.05	21	SE	0	6	29.78	-3.2	29	29	+15	ENE	1	0	*	31	14	-
	Loughborough ...	30.05	21	SE	0	6	29.78	-3.2	29	29	+15	ENE	1	0	*	31	14	-
GERMANY & HOLLAND.	Ardrossan ...	29.92	43	SSW	3	0	29.79	-2.0	42	40	+2	NW	3	6	2	43	35	0.01
	Malin Head ...	29.93	46	W	4	0	29.87	-0.3	43	42	+1	N	5	0	3	46	37	0.02
	Mullaghmore ...	30.00	43	SW	2	5	29.93	+0.1	44	42	+2	N	4	0	3	46	42	-
	Belmullet ...	30.04	44	S	1	5	29.97	+0.6	44	41	+3	N	2	0	*	45	42	0.08
	Donaghadee ...	29.98	41	SSW	2	0	29.83	-1.7	44	43	+1	NNE	4	0	2	45	40	0.01
	Liverpool (Bidston) ...	30.04	27	SE	1	6	29.78	-2.4	37	36	+12	N	1	60	1	41	25	-
	Holyhead ...	30.04	34	SE	0	0	29.79	-2.3	44	43	+13	NW	5	0	4	46	31	0.03
	Parsonstown ...	30.03	37	SE	0	0	29.93	-0.0	40	39	+2	SE	0	0	*	45	36	-
	Valencia ...	30.04	44	SE	0	0	29.97	+1.0	47	46	0	NE	1	0	1	49	42	0.01
	Roche's Point ...	30.03	41	SE	3	0	29.94	+0.1	44	41	-2	N	3	0	4	47	38	-
FRANCE AND BELGIUM.	Pembroke (St. Ann's Hd.) ...	30.04	33	ENE	2	60	29.84	-1.4	43	40	+3	NW	4	0	4	44	29	0.02
	Scilly ...	29.96	43	ENE	3	60	29.87	-0.2	44	42	+2	NW	4	0	5	44	40	-
	Prawle Point ...	30.01	38	E	3	6	29.84	-1.4	34	32	-4	W	2	0	2	43	27	-
	Jersey (St. Aubin's) ...	29.99	32	E	3	60	29.86	-1.4	30	29	-1	ENE	2	0	2	35	23	-
	Hurst Castle ...	30.03	30	ENE	3	60	29.83	-1.8	21	20	-5	WSW	1	0	1	35	19	-
	Dungeness ...	30.00	34	SE	0	6	29.80	-2.1	19	19	-12	N	2	0	1	38	15	-
	London ...	30.03	20	SE	0	6	29.80	-2.6	25	24	+6	W	1	0	*	25	19	0.01
	Oxford ...	30.02	23	W	1	0	29.80	-2.8	24	24	+8	W	1	0	*	29	16	0.06
	Cambridge ...	30.04	22	SE	0	0	29.77	-3.1	25	25	+7	SE	1	0	*	25	16	0.01
	Yarmouth ...	30.05	34	SE	2	60	29.78	-2.9	28	28	-8	SE	2	0	2	37	23	-
PENIN- SULA.	Cuxhaven ...	30.18	26	ENE	3	0	29.94	-3.1	16	15	-16	SE	4	0	*	32	16	-
	Berlin ...	30.19	16	?	4	6	30.03	-2.5	10	10	-13	SE	4	0	*	32	10	-
	Wiesbaden ...	*	*	*	*	*	29.89	-1.6	13	13	+8	SE	2	0	*	27	14	-
	Munich ...	29.91	13	SE	0	6	29.82	-1.6	13	13	+8	SE	2	0	*	18	5	0.04
	The Helder ...	30.03	25	E	1	6	29.85	-3.0	22	21	0	SE	1	0	1	27	18	-
	Brussels (8 a.m.) ...	*	*	*	*	*	29.85	-2.4	14	13	-5	SE	2	0	*	28	12	-
	Cape Gris Nez ...	30.02	25	SE	4	6	29.79	-2.4	28	28	+7	SE	1	0	1	30	19	-
	Paris ...	30.00	20	NE	2	6	29.89	-1.3	10	10	-6	NE	1	0	*	28	8	-
	Brest ...	29.93	24	E	3	6	?	?	35	34	+3	SE	0	0	3	41	23	-
	Lorient ...	29.94	25	E	3	6	29.87	-0.9	27	26	+2	NE	1	0	5	30	25	-
PENIN- SULA.	Rochefort ...	29.80	31	E	4	6	29.84	-0.5	21	21	-9	ENE	3	0	*	39	16	-
	Belfort ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Lyons ...	29.97	23	NW	1	0	29.85	-1.5	21	21	-1	S	1	0	*	26	22	-
	Nice ...	29.82	36	NE	5	6	29.75	-0.8	33	27	-2	NE	4	0	2	45	32	-
	Perpignan ...	29.84	34	SE	0	6	29.82	-0.0	34	35	+3	W	2	0	*	45	30	-
	Biarritz ...	29.82	33	E	3	6	29.81	-0.2	35	33	+6	WSW	4	0	2	36	?	-
PENIN- SULA.	Corunna ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Lisbon ...	29.70	34	SW	4	6	29.65	-1.7	50	50	0	NE	4	0	4	57	50	0.55

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

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



# WEATHER CHARTS

for 8 a.m. on

Monday, 15<sup>th</sup> December,

1890.

## BAROMETER, WIND AND SEA.

### EXPLANATION OF MAP

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

Changes since previous morning are stated in words.

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

their barbs and feathers refer to force thus—

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

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

⊙ = dead calm.

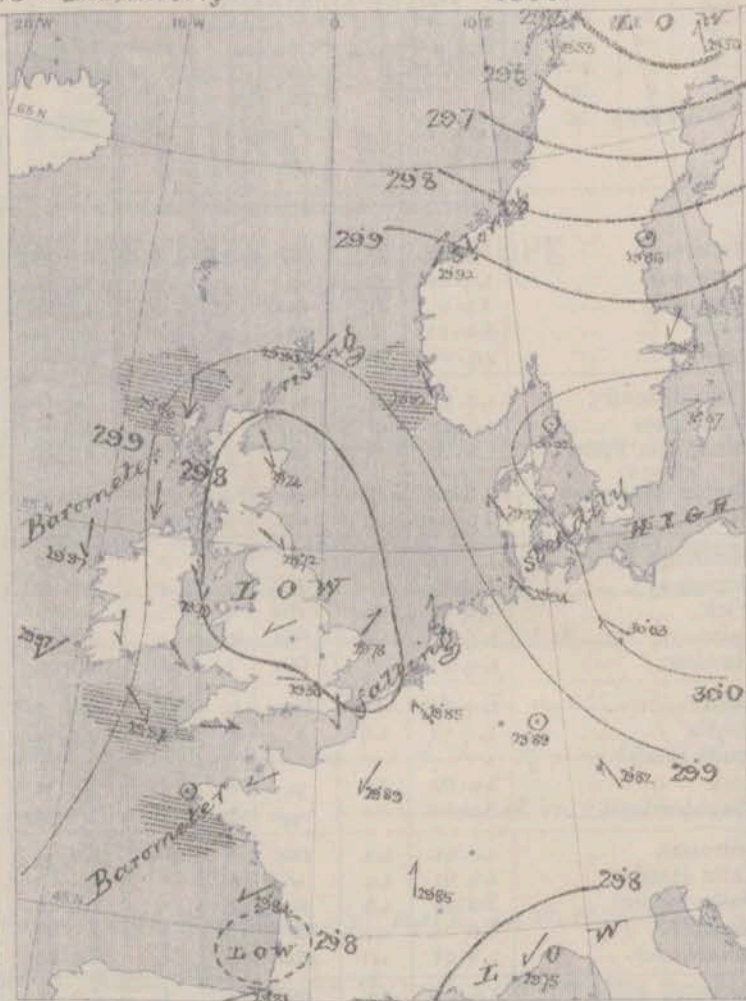
**SEA DISTURBANCE**—Where considerable, is shown thus:

▨ = Rough, ▨ = High.

## MEAN HEIGHT OF THE BAROMETER

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

STATIONS.	MEAN READINGS.
	INCH.
Sumburgh Head .....	29.667
Stornoway .....	29.701
Wick .....	29.711
Nairn .....	29.739
Aberdeen .....	29.757
Leith .....	29.803
Shields .....	29.843
York .....	29.888
Loughborough .....	29.923
Ardrossan .....	29.819
Donaghadee .....	29.847
Holyhead .....	29.879
Liverpool .....	29.895
Parsonstown .....	29.909
Valencia .....	29.908
Roche's Point .....	29.915
Pembroke .....	29.918
Sally .....	29.902
Jersey .....	29.985
Hurst Castle .....	29.959
Dover .....	29.957
LONDON .....	29.951
Oxford .....	29.954
Cambridge .....	29.938
Yarmouth .....	29.914



## 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.

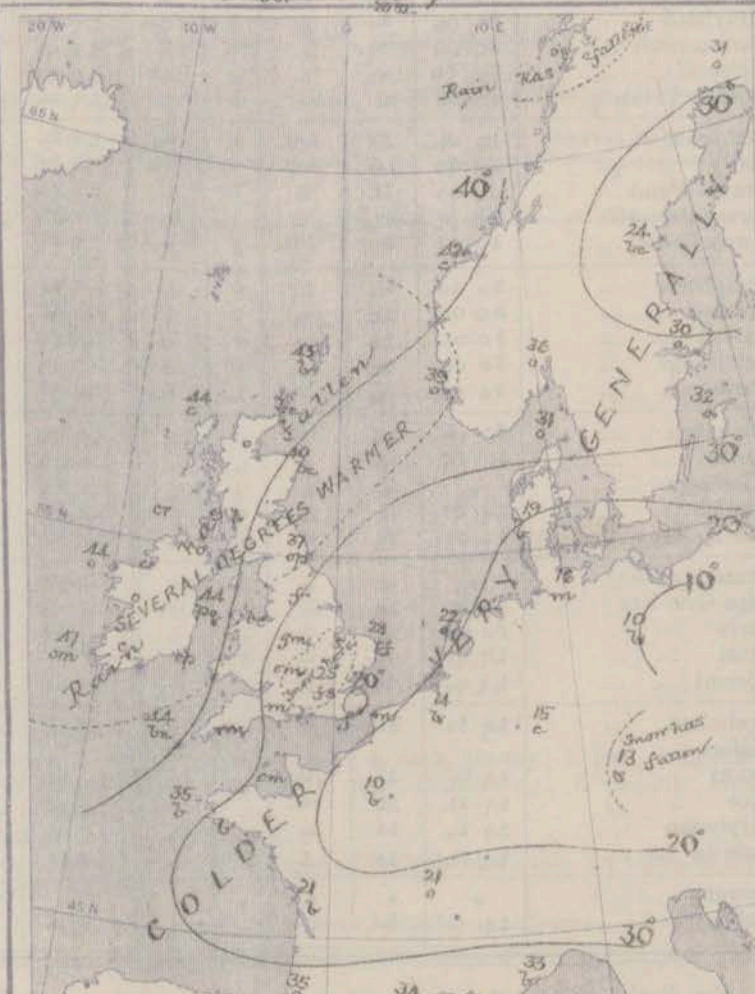
**RAINFALL**—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more are quoted in figures.

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

(For the month of December.)

STATIONS.	TEMPERATURE.				RAINFALL (Inches.)
	Daily Max.	Daily Min.	Dry at 8 a.m.	Wet	
Sumburgh Head .....	42.5	35.0	39.5	37.9	4.33
Stornoway .....	41.4	33.9	39.2	38.2	5.66
Wick .....	42.1	32.6	38.0	36.6	3.18
Nairn .....	41.7	32.8	37.0	35.6	2.08
Aberdeen .....	42.0	32.5	36.9	35.3	3.34
Leith .....	44.2	33.7	38.6	37.0	2.01
Shields .....	43.1	31.3	38.5	37.2	2.74
York .....	42.7	32.4	36.8	35.7	2.45
Loughborough .....	43.1	32.9	36.9	35.9	2.36
Ardrossan .....	44.6	36.0	40.1	38.7	4.04
Donaghadee .....	46.1	36.2	40.2	39.2	2.84
Holyhead .....	46.7	39.3	43.0	41.4	3.84
Liverpool .....	43.8	36.0	39.3	37.6	2.70
Parsonstown .....	44.8	33.2	37.0	36.6	3.02
Valencia .....	50.0	40.0	41.6	42.3	5.82
Roche's Point .....	48.0	39.0	42.9	41.5	4.74
Pembroke .....	47.1	40.6	43.9	42.5	4.06
Sally .....	49.8	43.8	47.1	45.4	4.10
Jersey .....	47.7	40.1	43.4	41.8	3.87
Hurst Castle .....	46.1	36.9	40.9	40.2	2.84
Dover .....	44.7	36.8	40.3	39.1	3.20
LONDON .....	44.7	34.6	38.5	37.4	2.14
Oxford .....	43.6	34.3	37.7	36.6	2.13
Cambridge .....	43.5	32.3	36.9	36.1	1.09
Yarmouth .....	42.4	31.2	38.3	37.5	2.55

**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. and upwards, over North Germany and the Baltic.  
 Lowest, 29.5 in. and less, in a depression lying over England; 29.5 in. and less, in a large shallow area lying over all the more northern and western part of Great Britain.  
 Gradients slight and irregular.

## TEMPERATURE

Barometer rising in the extreme north and westward of our Islands, but falling elsewhere.  
 Highest, 50° at Linton, 47° at Kilmuir, Island, and 44° at Stromway, Bismarck, Mullaghmore, Donaghadee, Holyhead, Rockingham and Lillie.  
 Lowest, 10° at Paris and Berlin, 13° at Munich, 14° at Brussels, 15° at Amsterdam, 16° at Stockholm, and 18° at Rome.  
 The maximal registered over England yesterday were exceedingly low; in London the thermometer during the day did not exceed 22°.

## WIND

Moderate from the N.W. at most of our western and northern stations, but strong to a gale at Stromway.  
 Light from the S.W. or W. in the south and south-east of England, but variable on our northeast coast.  
 Light from N.E. in the north of France and from S.W. or W. in the south of that country.

## WEATHER

Cloudy or overcast in most places, with fog or mist at several of the English stations, showers on our western coast, and snow in London and at Cambridge, as well as at Liverpool and Munich.  
 In Scotland and the west & north of France however, the weather is mostly fair.  
 Rain fell yesterday at most of our northern stations, the largest amount being 0.4 in. at Newcastle.

## SEA

Moderate to smooth generally, but rough at Skutumpah and Stromway and rather rough at the mouth of the Channel.

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The large depression over Great Britain appears to be moving southwards, but the distribution of pressure is too irregular to permit of any very decided forecast as to its future movements. Some further increase of temperature seems probable over England, with snow in places.

## FORECASTS

For the 24 hours ending at NOON on 16<sup>th</sup> DEC.: 1890.

### DISTRICTS.

### FORECASTS.

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

N<sup>2</sup> to NE<sup>2</sup> winds, fresh or strong; fair generally.  
 { NW<sup>1</sup> to N<sup>2</sup> or NE<sup>2</sup> winds; unsettled, some snow showers.  
 { SW<sup>2</sup> to Variable breezes; dull, some snow, fog locally, becoming mistier.

### DISTRICTS.

### FORECASTS.

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

{ N<sup>1</sup> to NE<sup>2</sup> winds, moderate or fresh; unsettled, some showers.  
 NW<sup>1</sup> to N<sup>2</sup> winds, moderate or fresh; unsettled, some showers.

Same as No<sup>s</sup> 6 and 7.

### 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 ...	29.97	41	38	S	8	0	5		Holyhead ...	30.05	30	35	2	0	0
Sumburgh Head ...									Valencia ...						
Stornoway ...	29.75	47	40	SW	3	C	4		Seilly ...						
Aberdeen ...									Jersey ...	29.99	34	32	2	3	3
Shields ...									Dungeness ...	30.01	36	32	SSW	2	0
Ardrossan ...									London ...						
Mulin Head ...	29.93	43	41	SSW	3	0	2		Yarmouth ...						
Mullaghmore ...									Rochefort ...	29.81	37	32	E/NE	4	2
Belmullet ...	30.00	44	40	WSW	1	om	*								

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

Weather in morning fine and bright over the greater part of western and southern Europe, but foggy in several localities - more particularly over England - cloudy or overcast elsewhere, with snow in some parts of Russia, Poland and south Germany, and much rain on the Atlantic coasts of Spain and Portugal, as well as over certain parts of Italy, Sicily and Malta. Rain later over Ireland, Scotland and the west of Norway, as well as the Iberian Peninsula, snow over the southeast of England.

Temperature remaining very low for the time of year, but inclined to rise at the Irish stations, in the southeast of France and northern Italy. Morning readings as low as (1) 3° F. at Moscow, 5° at Kiev, 8° at Kharkow, 11° at Warsaw, 12° at Hermannstadt, 22° at Mennel and Danzig, (2) 5° at Munich, 14° at Prague, 15° at Belfort, 16° at Paris, 19° at Munster, and 23° at Berlin, (3) 14° at Loughborough, 16° at Oxford, 18° at Cambridge, 19° in London, and 23° at York. Not exceeding 22° in London, and 25° at Paris all day, and falling again briskly at night.

Wind moderate E<sup>2</sup> over Germany; mainly NE<sup>2</sup> & NW<sup>2</sup> over the northern shores of the Mediterranean and Adriatic, and fresh to a gale in force; moderate SE<sup>1</sup> and E<sup>1</sup> on the shores of the Peninsula, west of France, and southwest of our Islands; SW<sup>2</sup> in Scotland and Norway; light W<sup>1</sup> over Finland; light and variable elsewhere, becoming W<sup>2</sup> and SW<sup>2</sup> over the northern parts of our Islands later, and SSE<sup>1</sup> in the west of Norway.

Barometer highest 30.3 ins. and more to 30.1 ins. in an anticyclone lying over central and eastern Europe; lowest 29.5 ins. and less both over the southeastern parts of the Mediterranean, and over Lapland, 29.7 ins. and less off C. Finisterre, and 29.8 ins. and less to the northwest of Scotland. Falling decidedly over Scotland and the North Sea later, slightly over England.

### SUMMARY OF CHANGES IN THE WEATHER OVER THE BRITISH ISLANDS AND THEIR NEIGHBOURHOOD FROM THE 7<sup>th</sup> TO 13<sup>th</sup> DEC. 1890.

The weather of last week was generally cold and quiet, - fair at many of the coast stations, but dull and foggy over the inland districts, with sharp frosts in the eastern, central and southern parts of Great Britain.

During nearly the whole of the period a large anticyclone has extended over all the more eastern parts of our Islands from Scandinavia and Denmark, while shallow low pressure systems have existed over Spain and the Bay of Biscay. The wind has therefore been E<sup>2</sup> or SE<sup>2</sup> over the greater part of England, Ireland and France, but S<sup>2</sup> in Scotland and SW<sup>2</sup> over the northern parts of Scandinavia. On the night of the 10<sup>th</sup>, however, a large depression travelled northwards outside our western coasts, while on the following day a small secondary disturbance appeared off the south of Ireland. These systems occasioned strong S<sup>2</sup> winds for a time in the western and northern parts of the Kingdom, with mild rainy weather, but their influence was of a purely temporary nature. Over the inland parts of England the weather was almost continuously foggy and frosty, the air being at times exceedingly dense in London. At the close of the week further low pressure systems were beginning to appear in the west, and the wind there was again increasing from SE or S, with rain in Ireland.

With the exception of the mild spell noticed in the extreme west and northwest on the 10<sup>th</sup> and 11<sup>th</sup> temperature has been low throughout the week, the maximum readings over England being almost always below 40°, and frequently below 35°. Sharp frost occurred at night, the lowest reading registered by the sheltered thermometer being 19° at Cambridge on the morning of the 13<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 16<sup>th</sup> December.* 1890.  
 Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.

STATIONS.	YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
	BAROM.	TEMP.	WIND.		Weather.	BAROMETER.		SHADE TEMP.		Difference from 8 a.m. yesterday.	WIND.		Sec. (0 to 12.)	Weather.	Sea. (0 to 2.)	SHADE TEMP.		
	Reading at 3 <sup>rd</sup> P. and Sea Level.	Dry.	Dir.	Force. (0 to 12.)		Reading at 3 <sup>rd</sup> P. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.		Dir.	Force. (0 to 12.)				Max.	Min.	Amount of Rainfall.
SCANDINAVIA.	Haparanda ...	29.92	18	NW	6	b	20.13	+63	10	12	-18	N	4	b	.	32	?	0.08
	Hernösand ...	20.15	27	2	0	bc	20.27	+57	12	10	-12	2	0	b	.	34	?	—
	Stockholm ...	20.04	32	NW	2	0	20.21	+23	25	23	-5	NW	2	b	.	34	2	—
	Wisby ...	20.04	34	NW	4	c	20.12	+05	31	27	-1	ENE	4	bc	.	36	28	—
	Bodö ...	20.15	32	N	2	0	20.11	+58	30	28	-1	ENE	2	bc	.	32	27	—
	Christiansund ...	20.17	41	E	0	0	20.14	+22	37	36	-5	2	0	b	4	41	37	0.12
	Skadesnaes ...	20.16	34	2	0	b	20.17	+25	31	30	-5	2	0	0	3	39	28	—
	Christiania Fjord (Farder) ...	20.13	31	NNW	0	b	20.21	+23	31	30	-5	NNW	0	0	1	36	28	—
	Skagen (The Scaw) ...	20.16	28	2	0	b	20.15	+13	32	32	+1	SE	4	0	3	32	23	—
	Fanö ...	20.07	24	ENE	4	b	20.08	+15	25	25	+6	ENE	3	b	.	25	19	—
BRITISH ISLANDS.	Sumburgh Head ...	30.00	43	ENE	0	b	20.03	+13	39	37	-4	ENE	1	0	3	46	38	—
	Stornoway ...	29.92	44	N	2	b	20.09	+03	41	39	-3	SE	4	0	4	46	36	0.03
	Wick ...	29.96	43	2	0	0	29.98	+16	41	40	-1	SE	3	0	3	45	40	—
	Nairn ...	29.93	37	2	0	b	29.96	+18	36	35	-7	2	0	0	1	44	34	0.04
	Aberdeen ...	29.95	40	ENE	6	bc	20.01	+27	39	35	-1	SE	4	0	5	45	39	0.05
	Leith ...	29.86	40	N	0	c	29.96	+21	38	35	-1	E	3	0	.	43	36	0.04
	Shields ...	29.82	42	ENE	0	0	29.94	+22	38	35	+1	ENE	3	0	4	42	34	0.09
	Spurn Head ...	29.76	38	ENE	5	0	29.86	+14	37	35	+2	ENE	6	bc	5	38	34	0.01
	York ...	29.78	34	ENE	1	0	29.93	+20	33	32	+3	ENE	1	0	.	37	28	0.06
	Loughborough ...	29.73	30	E	2	0	29.85	+07	28	27	-1	ENE	1	0	.	33	27	0.12
BRITISH ISLANDS.	Ardrossan ...	29.81	40	ENE	2	b	29.92	+13	33	32	-5	ENE	2	0	1	45	31	0.01
	Malin Head ...	29.78	45	NE	5	b	29.85	-02	38	35	-5	SE	4	0	2	46	38	—
	Mullaghmore ...	29.78	45	N	5	b	29.82	-11	35	37	-5	ENE	3	0	2	46	38	—
	Belmullet ...	29.82	45	NNW	1	0	29.82	-15	33	35	-7	ENE	1	0	.	45	35	0.04
	Donaghadee ...	29.76	44	NE	5	bc	29.89	+06	38	36	-6	SE	5	0	3	48	37	0.01
	Liverpool (Bidston) ...	29.72	35	NE	2	f	29.88	+10	30	29	-7	ENE	3	0	3	37	30	0.04
	Holyhead ...	29.70	39	ENE	3	0	29.84	+05	30	29	-14	E	4	0	4	45	30	0.10
	Parsonstown ...	29.75	39	2	0	b	29.80	-13	36	34	-4	2	0	0	.	44	34	0.04
	Valencia ...	29.79	45	NE	2	bc	29.74	-23	39	37	-8	ENE	1	0	1	47	35	0.01
	Roche's Point ...	29.72	44	NNW	4	b	29.74	-20	40	38	-4	E	4	0	4	45	37	0.01
BRITISH ISLANDS.	Pembroke (St. Ann's Hd.) ...	29.64	39	NNW	3	bc	29.74	-10	32	30	-11	ENE	4	0	3	45	32	0.11
	Scilly ...	29.62	45	NNW	4	c	29.58	-19	44	41	0	ENE	5	0	5	46	40	0.08
	Prawle Point ...	29.61	38	NNW	2	0	29.67	-17	38	36	+4	ENE	7	0	5	41	38	0.40
	Jersey (St. Aubin's) ...	29.61	39	ENE	3	0	29.67	-19	34	32	+4	ENE	5	0	4	41	29	0.19
	Hurst Castle ...	29.65	34	E	2	m	29.74	-09	29	29	+8	E	5	bc	1	35	20	0.02
	Dungeness ...	29.69	34	SE	3	c	29.76	-04	24	24	+5	ENE	4	0	3	37	19	—
	London ...	29.72	31	SE	2	0	29.76	-04	29	28	+4	E	3	0	.	32	24	0.05
	Oxford ...	29.73	29	NE	1	0	29.80	0.0	28	26	+4	NE	2	0	.	31	24	0.01
	Cambridge ...	29.70	26	E	1	0	29.82	+05	28	28	+3	NE	1	0	.	31	24	0.10
	Yarmouth ...	29.76	33	ENE	5	c	29.82	+04	31	30	+3	ENE	6	0	5	34	26	—
GERMANY & HOLLAND.	Cuxhaven ...	20.05	21	ENE	5	m	20.05	+11	22	21	+6	E	5	b	.	23	?	—
	Berlin ...	20.04	12	ENE	4	b	20.04	+01	9	9	-1	NE	4	b	.	16	9	—
	Wiesbaden ...	.	.	.	.	.	29.86	-03	15	15	0	2	0	b	.	39	14	—
	Munich ...	29.79	7	NE	2	b	29.79	-03	10	10	-3	NE	2	0	.	16	7	0.04
	The Helder ...	29.90	22	E	2	b	29.93	+03	18	17	-4	ENE	4	b	.	23	18	—
	Brussels (9 a.m.) ...	.	.	.	.	.	29.84	-01	11	11	-3	ENE	2	b	.	39	9	—
	Cape Gris Nez ...	29.71	28	SE	4	m	29.76	-03	13	13	-15	E	4	0	3	25	9	—
	Paris ...	29.78	15	SE	1	b	29.76	-13	16	16	+6	NE	1	0	.	25	7	—
	Brest ...	29.74	42	WNW	3	0	29.58	?	40	39	+5	E	4	0	4	46	32	0.08
	Lorient ...	29.65	44	WNW	3	0	29.55	-32	33	32	+6	NE	3	0	5	45	27	0.12
FRANCE AND BELGIUM.	Rocheport ...	29.76	27	NE	2	b	29.63	-21	33	31	+12	SE	5	0	.	?	19	—
	Belfort ...	29.78	15	N	4	b	29.74	-05	16	?	?	N	1	0	.	23	19	—
	Lyons ...	29.82	21	WNW	1	b	29.80	-05	20	19	-1	N	1	0	.	25	19	—
	Nice ...	29.78	35	SE	0	b	29.80	+05	36	33	+3	E	2	0	2	40	?	—
	Perpignan ...	29.75	38	SE	1	0	29.79	-03	38	37	+4	W	1	0	.	40	?	—
	Biarritz ...	29.74	47	SE	3	0	29.71	-10	43	42	+8	W	4	0	4	48	?	—
	Corunna ...	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Lisbon ...	29.71	31	N	3	0	29.81	+16	51	47	+1	WNW	3	0	6	54	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

Tuesday, 15<sup>th</sup> December,

1890.

## BAROMETER, WIND AND SEA.

### EXPLANATION OF MAP.

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

Changes since previous morning are stated in words.

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

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

→ = forces 5 to 7; → = forces 1 to 4.

○ = dead calm.

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

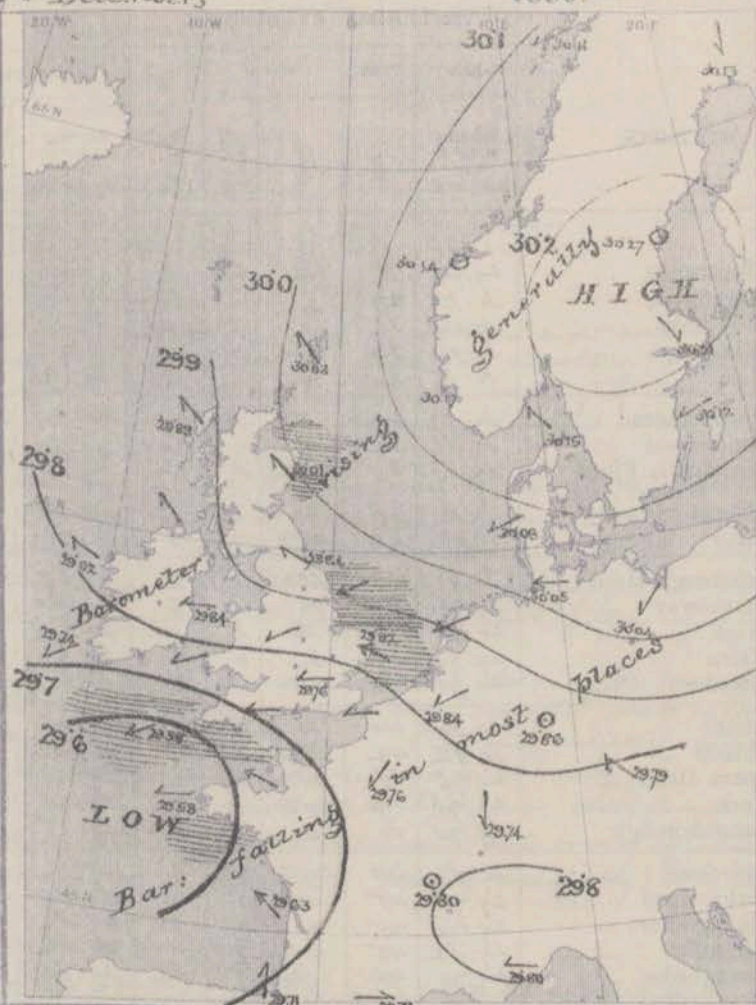
▨ = Rough. ▨ = High.

## MEAN HEIGHT OF THE BAROMETER

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

During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS.
Sumburgh Head	29.667
Stornoway	29.701
Wick	29.711
Nairn	29.739
Aberdeen	29.737
Leith	29.803
Shields	29.843
York	29.883
Loughborough	29.923
Ardrossan	29.819
Donaghadee	29.817
Holyhead	29.879
Liverpool	29.895
Parsonstown	29.909
Valencia	29.908
Roche's Point	29.915
Pembroke	29.916
Sally	29.962
Jersey	29.985
Hurst Castle	29.959
Dover	29.957
LONDON	29.951
Oxford	29.954
Cambridge	29.938
Yarmouth	29.914



## 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.

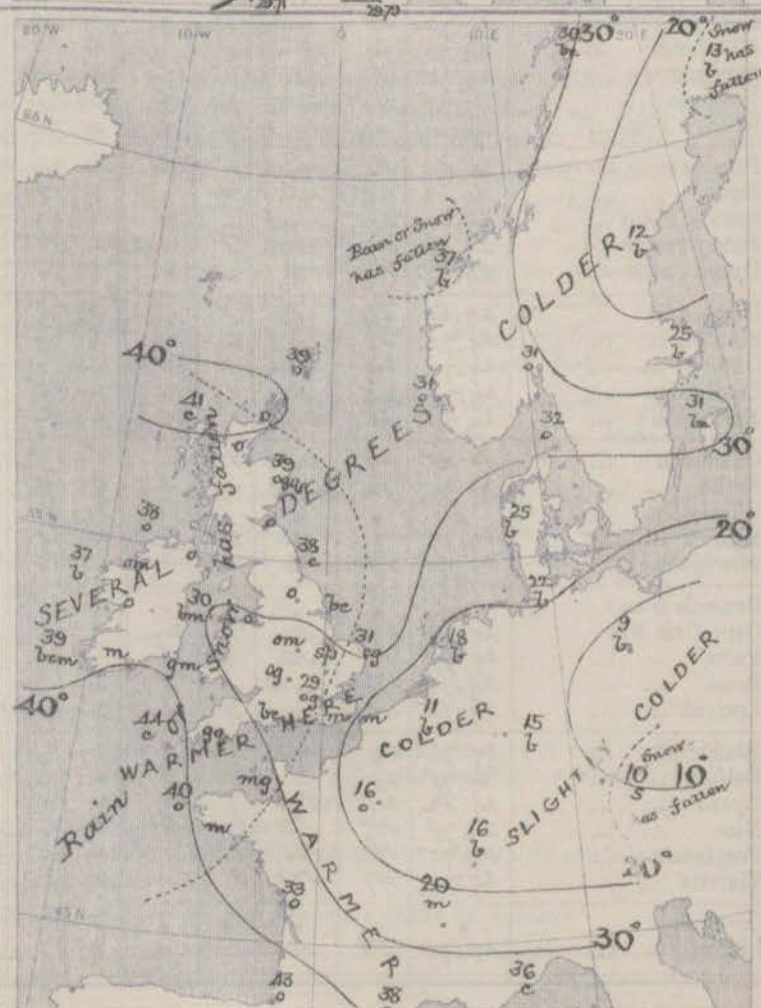
**RAINFALL**—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more are quoted in figures.

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

(For the month of December.)

STATIONS.	TEMPERATURE.				RAINFALL (Inches.)
	Daily Max.	Daily Min.	at 8 a.m.		
			Dry.	Wet.	
Sumburgh Head.....	42.5	35.0	39.5	37.9	4.33
Stornoway .....	41.4	33.9	39.2	38.2	5.66
Wick .....	42.1	32.6	38.0	36.6	3.18
Nairn .....	41.7	32.8	37.0	35.6	2.08
Aberdeen .....	42.0	32.5	36.9	35.3	3.34
Leith.....	44.2	35.7	38.6	37.0	2.01
Shields .....	43.1	34.3	38.5	37.2	2.74
York .....	42.7	32.4	36.8	35.7	2.45
Loughborough .....	43.1	32.9	36.9	35.9	2.36
Ardrossan .....	44.6	36.0	40.1	38.7	4.04
Donaghadee.....	45.1	36.2	40.2	39.2	2.84
Holyhead.....	46.7	39.3	43.0	41.4	3.84
Liverpool .....	43.8	36.0	39.3	37.6	2.70
Parsonstown .....	44.8	33.2	37.9	36.6	3.02
Valencia .....	50.0	40.0	41.6	42.3	5.82
Roche's Point.....	48.0	39.0	42.9	41.5	4.74
Pembroke.....	47.1	40.6	43.9	42.5	4.00
Sally .....	49.8	43.8	47.1	45.4	4.10
Jersey .....	47.7	40.1	43.4	41.8	3.87
Hurst Castle .....	46.1	36.9	40.9	40.2	2.84
Dover .....	44.7	36.8	40.3	39.1	3.20
LONDON .....	44.7	34.6	38.5	37.4	2.14
Oxford .....	43.6	34.3	37.7	36.6	2.13
Cambridge .....	43.5	32.3	36.9	36.1	1.99
Yarmouth .....	42.4	34.2	38.3	37.5	2.95

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, in and near, to 30.0 over Scandinavia, the Baltic, and North Sea. Lowest, 29.6 in and less, in a depression lying over the Bay of Biscay and Brittany. Gradient moderate for E <sup>3</sup> to SE <sup>2</sup> winds.
TEMPERATURE	Barometer still rising a little in the northeast and east, and the rise appeared to be spreading westwards to Ireland. Highest, 51° at Birken, 44° at Bally, 43° at Biscay, 40° at West and North Point. Lowest, (1) 34° at Biscay, 30° at Munich, 11° at Bremen and 1° at Berlin; (2) 12° at Copenhagen, 13° at Haparanda, and 25° at Stockholm. In London the reading is 39°, and at Oxford, Cambridge, and Southborough 28°.
WIND	Moderate from SE in Scotland and the north of Ireland. Moderate E over the greater part of England and the south of Ireland. Strong E on our eastern and southern coasts.
WEATHER	Fine and bright in the west of Ireland, Scandinavia and Germany. Very dull elsewhere, with snow at Cambridge and Munich.
SEA	Rather rough on our east coasts and at the mouth of the Channel, moderate or slight elsewhere.

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

There are no indications of any important change.

## FORECASTS

For the 24 hours ending at NOON on 17<sup>th</sup> DEC<sup>r</sup> 1890.

DISTRICTS.	FORECASTS.	DISTRICTS.	FORECASTS.
0 SCOTLAND NORTH	SE <sup>2</sup> or E <sup>2</sup> winds, moderate to fresh; cold, dry.	6 SCOTLAND WEST	SE <sup>2</sup> winds, moderate; fair, cold.
1 SCOTLAND EAST		7 ENGLAND N.W.	
2 ENGLAND N.E.		8 ENGLAND S.W.	Same as Nos 3 to 5
3 ENGLAND EAST	E <sup>2</sup> winds moderate inland, strong on coast; cold, dull, perhaps slight snow.	9 IRELAND NORTH	Same as Nos 6 and 7.
4 MIDLAND COUNTIES		10 IRELAND SOUTH	E <sup>2</sup> winds, fresh; some showers
5 ENGLAND SOUTH			
		WARNINGS	NONE ISSUED.

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



# YESTERDAY'S 2 P.M. REPORTS.

	THER:		WIND						THER:		WIND					
	BAR:	D.	W.	D.	F.	WEA	SEA		BAR:	D.	W.	D.	F.	WEA	SEA	
Skudesnaes ...	29.58	40	SE	SE	4	C	5	Holyhead ...	29.69	44	42	NE	4	Cg	4	
Sumburgh Head ...	29.94	44	42	E	2	C	3	Valencia ...	29.85	47	44	N	4	Jo	5	
Stornoway ...	29.91	46	44	N	2	C	3	Scilly ...	29.72	46	44	NW	4	C	5	
Aberdeen ...	29.86	43	41	E	7	C	7	Jersey ...	29.69	40	37	W	2	OT	2	
Shields ...	29.68	40	39	NW	2	O	2	Dungeness ...	29.69	31	30	N	2	m	1	
Ardrossan ...	29.76	43	41	NW	3	O	2	London ...	29.69	32	31	SE	1	ogfo	8	
Malin Head ...	29.79	46	44	NNE	5	O	3	Yarmouth ...	29.71	32	31	SW	1	eg	2	
Mullaghmore ...	29.82	45	43	NW	5	C	3	Rochefort ...	29.79	30	29	NNE	3	fo	?	
Belmullet ...	29.87	45	44	NNE	2	Ofo	*									

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

Weather fine in Scotland, as well as over the greater part of France, Germany, Italy, and Algeria. Cloudy or overcast elsewhere with fog or mist in many parts of England, passing showers at some of our western stations, and rain at Madrid, San Fernando, Nemours and Brindisi. Snow falling in London and at Cambridge as well as Haparanda and Munich. Sky clearing later in Ireland, but snow falling during day in most parts of England and rain in Scotland.

Temperature highest 55° at San Fernando, 54° at Malta, 53° at Nemours, 52° at Algiers and 51° at Przem; above 45° in the south-west of Ireland, and very little below that point in the west and extreme north of our Islands generally. Lowest -2° F. at Kier, +4° at Warsaw, 6° at Berlin, Cracow, and Kharkov, 9° at Neufahrwasser and 10° at Memel, Berlin, and Paris; lowest in our Islands 19° at Dungeness, and 21° at Hunt Castle. Daily maxima below 32° at some of the English stations and below 20° in many parts of Germany, but thermometer exceeding 45° in the west and north of the United Kingdom.

Wind moderate from the N<sup>W</sup> in the west and north of our Islands generally, but strong to a gale at Stornoway; light from the W<sup>W</sup> or S<sup>W</sup>W<sup>W</sup> in the south and east of England, moderate from the SE<sup>W</sup> over Denmark, Germany, and the Netherlands. Light or moderate from the SW<sup>W</sup> or W<sup>W</sup> over the northern parts of Russia and Scandinavia; fresh or strong from the N<sup>W</sup> or NW<sup>W</sup> in Italy; NE<sup>W</sup> in France and Spain, S<sup>W</sup> or SE<sup>W</sup> in Algeria. E<sup>W</sup> winds setting in later in most parts of Great Britain.

Barometer highest 30.1 ins. to 30.3 ins. in an anticyclone lying over Eastern Germany and the southern half of Russia. Lowest 29.5 ins. in a depression lying over the north of Scandinavia; 29.6 ins. and less, in another disturbance over Italy; 29.7 ins. and less, in a third lying off the southwest of Spain, and 29.8 ins. and less, in a fourth system covering the greater part of England and Scotland. Depression over our Islands subsequently moving steadily southwards, and barometer rising on our north and northeast coasts.

### EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

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

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

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

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



# DAILY WEATHER REPORT.

for *Wednesday, 17<sup>th</sup> December, 1890.*  
*Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.*

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

STATIONS.	YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
	Barom :  Reading at 32° F. and Sea Level.	TEMP.  Dry.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Weather.	Sea. (0 to 12.)	SHADE TEMP.		Amount of Rainfall.	
			Direc.	Force. (0 to 12.)		Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Direc.	Force. (0 to 12.)			Max.	Min.		
SCANDINAVIA.	Haparanda ...	30.07	20	S	2	b	29.97	-10	15	14	+2	S	2	c	*	23	1	
	Hernösand ...	30.29	5	Z	0	b	30.21	-06	3	2	-9	Z	0	b	*	27	3	
	Stockholm ...	30.27	18	NW	2	b	30.26	+05	19	18	-6	Z	0	o	*	34	18	
	Wisby ...	30.17	33	NE	4	b	30.14	+05	31	28	0	ENE	2	o	*	36	24	
	Bodö ...	30.04	33	ENE	2	a	29.91	-20	42	40	+12	SW	4	o	2	?	30	
	Christiansund ...	30.15	36	ESE	2	b	30.15	+01	34	31	-3	ESE	2	b	4	39	34	
	Skudeanaes ...	30.21	36	E	4	bc	30.24	+07	33	29	+2	SE	4	o	3	37	30	
	Christiania Fjord (Færder)	30.27	29	NNE	3	b	30.26	+05	29	26	-2	NNE	2	c	1	32	28	
	Skagen (The Scaw)	30.20	30	ESE	3	b	30.23	+08	28	24	-4	ESE	3	b	3	32	28	
	Fanö ...	30.07	31	E	4	o	30.10	+02	30	29	+5	ESE	4	c	*	?	23	
BRITISH ISLANDS.	Sumburgh Head	30.02	40	SSE	3	o	29.99	-04	41	40	+2	SSE	3	o	4	42	36	
	Stornoway ...	29.91	34	Z	0	b	29.89	-00	39	36	-2	S	5	bc	4	41	24	
	Wick ...	29.97	41	SE	5	o	29.97	-01	40	38	-1	S	3	bc	2	45	38	
	Nairn ...	29.96	32	Z	0	b	29.98	+02	32	31	-4	Z	0	c	1	38	24	
	Aberdeen ...	30.03	39	SE	3	o	30.04	+03	36	34	-3	SSE	2	agrop	4	40	36	0.02
	Leith ...	29.97	39	E	2	o	30.01	+05	36	34	-2	S	1	om	*	40	34	
	Shields ...	29.95	40	ESE	4	o	29.98	+04	40	36	+2	E	3	o	4	40	36	
	Spurn Head ...	29.86	37	ENE	7	c	29.92	+06	38	35	+1	E	5	o	5	38	35	
	York ...	29.90	36	ESE	1	o	29.97	+04	36	34	+3	E	1	o	*	37	32	
	Loughborough	29.86	31	E	3	o	29.93	+08	32	30	+4	NE	2	o	*	32	28	
GERMANY & HOLLAND.	Ardrossan ...	29.95	33	ENE	1	bm	30.00	+08	35	34	+2	NE	2	cm	1	37	32	
	Malin Head ...	29.88	33	S	4	b	29.92	+07	35	33	-3	S	2	o	2	40	32	
	Mullaghmore ...	29.87	37	ESE	4	cm	29.93	+11	33	30	-6	SE	1	c	3	39	32	
	Belmullet ...	29.85	34	SE	2	b	29.87	+05	32	31	-5	SSE	2	c	*	38	30	
	Donaghadee ...	29.91	40	E	5	b	29.99	+10	39	38	+1	SE	3	o	1	40	37	
	Liverpool (Bidston)	29.86	34	ENE	4	o	29.96	+08	32	31	+2	NE	1	o	2	35	30	
	Holyhead ...	29.86	33	E	4	bc	29.98	+14	30	30	0	Z	0	bcm	0	36	29	
	Parsonstown ...	29.87	30	Z	0	bc	29.96	+16	23	23	-13	Z	0	bc	*	34	23	
	Valencia ...	29.82	39	Z	0	om	29.90	+16	40	38	+1	ESE	2	bm	3	44	33	
	Roche's Point...	29.82	35	ENE	4	m	29.92	+18	32	31	-8	ENE	3	cm	3	41	28	
FRANCE AND BELGIUM.	Pembroke (St. Ann's Hd.)	29.83	30	ENE	2	bc	29.94	+20	32	31	0	E	3	cm	2	33	29	
	Scilly ...	29.74	38	NE	5	o	29.87	+29	38	35	-6	ENE	2	c	5	44	34	
	Prawle Point ...	29.77	30	NE	5	o	29.91	+24	29	29	-9	N	3	og	2	38	28	
	Jersey (St. Aubin's)	29.70	30	E	3	ogm	29.83	+16	34	33	0	E	2	ogm	3	34	29	
	Hurst Castle ...	29.77	28	NE	6	m	29.85	+11	30	30	+1	ENE	4	om	2	30	26	
	Dungeness ...	29.75	25	E	4	m	29.80	+04	29	29	+5	E	3	o	2	32	20	
	London ...	29.79	27	ENE	1	ofg	29.85	+09	30	29	+1	ENE	2	og	*	32	26	
	Oxford ...	29.92	29	NE	2	o	29.90	+10	28	27	0	N	3	og	*	30	27	
	Cambridge ...	29.83	30	E	1	o	?	?	29	29	+1	N	1	og	*	30	26	
	Yarmouth ...	29.81	32	E	6	og	29.85	+03	32	32	+1	E	5	og	5	33	28	
PENINSULA.	Cuxhaven ...	30.05	25	E	4	c	30.03	-02	26	25	+4	E	4	b	*	27	?	
	Berlin ...	30.01	18	NE	4	c	30.00	-04	19	18	+10	NE	4	b	*	19	?	
	Wiesbaden ...	*	*	*	*	*	29.80	-06	23	22	+8	NE	2	bc	*	27	?	
	Munich ...	29.81	13	E	2	o	29.68	-11	17	17	+7	E	6	o	*	18	10	0.04
	The Helder ...	29.92	17	E	4	c	29.93	-00	23	22	+8	ENE	3	o	3	23	18	
	Brussels (9 a.m.)	*	*	*	*	*	29.82	-02	11	11	0	ENE	1	b	*	21	11	
	Cape Gris Nez	29.75	15	SE	3	m	29.79	+03	22	22	+9	E	3	m	2	22	12	
	Paris ...	29.75	22	ENE	3	o	29.77	+01	19	?	+1	NW	2	o	*	25	?	
	Brest ...	29.65	37	ENE	3	o	29.88	+30	36	33	-4	NE	3	o	1	?	32	
	Lorient ...	29.65	31	NE	3	o	29.85	+30	36	33	+3	N	3	o	4	45	30	
FRANCE AND BELGIUM.	Rochefort ...	29.57	39	NW	5	o	29.79	+16	32	31	-1	N	3	m	2	41	27	0.16
	Belfort ...	29.82	21	W	1	c	29.73	-01	21	?	+5	W	1	bc	*	23	18	0.16
	Lyons ...	29.76	26	NW	1	m	29.69	-11	30	29	+10	S	1	bc	*	?	?	0.08
	Nice ...	29.77	40	E	2	o	29.67	-13	40	39	+4	E	2	o	4	45	36	0.12
	Perpignan ...	29.73	37	Z	0	b	29.75	-04	32	31	-6	W	2	o	*	45	28	
	Barritz ...	29.66	48	W	5	o	29.78	+07	58	48	+10	N	5	o	3	?	?	0.47
PENINSULA.	Corunna ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
	Lisbon ...	29.89	51	NW	1	o	29.97	+16	48	45	-3	SW	2	b	?	54	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

Wednesday, 17<sup>th</sup> December,

1890.

## BAROMETER, WIND AND SEA.

### EXPLANATION OF MAP.

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

Changes since previous morning are stated in words.

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

their barbs and feathers refer to force thus—

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

→ = forces 5 to 7; → = forces 1 to 4.

○ = dead calm.

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

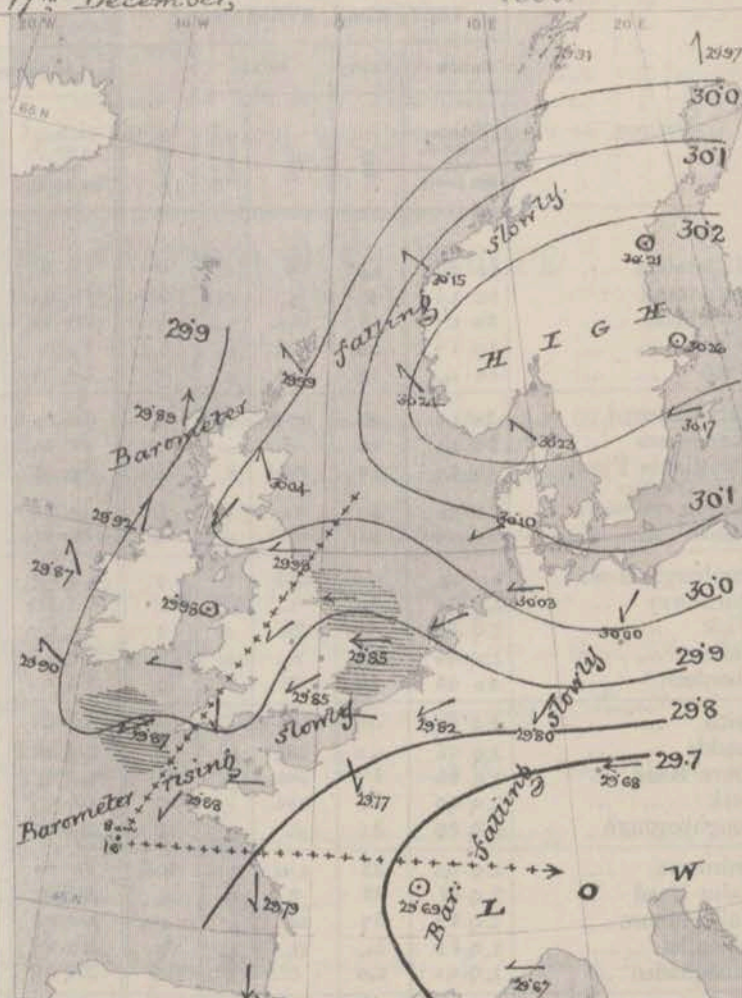
■ = Rough. ■ = High.

## MEAN HEIGHT OF THE BAROMETER

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

During the 15 Years, 1871-1885.

STATIONS.	MEAN READINGS.
	in.
Sumburgh Head .....	29.667
Stornoway .....	29.701
Wick .....	29.711
Nairn .....	29.730
Aberdeen .....	29.757
Leith .....	29.803
Shields .....	29.843
York .....	29.888
Loughborough .....	29.923
Ardrossan .....	29.819
Donaghadee .....	29.847
Holyhead .....	29.879
Liverpool .....	29.895
Parsonstown .....	29.909
Valencia .....	29.908
Roche's Point .....	29.915
Pembroke .....	29.918
Silly .....	29.902
Jersey .....	29.985
Hurst Castle .....	29.959
Dover .....	29.957
LONDON .....	29.951
Oxford .....	29.954
Cambridge .....	29.938
Yarmouth .....	29.914



## 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.

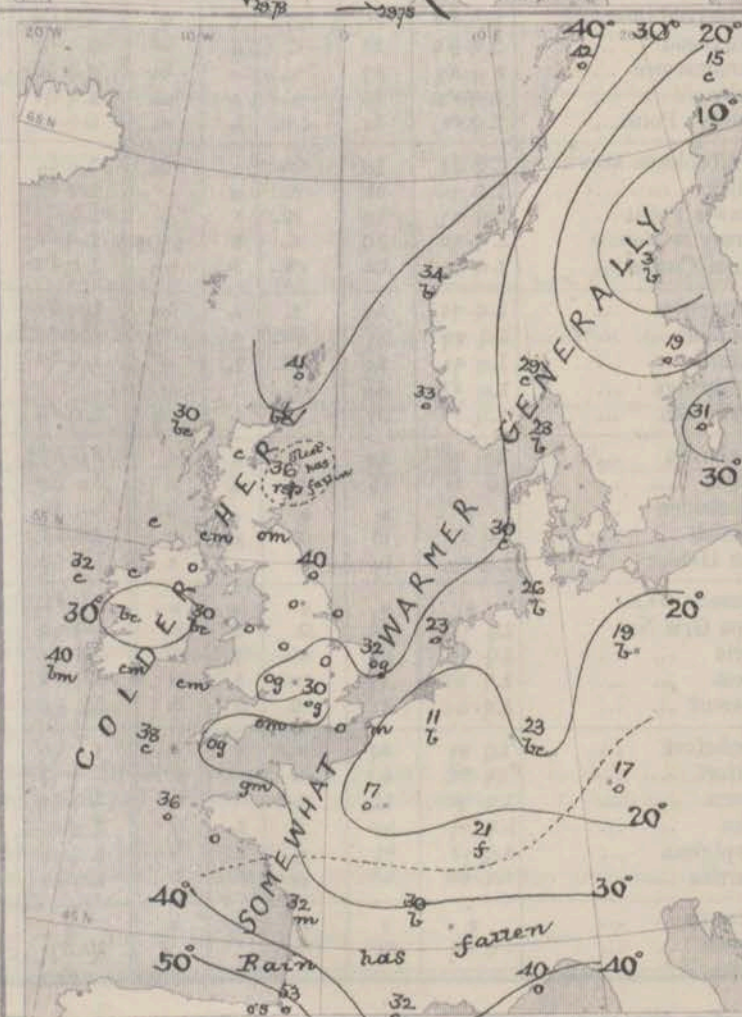
**RAINFALL**—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more are quoted in figures.

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

(For the month of December.)

STATIONS.	TEMPERATURE.				RAINFALL (Inches.)
	Daily Max.	Daily Min.	Dry. at 8 a.m.	Wet.	
Sumburgh Head.....	42.5	35.0	39.5	37.9	4.33
Stornoway .....	44.4	33.9	39.2	38.2	5.06
Wick .....	42.1	32.6	38.0	36.0	3.18
Nairn .....	41.7	32.8	37.0	35.5	2.08
Aberdeen .....	42.0	32.5	36.9	35.3	3.34
Leith .....	44.2	33.7	38.6	37.0	2.01
Shields .....	43.1	31.3	38.5	37.2	2.74
York .....	42.7	32.4	36.8	35.7	2.45
Loughborough .....	43.1	32.9	36.9	35.9	2.30
Ardrossan .....	44.6	36.0	40.1	38.7	4.04
Donaghadee .....	46.1	36.2	40.2	39.2	2.84
Holyhead .....	40.7	39.3	43.0	41.4	3.84
Liverpool .....	43.8	36.0	39.3	37.6	2.70
Parsonstown .....	44.8	33.2	37.9	36.6	3.02
Valencia .....	50.0	40.0	44.6	42.3	5.82
Roche's Point .....	48.0	39.0	42.9	41.5	4.74
Pembroke .....	47.1	40.6	43.9	42.5	4.06
Silly .....	49.8	43.8	47.1	45.4	4.10
Jersey .....	47.7	40.1	43.4	41.8	3.87
Hurst Castle .....	46.1	36.0	40.9	40.2	2.84
Dover .....	44.7	36.8	40.3	39.1	3.20
LONDON .....	44.7	34.0	38.5	37.4	2.14
Oxford .....	43.6	34.3	37.7	36.6	2.13
Cambridge .....	43.5	32.3	36.9	35.1	1.99
Yarmouth .....	42.4	34.2	38.3	37.5	2.95

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, 30.25 in. to 30.0 in. over the southern half of Scandinavia, Denmark, and the North Sea.  
 Lowest, 29.7 in. and less, over Switzerland and the southeast of France, 29.5 in. and less, off the west of our islands and over Lapland.  
 Gradient, slight in most places, moderate in the far north.  
 Barometer almost steady on all our coast, but tending to rise.

## TEMPERATURE

Highest, 53° at Bantry, 41° at Bodo and Sumburg H., 40° at Valenien Island, and 38° at Seilly.  
 Lowest, 3° at Helsingland, 11° at Bruride, 17° at Paris and Munich, 19° at Berlin, 23° at Amsterdam, 28° at Oxford, 29° at Cambridge, 30° in London.  
 It has varied very much between 26° at 32° in London during the past 24 hours. In Germany it has risen decidedly.

## WIND

Very light from SE. in Ireland, S. in Scotland, moderate SW. at Bodo, light to moderate NE. to N. in the Channel and over France. Strong E. at Munich.

## WEATHER

Fine at our western stations as well as over Germany and the eastern shores of the North Sea, dull in Great Britain as a whole and the northern half of France — showery at Aberdeen.  
 Snow fell yesterday in the west and south of France.

## SEA

Continues rather rough on our east coasts and at the mouth of the Channel, moderate to slight elsewhere.

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

Cold quiet weather is still probable over the United Kingdom.

# FORECASTS

For the 24 hours ending at NOON on 18<sup>th</sup> DEC<sup>r</sup> 1890.

## DISTRICTS.

## FORECASTS.

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

S. and SW. winds, light, fair to showery.  
 SE. or E. breezes, light, fair, cold, fog in places.  
 Varying NE. and N. breezes, light, dull, cold, fog in places.

## DISTRICTS.

## FORECASTS.

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

Varying breezes, very light, to calm; cold, hazy or foggy.

Calms in the east, S. airs in the west; fair as a whole, 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 ...	30.18	37	35	E	2	c	3		Holyhead ...	29.83	35	33	ENE	4	6
Sumburgh Head ...	30.03	40	37	SE	2	o	3		Valencia ...	29.76	43	40	SE	1	cm
Stornoway ...	29.89	40	38	SE	2	c	3		Scilly ...	29.68	41	40	ENE	5	0
Aberdeen ...	30.01	40	35	SE	3	o	5		Jersey ...	29.68	31	29	ENE	4	6c
Shields ...	29.93	40	37	SE	4	o	4		Dungeness ...	29.75	23	23	E	3	m
Ardrossan ...	29.93	34	33	ENE	1	o	1		London ...	29.79	29	29	E	2	ogm
Malin Head ...	29.86	37	34	SE	3	o	1		Yarmouth ...	29.82	31	31	E	5	cg
Mullaghmore ...	29.84	38	35	SE	4	om	3		Rochefort ...	29.57	37	36	SE	5	r
Belmullet ...	29.82	38	35	SE	2	o	*								

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

Weather fine and bright in the west of Ireland and on some parts of the English coast, as well as in Scandinavia, Finland, the Baltic, the north and west of Germany, the Netherlands and central Italy. Cloudy or overcast elsewhere with mist at several of the English stations, and snow at Cambridge as well as in South Germany and some parts of Austria. Snow falling later in many parts of France.

Temperature highest, 56° at Algiers, 54° at Nemours, Oran, and Malta, 53° at La Galle, and 51° at Lisbon and San Fernando, above 45° over the central and southern parts of the Mediterranean generally, as well as on the Spanish coast. Lowest -11° F at Kiev, +1° at Kharkov, 8° at Swainsund, 3° at Berlin, and 10° at Warsaw and Munich; below 20° in nearly all parts of northern, eastern, and central Europe, and as low as 23° even at Naples. Daily maxima below the freezing point in the south and east of England, and below 20° in some parts of Germany.

Wind E<sup>3</sup> over England, the south of Ireland, Denmark, the Netherlands, and the greater part of France and central Europe, light or moderate in force generally, but strong on some parts of the English coast. Moderate from the SE<sup>2</sup> in Scotland and the north of Ireland. Light from the N<sup>2</sup> over the greater part of Sweden, Prussia, Spain, and Italy, but S<sup>1</sup> in Algeria. Subsequently shifting to the NW<sup>2</sup> or W<sup>2</sup> in the west of France, but no important change occurring elsewhere.

Barometer highest, 30.1 in. to 30.2 in. and upwards, in a large anticyclone lying over Scandinavia and also in a smaller system over the south of Prussia. Lowest 29.5 in. and less, in a depression lying over the north of Prussia; 29.6 in. and less, in another system lying over the Bay of Biscay, and the northwest of France. Latter disturbance subsequently moving eastward over France; no material change observed elsewhere.

### EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

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

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

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

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



# DAILY WEATHER REPORT.

for Thursday, 18<sup>th</sup> December, 1890.  
Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.

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

STATIONS.	YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
	BAROM.  Reading at 32° F. and Sea Level.	TEMP.  Dry.	WIND.		Weather.	BAROMETER  Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	SHADE TEMP.		WIND.  Direc. Force. (0 to 12.) 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.)	Weather.	Max.	Min.
SCANDINAVIA.	Haparanda ...	30.06	15	Z	0	b	30.09	+12	24	24	+9	Z	0	f	*	?	10	
	Hernösand ...	30.21	6	Z	0	b	30.25	+04	13	12	+10	NNE	2	0	*	13	-2	
	Stockholm ...	30.19	19	N	2	b	30.21	-05	27	24	+8	E	4	0	*	27	16	
	Wisby ...	30.08	29	ENE	4	0	30.13	-04	24	22	-7	SE	4	0	*	34	29	0.04
	Bodö ...	30.06	40	SW	4	bc	29.98	+07	39	35	-3	SSE	2	0	1	48	37	0.04
	Christiansund	30.19	33	SE	1	b	30.00	-15	30	28	-4	ESE	2	0	4	34	28	
	Skudesnaes ...	30.20	32	E	2	b	29.98	-26	30	28	-3	E	2	0	2	34	27	
	Christiania Fjord (Færder)	30.19	23	NNW	3	0	30.14	-12	20	19	-9	N	4	0	1	37	18	
	Skagen (The Scaw)	30.16	26	E	2	b	29.90	-24	27	23	-1	ESE	5	0	4	30	25	
	Fanø ...	30.09	28	ENE	2	0	29.90	-20	24	23	-6	NE	2	0	*	30	24	
BRITISH ISLANDS.	Sumburgh Head	29.98	41	SSE	3	0	29.75	-24	39	38	-2	SSE	4	0	5	42	36	0.12
	Stornoway ...	29.85	40	SW	6	0	29.53	-36	38	38	-1	SW	8	0	7	40	36	
	Wick ...	29.95	42	SSE	4	0	29.69	-28	39	37	-1	S	8	bcu	4	45	35	
	Nairn ...	29.95	35	SW	1	b	29.67	-31	34	32	+2	WSW	5	bc	2	40	30	
	Aberdeen ...	30.04	36	SSW	2	ohp	29.79	-25	35	33	-1	SSW	2	ogrsp	4	40	35	0.05
	Leith ...	30.03	36	SE	1	0	29.82	-19	33	31	-3	SSE	1	c	*	37	31	
	Shields ...	30.03	38	ESE	3	0	29.86	-12	32	30	-8	S	3	c	3	40	30	0.02
	Spurn Head ...	29.99	36	E	7	0	29.87	-05	32	30	-6	SE	3	c	4	38	31	
	York ...	30.02	34	E	1	0	29.88	-09	32	?	-4	E	1	0	*	38	30	0.01
	Loughborough	30.00	31	ENE	2	0	29.90	-03	29	28	-3	ESE	1	ogm	*	37	29	
GERMANY & HOLLAND.	Ardrossan ...	30.00	36	NE	2	bm	29.75	-25	35	34	0	ESE	4	om	3	38	31	
	Malin Head ...	29.89	34	SSE	4	b	29.48	-44	35	33	0	SSE	6	og	3	38	32	
	Mullaghmore ...	29.86	36	SE	5	b	29.43	-50	40	37	+7	SE	6	cog	5	40	32	
	Belmullet ...	29.80	32	SE	5	b	29.31	-56	40	40	+8	SSE	8	of	*	40	31	0.14
	Donaghadee ...	29.99	40	SSW	3	c	29.72	-27	38	37	-1	SSW	7	c	5	41	37	
	Liverpool (Bidston)	30.00	35	ENE	2	0	29.84	-12	29	27	-3	SE	3	0	3	35	29	
	Holyhead ...	30.00	35	Z	0	ogm	29.78	-20	31	31	+1	ESE	2	ogm	2	37	30	
	Parsonstown ...	29.92	32	Z	0	0	29.54	-42	39	37	+16	SE	3	0	*	40	23	
	Valencia ...	29.84	43	SE	4	0	29.36	-54	50	49	+10	SSE	7	rm	7	50	36	0.03
	Roche's Point...	29.94	42	S	5	b	29.53	-39	47	45	+15	S	3	0	2	47	32	
FRANCE AND BELGIUM.	Pembroke (St. Ann's Hd.)	29.97	34	ENE	2	bc	29.76	-18	39	37	+7	S	4	c	3	39	31	
	Scilly ...	29.95	38	NE	2	bc	29.71	-16	42	40	+4	SSE	5	c	4	42	35	
	Prawle Point ...	29.96	31	N	3	0	29.83	-08	38	34	+9	E	3	og	2	38	28	
	Jersey (St. Aubin's)	29.90	37	N	2	osh	29.86	+03	36	34	+2	ESE	3	ogm	3	37	34	0.01
	Hurst Castle ...	29.95	32	NNE	3	og	29.90	+05	29	29	-1	NE	2	of	2	32	27	
	Dungeness ...	29.87	33	NE	4	0	29.84	+04	32	32	+3	NE	4	0	3	33	25	
	London ...	29.95	32	NE	2	0	29.89	+04	27	26	-3	S	1	ofg	*	33	26	0.02
	Oxford ...	29.98	29	NE	2	0	29.90	-00	27	26	-1	Z	0	0	*	32	26	
	Cambridge ...	29.95	30	N	1	b	29.92	?	29	29	0	E	1	0	*	32	19	0.01
	Yarmouth ...	29.95	31	E	5	c	29.87	+02	30	30	-2	E	3	bc	4	33	29	
GERMANY & HOLLAND.	Cuxhaven ...	30.11	27	E	3	b	29.89	-14	30	29	+4	NNE	3	0	*	?	?	
	Berlin ...	30.01	18	N	2	b	29.83	-17	15	15	-4	S	4	0	*	21	14	0.16
	Wiesbaden ...	*	*	*	0	0	29.84	+04	13	12	-10	NE	2	0	*	28	12	
	Munich ...	29.75	19	Z	0	0	29.70	+02	15	15	-2	NE	4	S	*	19	15	
	The Helder ...	30.02	23	ENE	4	b	29.93	-00	22	21	-1	E	1	c	1	27	21	
	Brussels (9 a.m.)	*	*	*	*	*	29.88	+06	15	15	+4	ENE	3	0	*	21	11	
	Cape Gris Nez	29.92	24	E	4	0	29.86	+07	25	25	+3	SE	3	0	3	27	19	
	Paris ...	29.89	22	NW	1	0	29.71	-06	21	21	+4	NW	2	0	*	23	17	
	Brest ...	29.94	38	N	3	0	29.85	-03	39	37	+3	SE	4	bc	4	39	32	
	Lorient ...	29.95	37	NW	4	0	29.89	+04	34	32	-2	Z	0	0	5	37	34	
FRANCE AND BELGIUM.	Rochefort ...	29.90	28	NNE	4	0	29.90	+11	27	27	-5	NE	4	0	*	39	21	
	Belfort ...	?	22	W	1	0	?	?	23	?	+2	W	1	S	*	25	17	0.08
	Lyons ...	29.87	25	N	2	c	29.87	+18	23	22	-7	N	3	S	*	35	22	
	Nice ...	29.61	40	E	4	b	29.52	-15	36	32	-4	NE	5	b	2	48	32	
	Perpignan ...	29.81	41	NW	4	b	29.78	+03	35	30	+3	W	4	b	*	50	?	
	Biarritz ...	29.88	48	NW	5	0	29.89	+11	36	34	-17	SSE	3	0	4	?	32	0.28
	Corunna ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
	Lisbon ...	30.10	51	NNW	3	b	30.13	+16	52	40	+14	W	2	0	4	57	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

Thursday, 18<sup>th</sup> December,

1890.

## BAROMETER, WIND AND SEA.

### EXPLANATION OF MAP

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

Changes since previous morning are stated in words.

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

their barbs and feathers refer to force thus—

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

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

○ = dead calm.

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

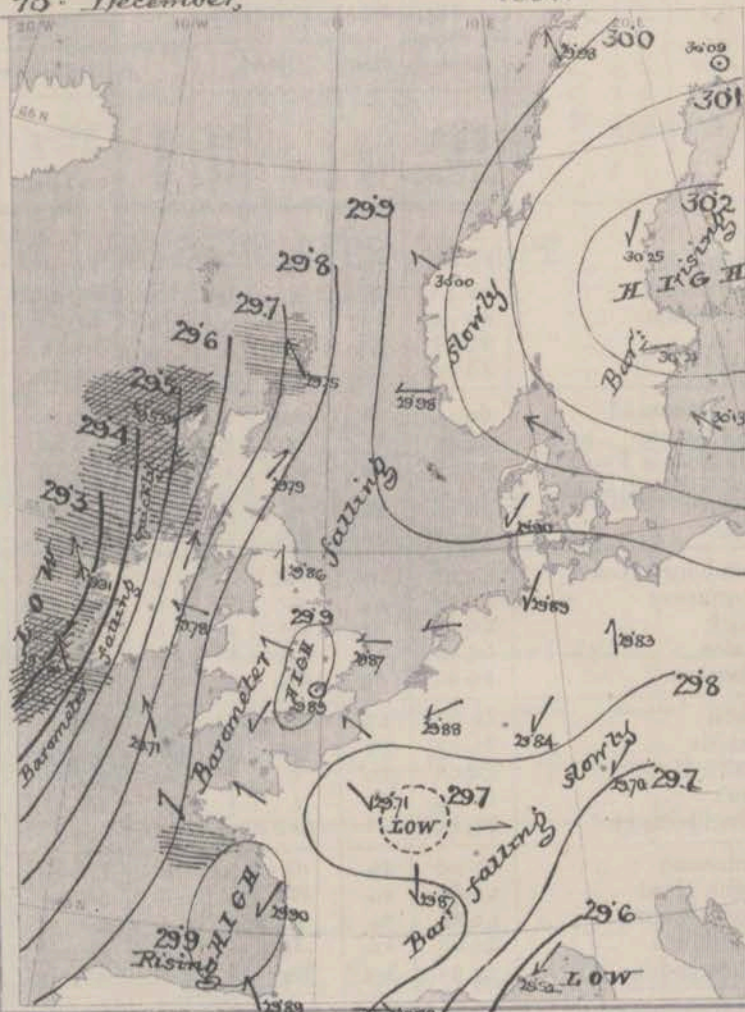
■ = Rough. ■ = High.

## MEAN HEIGHT OF THE BAROMETER

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

During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS.
Sumburgh Head .....	29.667
Stornoway .....	29.701
Wick .....	29.711
Nairn .....	29.739
Aberdeen .....	29.797
Leith .....	29.803
Shields .....	29.843
York .....	29.883
Loughborough .....	29.923
Ardrossan .....	29.819
Donaghadee .....	29.847
Holyhead .....	29.879
Liverpool .....	29.805
Parsonstown .....	29.909
Valencia .....	29.908
Roche's Point .....	29.915
Pembroke .....	29.918
Silly .....	29.902
Jersey .....	29.985
Hurst Castle .....	29.959
Dover .....	29.957
LONDON .....	29.951
Oxford .....	29.954
Cambridge .....	29.938
Yarmouth .....	29.914



## 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.

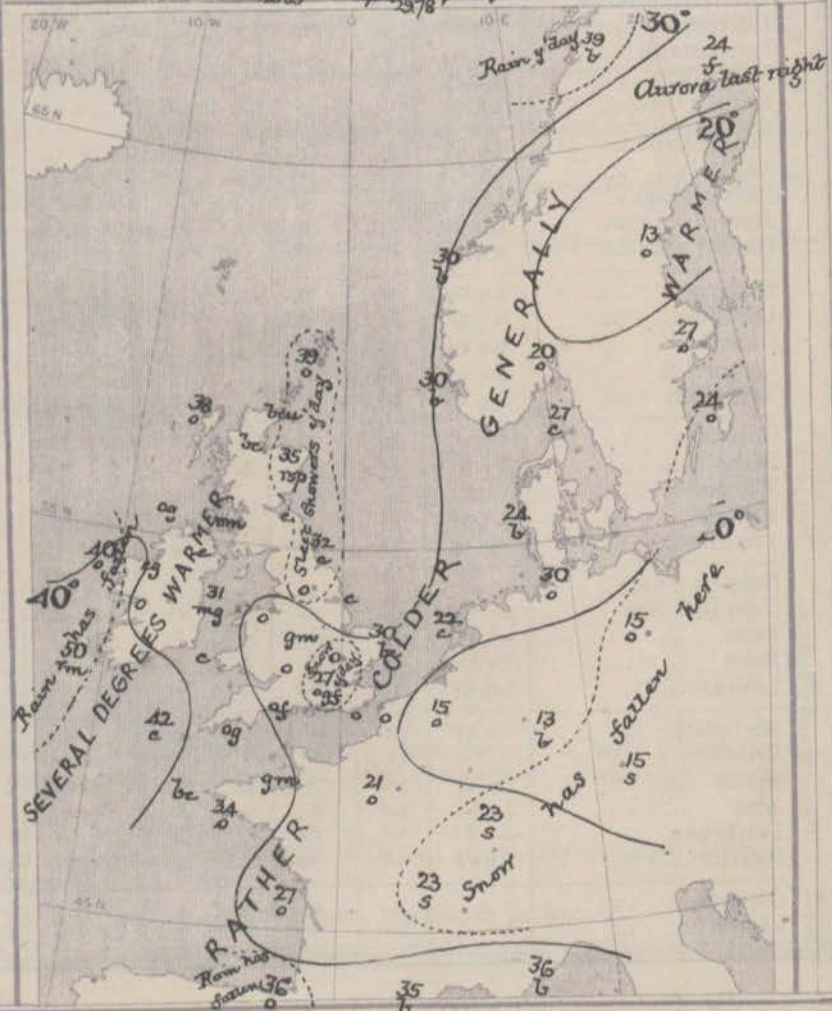
**RAINFALL**—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more are quoted in figures.

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

(For the month of December.)

STATIONS.	TEMPERATURE.				RAINFALL (Inches.)
	Daily Max.	Daily Min.	at 8 a.m.		
			Dry.	Wet.	
Sumburgh Head.....	42.5	35.0	39.5	37.9	4.33
Stornoway .....	41.4	33.9	39.2	38.2	5.66
Wick .....	42.1	32.6	38.0	36.6	3.18
Nairn .....	41.7	32.8	37.0	35.6	2.08
Aberdeen .....	42.0	32.5	36.9	35.3	3.34
Leith .....	44.2	33.7	38.0	37.0	2.01
Shields .....	43.1	34.3	38.5	37.2	2.74
York .....	42.7	32.4	36.8	35.7	2.45
Loughborough .....	43.1	32.9	36.9	35.9	2.36
Ardrossan .....	44.6	36.0	40.1	38.7	4.04
Donaghadee.....	45.1	36.2	40.2	39.2	2.84
Holyhead .....	46.7	39.3	43.0	41.4	3.84
Liverpool .....	43.8	36.0	39.3	37.6	2.70
Parsonstown .....	44.8	33.2	37.9	36.6	3.02
Valencia .....	50.0	40.0	44.6	42.3	5.82
Roche's Point .....	48.0	39.0	42.9	41.5	4.74
Pembroke.....	47.1	40.6	43.9	42.5	4.06
Scilly .....	49.8	43.8	47.1	45.4	4.10
Jersey .....	47.7	40.1	43.4	41.8	3.87
Hurst Castle .....	46.1	36.9	40.9	40.2	2.84
Dover .....	44.7	36.8	40.3	39.1	3.20
LONDON .....	44.7	34.6	38.5	37.4	2.14
Oxford .....	43.6	34.3	37.7	36.6	2.13
Cambridge .....	43.5	32.3	36.9	36.1	1.99
Yarmouth .....	42.4	31.2	38.3	37.5	2.95

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, 30.25 in. to 29.9 in. over Scandinavia, Denmark and the eastern part of the North Sea; 30.1 in. to 29.9 in. over Spain, 29.9 in. over Portugal and the west of Ireland; about 29.6 in. over the east of France, and 29.5 in. over the Gulf of Genoa.

Gradients steep over Ireland, rather so in the southeast of France, moderate to slight elsewhere.

Barometer falling fast on our west and northwest coasts.

## TEMPERATURE

Highest, 52° at Lisbon, 50° at Valencia, 47° at Rochefort, 42° at Seilly, and 40° at Belmullet and Mullaghmore.

Lowest (1) 13° at Hemsby, 24° at Haparanda and Nisby; (2) 13° at Miskatom, 15° at Balm and Mennick, and 21° at Paris; (3) 27° at Oxford and in London, 29° at Hurst Castle, Loughborough and Oxford.

It has risen from 7° to 16° at the Irish stations, but fallen a little over England.

## WIND

S<sup>3</sup> at all our western and northern stations, and blowing a gale in several parts of Ireland and the extreme north of England. Over England it is variable and light - calm at Oxford.

Variable light breezes prevail in France also.

## WEATHER

Dull and gloomy in most places; foggy in the south of England, rainy at Belmullet and Valencia, threatening at Wick. Snow is falling over Germany and the southeast of France.

## SEA

Rough in the Minch and at Valencia (Ireland) rather rough at Loughborough, moderate to smooth elsewhere.

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The southerly gale in the west seems likely to become stronger and to spread to the Irish Sea and the east of Scotland, but it is at present doubtful whether it will affect the south and east of England.

# FORECASTS

For the 24 hours ending at NOON on 19<sup>th</sup> DEC<sup>r</sup> 1890.

## DISTRICTS.

## FORECASTS.

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

S<sup>2</sup> gales and strong winds; mild, squally, rain at times.

Same as No 5

Variable airs, followed by S<sup>2</sup> and SW<sup>2</sup> winds; milder, foggy to fair and rainy.

## DISTRICTS.

## FORECASTS.

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

S<sup>2</sup> to W<sup>2</sup> winds, strong or a gale; rainy, squally, very unsettled.

## WARNINGS

The SOUTH CONE has been hoisted this morning in districts 0.1 and 6 to 10.

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

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



# YESTERDAY'S 2 P.M. REPORTS.

	BAR:	THER:		WIND		WEA	SEA		BAR:	THER:		WIND		WEA	SEA
		D.	W.	D.	F.					D.	W.	D.	F.		
Skudesnaes ...	30.24	34	30	SSW	4	o	3		Holyhead ...	29.99	34	33	SSW	2	6
Sumburgh Head ...	29.99	41	39	SSW	3	c	4		Valencia ...	29.88	44	42	SE	5	6cm
Stornoway ...	29.87	40	37	S	4	c	4		Scilly ...	29.92	40	36	WNW	4	o
Aberdeen ...	30.04	32	36	SSW	2	oq	4		Jersey ...	29.87	36	32	N	2	o
Shields ...	30.02	40	36	SSW	3	o	4		Dungeness ...	29.83	32	31	ENE	3	o
Ardrossan ...	30.01	34	?	NE	2	b	1		London ...	29.91	32	32	NE	2	o s
Mulin Head ...	29.90	37	33	E	5	c	2		Yarmouth ...	29.89	31	31	E	5	o s p
Mullaghmore ...	29.90	38	33	SE	5	b	4		Rochefort ...	29.87	29	29	WNW	4	o
Belmullet ...	29.86	37	35	SE	3	b	*								

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

Weather fine in the west and extreme north of our Islands, as well as in Scandinavia, Denmark, North Germany, and the Netherlands. Dull elsewhere, with fog at some of the French and Spanish stations, rain in the north of Italy and at Algiers, sleet showers at Aberdeen and snow at Lemberg. A little snow falling later at many of the English stations, no important change occurring elsewhere.

Temperature highest 57° at Malta, 56° at Palermo, 55° at La Helle and Tunis, and 54° at Algiers; above 50° over the southern and central parts of the Mediterranean generally as well as at Rianiz. Lowest (1) 0° zero Faint at Kiev, 3° at Helsingfors, 8° at Kuopio, 11° at Moscow and Odessa; (2) 11° at Brussels, 17° at Paris and Munich, and 20° at Havre; (3) 23° at Kars; below 20° in many parts of northern, eastern and central Europe, and below 32° at most of the English stations. Daily maxima over England very little above the freezing point.

Wind light from the SE<sup>2</sup> over Ireland, Scotland, and the west of Norway, but from the E<sup>2</sup> or NE<sup>2</sup> over England, Central Europe and the north of Russia. Light from the N<sup>2</sup> over Spain and the west of France, but S<sup>3</sup> in Algeria, and SE<sup>3</sup> or E<sup>3</sup> in Italy. Variable over Austria, the south of Russia and the central and southern parts of France. SE<sup>3</sup> winds freshening later in the west of Ireland.

Barometer highest 30.2 ins: and upwards in an anticyclone lying over Scandinavia and Finland; 30.0 ins: and upwards in another system lying over Portugal. Lowest 29.7 ins: and less, in a large shallow depression extending from Central France to Scandinavia and the west of Italy. Decided fall taking place later in the extreme west of our Islands, and depressions beginning to advance from Atlantic.

### 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, 19<sup>th</sup> December, 1890.  
Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.

Issued by the Meteorological Office, 53, Victoria Street, London. H. H. SCOTT, Secretary.																		
STATIONS.		YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.	
		BAROM.  Reading at 32° F. and Sea Level.	TEMP.  Dry.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Weather.	Sea. (0 to 2.)	SHADE TEMP.		Amount of Rainfall.
				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.	
SCANDINAVIA.	Haparanda ...	30.20	25	SW	2	b	30.27	+ .18	27	26	+ 3	SW	4	0	*	30	7	-
	Hernösand ...	30.29	18	2	0	o	30.21	- .04	26	24	+ 13	NE	2	0	*	?	5	-
	Stockholm ...	30.16	27	E	6	o	30.03	- .18	31	29	+ 4	ESE	4	0	*	31	16	0.04
	Wisby ...	30.08	26	SE	6	S	29.91	- .22	30	28	+ 6	SE	4	2	*	?	21	0.16
	Bodö ...	29.93	34	E	2	b	29.97	- .01	31	29	- 8	E	1	6	1	39	30	-
	Christiansund ...	29.89	29	ESE	1	b	29.86	- .14	31	30	+ 1	ESE	6	6	4	32	28	-
	Skudesnaes ...	29.91	30	E	8	b	29.72	- .26	30	26	0	ESE	2	0	5	30	28	-
	Christiania Fjord (Fjorder)	30.03	26	ESE	6	o	29.91	- .23	25	23	+ 5	ESE	3	0	3	27	?	-
	Skagen (The Scaw)	29.85	27	SE	4	o	29.85	- .14	24	20	- 3	SE	3	0	3	28	23	-
	Fanö ...	29.84	21	ESE	5	b	29.73	- .17	21	20	- 3	ESE	4	0	*	28	19	-
BRITISH ISLANDS.	Sumburgh Head	29.58	40	SSE	6	o	29.46	- .29	34	34	+ 5	SSE	6	0	4	41	34	0.01
	Stornoway ...	29.33	40	S	5	o	29.18	- .35	36	35	- 2	SE	5	8	6	40	33	0.03
	Wick ...	29.49	38	S	8	b	29.31	- .38	34	33	- 5	S	6	0	8	39	32	0.10
	Nairn ...	29.46	28	2	0	b	29.29	- .38	27	26	- 1	2	0	6	1	36	20	-
	Aberdeen ...	29.58	36	SE	6	og	29.35	- .44	32	32	- 3	SSE	3	og	6	38	32	0.45
	Leith ...	29.87	33	SE	1	o	29.30	- .52	31	30	- 2	SSE	1	0	*	34	25	-
	Shields ...	29.63	29	ESE	3	b	29.33	- .53	29	29	- 3	S	3	0	3	38	24	-
	Spurn Head ...	29.64	28	S	3	b	29.32	- .55	32	31	0	SSE	6	0	5	34	28	-
	York ...	29.64	30	E	2	o	29.34	- .54	27	27	- 5	SE	1	0	*	33	26	-
	Loughborough	29.64	29	SE	3	o	29.31	- .59	25	25	- 4	ESE	2	5	*	30	25	0.06
GERMANY & HOLLAND.	Ardrossan ...	29.51	32	ESE	4	o	29.27	- .48	30	29	- 5	NE	2	0	1	36	28	-
	Malin Head ...	29.20	36	ESE	6	or	29.07	- .59	38	34	- 2	W	1	0	3	42	36	0.91
	Mullaghmore ...	29.18	42	SE	8	r	29.24	- .19	38	34	- 2	W	1	0	3	42	36	0.91
	Belmullet ...	29.20	43	W	6	o	29.29	- .02	39	34	- 1	W	1	6	*	44	37	0.69
	Donaghadee ...	29.40	39	S	7	o	29.23	- .49	37	37	- 1	SSE	6	7	4	40	36	0.55
	Liverpool (Bidston)	29.51	29	ESE	5	o	29.24	- .60	27	26	- 2	E	6	5	4	31	26	0.04
	Holyhead ...	29.42	38	SSE	5	ogmg	29.18	- .60	35	35	+ 4	2	0	8	0	38	31	0.50
	Parsonstown ...	29.16	44	SE	3	r	29.30	- .24	32	31	- 7	2	0	8	*	44	32	0.21
	Valencia ...	29.29	43	W	5	omg	29.35	- .01	40	39	- 10	SE	1	6	2	50	39	1.44
	Roche's Point...	29.16	46	SW	5	c	29.35	- .18	39	36	- 8	W	4	6	4	47	38	0.45
FRANCE AND BELGIUM.	Pembroke (St. Ann's Hd.)	29.32	42	SE	4	o	29.24	- .52	42	38	+ 3	W	4	0	6	43	35	0.60
	Scilly ...	29.20	47	ESE	6	r	29.37	- .34	47	43	+ 5	W	4	0	6	47	42	0.48
	Prawle Point ...	29.48	40	SE	6	o	29.27	- .56	40	38	+ 2	W	8	0	6	43	37	0.35
	Jersey (St. Aubin's)	29.66	35	SSE	4	ogm	29.29	- .57	46	44	+ 10	W	8	0	5	46	31	0.52
	Hurst Castle ...	29.69	37	SSE	5	o	29.17	- .73	34	34	+ 5	NE	2	5	2	39	29	0.12
	Dungeness ...	29.61	31	SSE	3	b	29.21	- .63	31	31	- 1	SSE	6	5	4	32	28	0.04
	London ...	29.68	31	SSE	2	o	29.23	- .66	27	26	0	E	2	5	*	38	27	0.16
	Oxford ...	29.55	30	SE	3	o	29.24	- .66	27	27	0	E	1	5	*	32	27	0.25
	Cambridge ...	29.69	29	SE	1	o	29.29	- .63	27	27	- 2	E	1	5	*	32	24	?
	Yarmouth ...	29.70	29	2	0	b	29.33	- .54	29	29	- 1	E	7	og	5	32	26	-
PENINSULA.	Cuxhaven ...	29.79	24	ESE	5	c	29.76	- .13	16	14	- 14	SSE	3	m	*	?	15	-
	Berlin ...	29.91	12	2	4	o	29.77	- .06	7	7	- 8	ESE	3	6	*	19	7	0.04
	Wiesbaden ...	*	*	*	*	*	29.69	- .15	15	15	+ 2	2	0	0	*	27	9	-
	Munich ...	29.74	17	2	0	S	29.69	- .01	9	9	- 6	SE	3	1	*	19	7	0.12
	The Helder ...	29.69	28	W	1	S	29.54	- .39	14	13	- 8	ESE	2	6	2	30	?	0.32
	Brussels (9 a.m.)	*	*	*	*	*	29.48	- .45	23	22	+ 8	SE	6	5	*	23	12	0.04
	Cape Gris Nez	29.69	22	S	8	o	29.20	- .66	24	24	- 1	S	5	5	4	28	19	-
	Paris ...	29.79	22	ESE	7	o	29.37	- .3	27	27	+ 6	SSE	4	0	*	27	21	-
	Brest ...	29.48	44	S	6	r	29.50	- .35	46	45	+ 7	W	6	6	1	46	39	0.39
	Lorient ...	29.55	42	SSE	6	o	29.43	- .46	45	41	+ 11	W	5	0	1	?	?	0.22
FRANCE AND BELGIUM.	Rochefort ...	29.79	28	SE	4	f	29.60	- .30	45	43	+ 18	W	6	0	3	?	27	0.34
	Belfort ...	?	25	W	1	S	?	?	24	?	+ 1	W	1	0	*	25	14	0.04
	Lyons ...	29.91	23	E	4	b	29.69	- .18	27	27	+ 4	E	4	5	*	?	?	0.08
	Nice ...	29.63	37	SE	5	c	29.80	+ .28	35	31	- 1	E	2	0	2	45	32	-
	Perpignan ...	29.85	40	W	4	b	29.80	+ .02	35	33	0	SW	2	0	*	42	28	-
	Biarritz ...	29.75	44	S	3	c	29.81	- .08	50	46	+ 14	W	8	0	5	50	?	0.28
	Corunna ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Lisbon ...	30.04	56	SW	6	o	30.15	+ .02	50	47	- 2	W	1	0	6	57	50	0.12

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, 13<sup>th</sup> December,

1890.

## BAROMETER, WIND AND SEA.

### EXPLANATION OF MAP.

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

Changes since previous morning are stated in words.

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

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

→ = forces 5 to 7; → = forces 1 to 4.

☉ = dead calm.

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

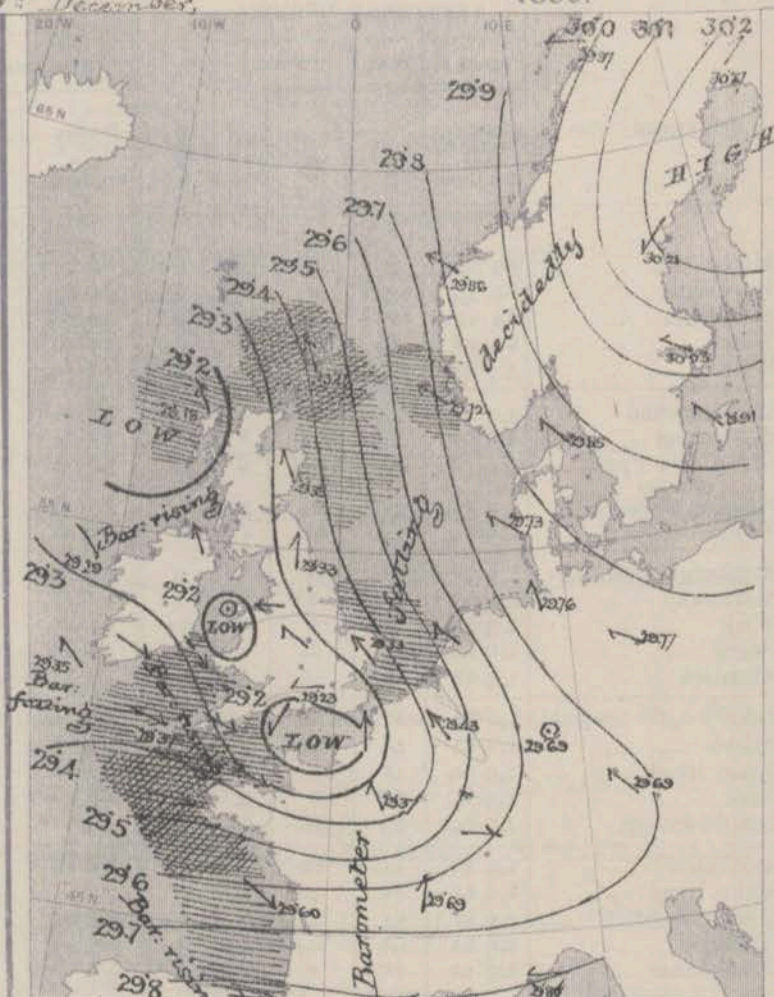
▨ = Rough. ▨ = High.

### MEAN HEIGHT OF THE BAROMETER

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

During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS.
Sumburgh Head .....	29.007
Stornoway .....	29.701
Wick .....	29.711
Nairn .....	29.739
Aberdeen .....	29.757
Leith .....	29.803
Shields .....	29.843
York .....	29.888
Loughborough .....	29.923
Ardrossan .....	29.819
Donaghadee .....	29.847
Holyhead .....	29.879
Liverpool .....	29.895
Parsonstown .....	29.909
Valencia .....	29.908
Roche's Point .....	29.915
Pembroke .....	29.918
Silly .....	29.962
Jersey .....	29.985
Hurst Castle .....	29.959
Dover .....	29.957
LONDON .....	29.951
Oxford .....	29.954
Cambridge .....	29.938
Yarmouth .....	29.914



## 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.

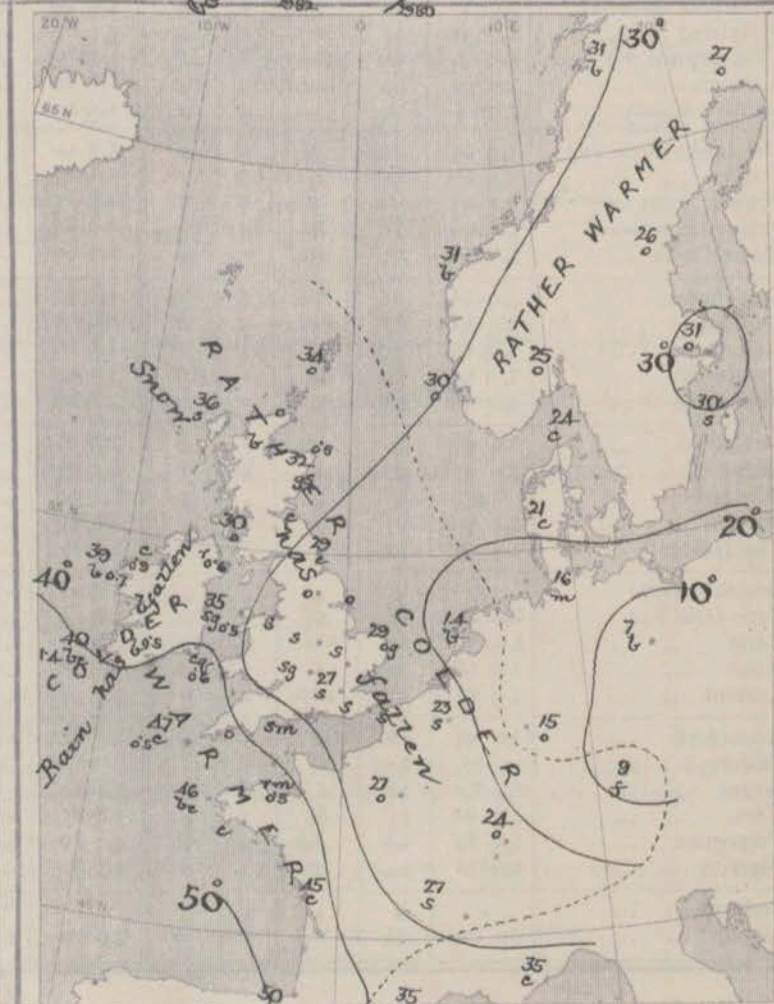
**RAINFALL**—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more are quoted in figures.

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

(For the month of December.)

STATIONS.	TEMPERATURE.				RAINFALL. (Inches.)
	Daily Max.	Daily Min.	Dry. at 8 a.m.	Wet.	
Sumburgh Head .....	42.5	35.0	39.5	37.9	4.33
Stornoway .....	41.4	33.9	39.2	38.2	5.66
Wick .....	42.1	32.6	38.0	36.6	3.18
Nairn .....	41.7	32.8	37.0	35.5	2.08
Aberdeen .....	42.0	32.5	36.9	35.3	3.34
Leith .....	44.2	33.7	38.6	37.0	2.01
Shields .....	43.1	34.3	38.5	37.2	2.74
York .....	42.7	32.4	36.8	35.7	2.45
Loughborough .....	43.1	32.9	36.9	35.9	2.36
Ardrossan .....	44.6	33.0	40.1	38.7	4.04
Donaghadee .....	45.1	33.2	40.2	39.2	2.84
Holyhead .....	46.7	30.3	43.0	41.4	3.84
Liverpool .....	43.8	36.0	39.3	37.4	2.70
Parsonstown .....	44.8	33.2	37.9	36.6	3.02
Valencia .....	50.0	40.0	44.6	42.3	5.82
Roche's Point .....	48.0	39.0	42.9	41.5	4.74
Pembroke .....	47.1	40.6	43.9	42.5	4.06
Silly .....	42.8	43.5	47.1	45.4	4.10
Jersey .....	47.7	40.1	43.4	41.8	3.87
Hurst Castle .....	46.1	38.9	40.9	40.2	2.84
Dover .....	44.7	36.8	40.3	39.1	3.20
LONDON .....	44.7	34.6	38.5	37.4	2.14
Oxford .....	43.6	34.3	37.7	36.6	2.13
Cambridge .....	43.5	32.3	36.9	36.1	1.99
Yarmouth .....	42.4	34.2	38.3	37.5	2.05

**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, 30.2 ins: and upwards over the Gulf of Bothnia.</p> <p>Lowest, 29.2 ins: and less, in three small depressions, — one lying off the northwest of Scotland another over North Wales, and a third over the eastern part of the English Channel.</p> <p>Gradients moderate or slight generally. Barometer rising at some of our western stations, but falling elsewhere.</p>
TEMPERATURE	<p>Highest, 50° at Limerick, 47° at Bally, 46° at Jersey and Brest, 45° at Lorient and Rochefort, and 42° at Pembroke.</p> <p>Lowest, 7° at Berlin, 9° at Munich, 14° at the Helder, 15° at Nieuweden, 16° at Copenhagen, 21° at Paris and 24° at St. Petersburg.</p> <p>The maxima registered over England yesterday were in most cases very little above the freezing point.</p>
WIND	<p>Strong to a gale from the NW<sup>2</sup> in the southwest of England, and from the W<sup>2</sup> over the Bay of Biscay.</p> <p>Moderate to strong from the SE<sup>2</sup> in most part of Western Europe, but variable in Ireland and also in the north of Scandinavia.</p>
WEATHER	<p>Fine in Ireland, as well as in Denmark, North Germany, and the coast of Norway.</p> <p>Dull elsewhere with heavy snow in many parts of England and some parts of Belgium and France.</p> <p>Rain, on the French side of the English Channel.</p> <p>Heavy rain fell yesterday in the west of our Islands the largest amounts being 1.4 ins: at Valencia Isl<sup>d</sup> and 0.9 ins: at Mullaghmore.</p>
SEA	<p>Very high off the north of Scotland, high at Brest, rough on the east, south, and southwest coasts of Great Britain.</p>

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The barometer at Valencia Island is beginning to fall again, and the wind there which had veered to the northwestward last evening has now shifted to the SE<sup>2</sup>. There are consequently, some indications of the advance of further depression towards our southwest coasts, and the general appearance is exceedingly unsettled.

## FORECASTS

For the 24 hours ending at NOON on 20<sup>th</sup> DEC<sup>r</sup> 1890.

DISTRICTS.		FORECASTS.	DISTRICTS.		FORECASTS.
† 0	SCOTLAND NORTH	{ SE <sup>2</sup> winds, fresh; unsettled; some snow showers.	† 6	SCOTLAND WEST	{ E <sup>2</sup> and SE <sup>2</sup> winds, freshening; unsettled, some snow.
† 1	SCOTLAND EAST		† 7	ENGLAND N.W.	
† 2	ENGLAND N.E.	{ SE <sup>2</sup> winds, strong to a gale; squally some snow.	† 8	ENGLAND S.W.	NW <sup>2</sup> gales, moderating and backing later; unsettled, some rain.
† 3	ENGLAND EAST		† 9	IRELAND NORTH	{ Wind shifting to E. or SE; fine to unsettled, with some rain or sleet.
4	MIDLAND COUNTIES	{ E <sup>2</sup> and Variable breezes; unsettled, some snow.	† 10	IRELAND SOUTH	
5	ENGLAND SOUTH				
			WARNINGS		
			The SOUTH CONE has been hoisted this morning in districts 2 and 3, and is still		

### WARNINGS

The SOUTH CONE has been hoisted this morning in districts 2 and 3, and is still flying in districts 0.1. and 6 to 10.

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

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



# YESTERDAY'S 2 P.M. REPORTS.

	BAR:	THER:		WIND		WEA.	SEA		BAR:	THER:		WIND		WEA.	SEA
		D.	W.	D.	F.					D.	W.	D.	F.		
Skudesnaes ...	29.98	31	27	ESE	6	bc	3		Holyhead ...	29.57	36	38	SEE	4	ogm
Sumburgh Head ...	29.64	40	39	SEE	4	r	5		Valencia ...	29.15	49	49	SEW	1	rm
Stornoway ...	29.42	40	39	SW	7	0	6		Scilly ...	29.45	46	45	SEE	7	0
Aberdeen ...	29.67	35	33	SEE	4	oggy	5		Jersey ...	29.77	38	35	SEE	3	ogm
Shields ...	29.72	31	31	SEE	3	0	3		Dungeness ...	29.77	32	31	SEE	3	c
Ardrossan ...	29.61	34	31	SEE	4	0	3		London ...	29.79	38	31	SE	1	og
Malin Head ...	29.28	38	36	SEE	4	0	3		Yarmouth ...	29.77	32	31	SEE	2	bc
Mullaghmore ...	29.25	42	40	SE	8	0r	6		Rocheport ...	29.89	32	31	E	3	m
Belmullet ...	29.16	44	44	SE	5	0	*								

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

Weather dull in most parts of our Islands and the Continent, but fine in some parts of Southern Europe. fog reported in the south of England, rain falling in the west of Ireland, as well as in some parts of Italy and Algeria, sleet showers at Aberdeen, and snow at Munich, Belfort and Lyons. Heavy rain falling later in the west of our Islands (1.4 in. at Valencia Island, 0.9 in. at Mullaghmore, and 0.7 in. at Belmullet); snow settling in over England later.

Temperature highest 55° at Palermo, 54° at Nemours, 53° at San Fernando, and 52° at Brindisi, Lisbon, and La Palme, exceeding 45° at most of the Mediterranean and Spanish coast stations, and reaching 50° at Valencia Island. Lowest 2° at Moscow, 5° at Kuopio, 8° at Prague, 10° at Cracow, 11° at Warsaw, and 12° at Vienna, below 20° in many parts of Sweden, Russia, and Central Europe and below the freezing point at most of the English stations. Daily maxima at or below 32° in many parts of England.

Wind strong to a gale from the SW or SE in Ireland and the north of Scotland, and moderate or fresh from the same quarters in the west and north of our Islands generally, as well as over the Bay of Biscay and north of Spain. Light or moderate from the E over Russia, the Baltic, Denmark, the south of Scandinavia, the Netherlands and the southeast of England. SE in Italy, SW in Algeria, and W in the south of Spain, but variable in Austria. Subsequently, increasing to a moderate or fresh gale from the SW in the west and southwest of England, but shifting to the NW in Ireland.

Temperature highest, 30.6 ins. and upwards, in an anticyclone lying over central Russia; 30.1 ins. and upwards in a smaller system lying over the southwest of Spain. Lowest 28.3 ins. and less, in a deep depression off the west of Ireland; 29.6 ins. and less in a shallow depression lying over Corsica and the Gulf of Genoa. Depression in west subsequently advancing as a "V shaped" system directly over our western coasts, and barometer rising again in the west of Ireland.

### 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 *Saturday, 20<sup>th</sup> December, 1890.*  
*Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.*

		YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
STATIONS.		BAROM.	TEMP.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Weather.	Sea.	SHADE TEMP.			
		Reading at 32° F. and Sea Level.	Dry.	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.	Average of 24 hours.	
SCANDINAVIA.	Haparanda ...	30.28	15	SE	2	0	30.06	-21	15	14	-12	SE	4	0	*	27	14	-	
	Hernösand ...	29.96	31	NE	6	4	29.80	-14	30	28	+4	S	8	0	*	32	18	0.59	
	Stockholm ...	29.73	33	ESE	6	5	30.03	-09	22	21	-9	SW	2	0	*	34	?	0.32	
	Widby ...	29.76	33	S	4	0	30.02	+11	23	22	-7	SSE	2	0	*	36	?	0.35	
	Bodö ...	29.97	25	E	2	6	29.73	-24	30	27	-1	E	6	0	*	31	25	-	
	Christiansund	29.71	32	ESE	5	0	29.65	-21	33	30	+2	WSW	5	0	3	34	?	-	
	Skudesnaes ...	29.63	30	ESE	1	6	29.78	+07	31	29	+1	E	2	60	3	?	25	-	
	Christiania Fjord (Færder)	29.55	30	NE	5	5	29.73	-12	32	30	+7	WNW	3	0	2	?	?	-	
	Skagen (The Seaw)	29.62	25	SW	1	6	29.85	00	26	24	+2	S	2	6	1	27	19	0.04	
	Fanö ...	29.65	?	SE	4	6	29.74	+01	24	23	+3	ESE	4	0	*	25	14	-	
BRITISH ISLANDS.	Sumburgh Head	29.43	36	SSE	3	0	29.42	-04	41	40	+7	SSE	5	0	6	41	34	0.06	
	Stornoway ...	29.22	38	SW	6	0	29.59	+41	36	35	0	SW	3	60	4	38	33	0.72	
	Wick ...	29.34	35	S	2	6	29.53	+22	39	38	+5	W	4	0	3	39	32	0.10	
	Nairn ...	29.36	33	W	0	6	29.62	+33	37	36	+10	W	3	0	1	37	25	-	
	Aberdeen ...	29.44	28	SW	1	0	29.71	+36	32	31	0	S	3	0	4	33	27	0.24	
	Leith ...	29.44	32	SE	1	m	29.76	+46	28	28	-3	W	0	m	*	33	27	-	
	Shields ...	29.46	30	W	0	0	29.78	+45	27	27	-2	WNW	2	60	2	30	26	-	
	Spurn Head ...	29.41	32	E	3	8	29.80	+48	31	30	-1	WNW	3	60	4	33	30	0.11	
	York ...	29.43	28	W	0	5	29.83	+49	23	23	-4	N	1	6	*	29	21	0.06	
	Loughborough	29.44	25	WNW	1	0	29.82	+51	27	27	+2	WNW	1	0	gm	29	21	0.10	
GERMANY & HOLLAND.	Ardrossan ...	29.43	30	NE	3	0	29.78	+51	38	37	+8	SSW	4	0	3	36	28	-	
	Malin Head ...	29.36	36	SW	2	6	29.74	+47	37	36	+1	WSW	1	0	2	39	35	0.16	
	Mullaghmore ...	29.39	36	W	0	6	29.78	+54	38	37	0	WSW	4	0	3	44	31	0.14	
	Belmullet ...	29.40	37	E	2	6	29.82	+53	36	35	-3	SW	1	6	*	44	32	0.11	
	Donaghadee ...	29.40	38	SW	3	0	29.79	+56	38	38	-4	W	2	60	1	38	30	0.14	
	Liverpool (Bidston)	29.44	26	ESE	2	m	29.79	+55	19	18	-8	ESE	1	6	2	27	18	0.12	
	Holyhead ...	29.39	34	ESE	1	60	29.80	+62	31	31	-4	ESE	3	60	2	35	31	0.10	
	Parsonstown ...	29.39	33	W	0	60	29.83	+53	26	25	-6	W	0	6	*	41	25	-	
	Valencia ...	29.34	38	WNE	2	0	29.86	+51	37	36	-3	N	1	6	1	43	35	1.34	
	Roche's Point...	29.35	44	E	4	0	29.81	+46	35	33	-4	WNE	4	6	4	46	38	0.20	
FRANCE AND BELGIUM.	Pembroke (St. Ann's Hd.)	29.40	41	W	2	60	29.71	+47	35	32	-7	NE	2	0	2	44	35	-	
	Scilly ...	29.35	44	S	2	0	29.55	+18	43	42	-4	NE	6	0	6	47	42	0.26	
	Prawle Point ...	29.45	43	W	3	0	29.62	+35	36	36	-4	WNE	6	0	5	46	36	0.50	
	Jersey (St. Aubin's)	29.54	45	W	5	0	29.61	+32	45	44	-1	SSE	4	0	4	49	43	0.04	
	Hurst Castle ...	29.46	35	WNW	3	6	29.66	+49	33	33	-1	ESE	6	0	4	39	32	0.41	
	Dungeness ...	29.38	29	WNE	3	5	29.67	+46	36	35	+5	E	4	0	3	36	22	0.10	
	London ...	29.42	28	W	2	0	29.76	+53	23	22	-4	ESE	2	0	*	29	19	0.34	
	Oxford ...	29.52	27	W	0	0	29.80	+56	21	21	-6	WNE	2	0	*	28	17	0.11	
	Cambridge ...	29.43	27	NE	1	0	29.83	+54	26	26	-1	NE	1	0	*	30	19	?	
	Yarmouth ...	29.35	30	SSE	2	0	29.76	+43	33	32	+4	NE	3	0	3	38	26	0.07	
GERMANY & HOLLAND.	Cuxhaven ...	29.67	19	SE	3	5	29.65	-11	30	29	+16	S	1	0	*	30	?	-	
	Berlin ...	29.76	15	SE	3	60	29.87	+10	26	26	+19	SE	3	60	*	27	?	-	
	Wiesbaden ...	*	*	*	*	*	29.85	+16	32	32	+17	W	1	0	*	32	?	0.04	
	Munich ...	29.81	27	SW	3	0	29.99	+30	23	23	+14	SSW	3	0	*	28	9	0.04	
	The Helder ...	29.42	22	ESE	4	5	29.74	+20	27	27	+15	WSW	1	0	1	30	?	0.12	
	Brussels (9 a.m.)	*	*	*	*	*	29.80	+37	31	31	+8	WNE	1	?	*	36	23	0.15	
	Cape Gris Nez	29.38	33	W	5	5	29.67	+47	32	31	+8	E	3	5	3	36	23	-	
	Paris ...	29.62	38	SW	4	6	29.78	+41	37	36	+10	SSW	2	0	*	42	?	0.12	
	Brest ...	29.53	46	SW	5	?	29.81	+01	43	44	-1	SW	3	0	6	48	43	0.20	
	Lorient ...	29.57	49	SW	5	0	29.58	+15	43	42	-2	ESE	1	0	6	50	41	0.39	
FRANCE AND BELGIUM.	Rochefort ...	29.82	46	WNW	4	?	29.70	+10	39	37	-6	SSE	5	0	*	50	34	0.20	
	Belfort ...	?	36	SW	1	0	?	?	28	28	+4	S	1	0	*	36	19	-	
	Lyons ...	29.92	32	S	2	6	29.97	+28	24	24	-3	SSW	1	0	*	37	23	0.04	
	Nice ...	29.83	34	ESE	4	6	29.98	+18	36	33	+1	E	4	6	3	41	32	-	
	Perpignan ...	29.97	44	W	3	6	29.83	+03	51	?	+6	SW	2	0	*	54	?	-	
	Biarritz ...	29.89	48	SSW	2	6	29.76	-05	46	45	-4	SSW	4	6	*	54	48	0.08	
	Corunna ...	*	*	*	*	*	29.84	+10	42	41	-3	W	2	0	6	54	41	?	
	Lisbon ...	30.06	50	SW	3	0	29.96	-19	47	46	-3	W	4	0	?	55	48	0.20	

For Explanation of Columns, see bottom of p. 1.

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



# WEATHER CHARTS

for 8 a.m. on

Saturday 20<sup>th</sup> December,

1890.

## BAROMETER, WIND AND SEA.

### EXPLANATION OF MAP.

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

Changes since previous morning are stated in words.

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

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

→ = forces 5 to 7; → = forces 1 to 4.

☉ = dead calm.

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

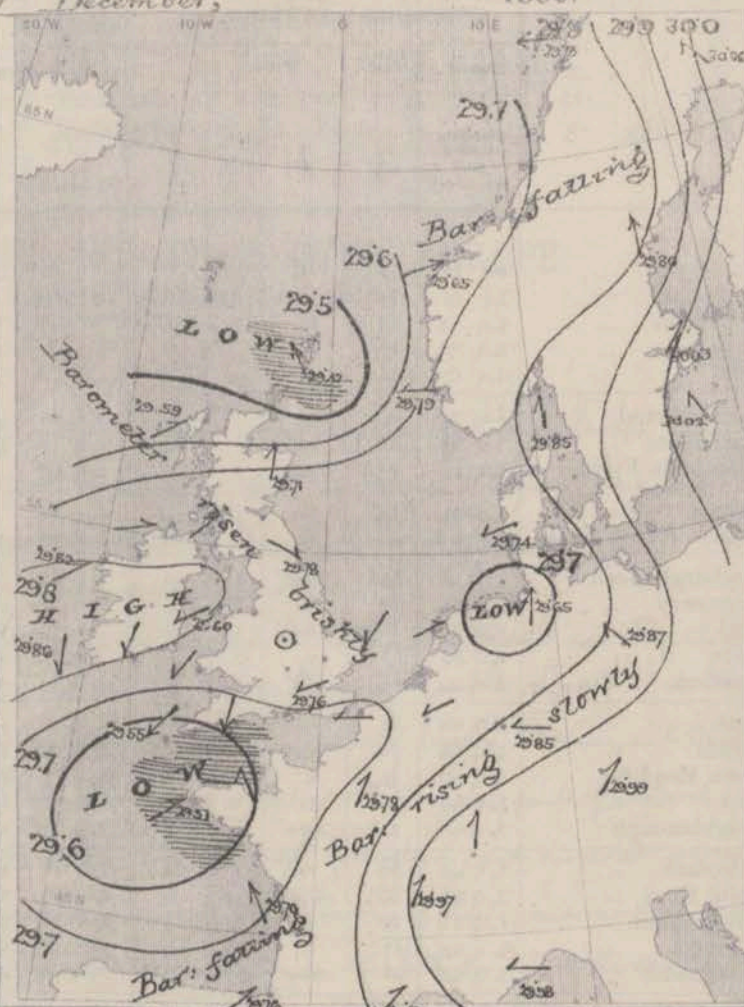
▨ = Rough. ▨ = High.

## MEAN HEIGHT OF THE BAROMETER

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

During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS.
Sumburgh Head	29.667
Stornoway	29.701
Wick	29.711
Nairn	29.739
Aberdeen	29.757
Leith	29.803
Shields	29.843
York	29.883
Loughborough	29.923
Ardrossan	29.919
Donaghadee	29.847
Holyhead	29.879
Liverpool	29.893
Parsonstown	29.909
Valencia	29.908
Roch's Point	29.915
Pembroke	29.918
Silly	29.962
Jersey	29.985
Hurst Castle	29.959
Dover	29.957
LONDON	29.951
Oxford	29.954
Cambridge	29.938
Yarmouth	29.914



## 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.

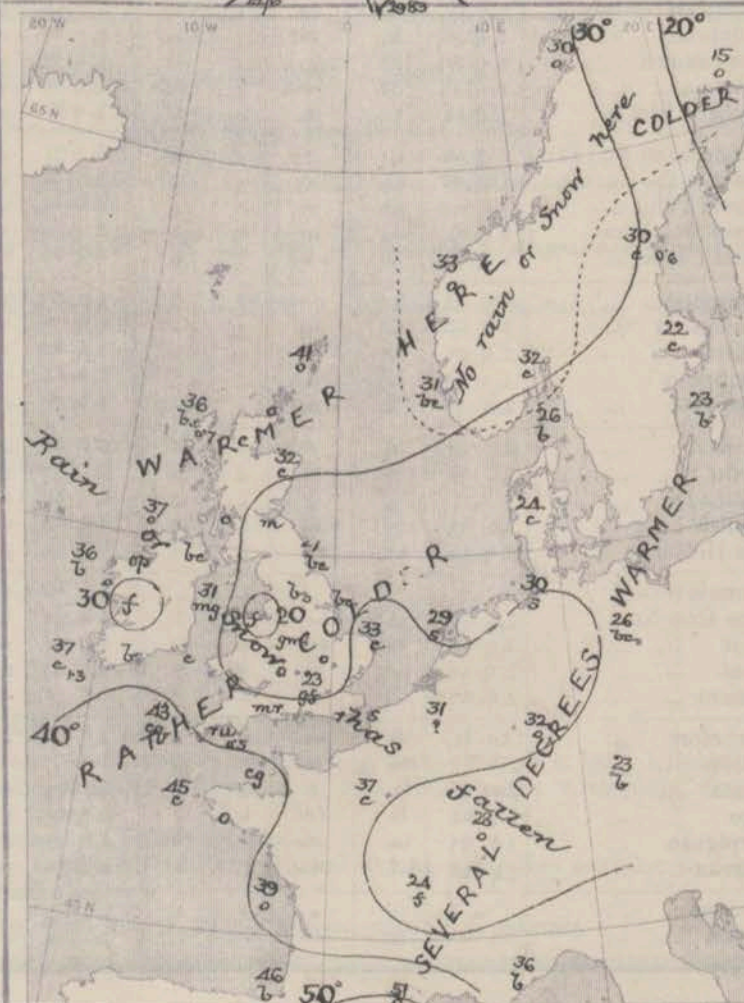
**RAINFALL**—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more are quoted in figures.

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

(For the month of December.)

STATIONS.	TEMPERATURE.				RAINFALL (Inches.)
	Daily Max.	Daily Min.	at 8 a.m. Dry.	Wet.	
Sumburgh Head	42.5	35.0	39.5	37.9	4.33
Stornoway	41.4	33.9	39.2	38.2	5.06
Wick	42.1	32.6	38.0	36.6	3.18
Nairn	41.7	32.8	37.0	35.5	2.08
Aberdeen	42.0	32.5	36.9	35.3	3.34
Leith	44.2	33.7	33.6	37.0	2.01
Shields	43.1	34.3	38.5	37.2	2.74
York	42.7	32.4	38.8	35.7	2.45
Loughborough	43.1	32.9	35.9	35.9	2.36
Ardrossan	41.6	35.0	40.1	38.7	4.04
Donaghadee	43.1	36.2	40.2	39.2	2.84
Holyhead	43.7	39.3	43.0	41.4	3.84
Liverpool	43.8	36.0	39.3	37.6	2.70
Parsonstown	44.8	33.2	37.9	36.6	3.02
Valencia	50.0	40.0	44.6	42.3	5.82
Roch's Point	48.0	39.0	42.9	41.5	4.74
Pembroke	47.1	40.6	43.9	42.5	4.08
Silly	49.8	43.8	47.1	45.4	4.10
Jersey	47.7	40.1	43.4	41.8	3.87
Hurst Castle	46.1	38.9	40.9	40.2	2.84
Dover	44.7	36.8	40.3	39.1	3.20
LONDON	44.7	34.6	38.5	37.4	2.14
Oxford	43.6	34.3	37.7	36.6	2.13
Cambridge	43.5	32.3	36.9	36.1	1.99
Yarmouth	42.4	34.2	38.3	37.5	2.95

**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. and more over the Baltic and Northern Russia; 29.9 in. and more over North Germany; 29.8 in. and more over Ireland and Central England.  
 Lowest, 29.5 in. and less, off the north of Scotland, about 29.5 in. at the mouth of the Channel, and below 29.7 in. near the mouth of the River.  
 Gradients moderate in the south-west, slight elsewhere, and changing fitfully.  
 Barometer rising except in north and north-east, very quickly over Ireland.

## TEMPERATURE

Highest, 47° at Lisbon, 46° at Biarritz, 45° at Brest, 43° at Sicily, and 41° at Seaburgh Head.  
 Lowest, (1.) 15° at Copenhagen, 22° at Stockholm, 23° at Wistig and at Munich, 24° at Lyons, 26° at Berlin.  
 (2.) 21° at Oxford, 23° at York and in London, 26° at Harrogate, and 27° at Loughborough and Shields.  
 In London the thermometer went down to 19° during the night.

## WIND

Very variable; mainly SW<sup>3</sup> at our northern stations and NE<sup>1</sup> in the south of our Islands, but S<sup>2</sup> over France and Germany, and NW<sup>1</sup> on our northeast coasts.  
 In force it is as variable as in direction.

## WEATHER

Extremely variable; dull in most places, foggy in some and raining along the Channel coast of England, fine in the northeast of England.  
 Snow or rain has fallen very generally— heavy rain at Valencia Island and Stormsøy.

## SEA

Rough in the Channel and at Seaburgh H.

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

Cold weather seems likely to hold over Ireland and England.

# FORECASTS

For the 24 hours ending at NOON on 21<sup>st</sup> DEC<sup>r</sup> 1890.

## DISTRICTS.

## FORECASTS.

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

Varying winds, mainly W<sup>2</sup>;  
 cold, some rain or snow.

Same as No 4

Same as No 5.

Varying light winds and calms;  
 very cold, fog at times.  
 NE<sup>1</sup> winds, moderate and light, snow  
 at first, foggy later, very cold.

## DISTRICTS.

## FORECASTS.

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

Same as No 0 and 1

Same as No 4.

NE<sup>2</sup> to N<sup>2</sup> winds, falling light; colder  
 again, fog at times.

Same as No 4.

NE<sup>2</sup> winds, light; cold, fair.

## 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.

THER: WIND								THER: WIND							
	BAR:	D.	W.	D.	F.	WEA.	SEA		BAR:	D.	W.	D.	F.	WEA.	SEA
Skudesnaes ...	29.63	30	26	ESE	1	c	5	Holyhead ...	29.29	31	32	SSE	1	bc	2
Sumburgh Head ...	29.42	31	30	SSE	4	b	6	Valencia ...	29.28	42	42	20	0	rm	6
Hownoway ...	29.20	36	36	SW	6	r	6	Scilly ...	29.40	46	45	NNW	3	op	5
Aberdeen ...	29.87	31	30	SW	1	c	5	Jersey ...	29.48	47	44	W	6	c	2
Shields ...	29.38	30	30	S	2	s	2	Dungeness ...	29.46	32	32	NNW	3	0	8
Ardrossan ...	29.34	30	30	NE	3	0	2	London ...	29.30	29	?	E	1	ogf	5
Malin Head ...	29.22	39	38	SSW	1	c	2	Yarmouth ...	29.30	30	30	ESE	6	os	5
Mullaghmore ...	29.30	44	41	NNW	2	b	3	Rochefort ...	29.73	48	45	NNW	5	r	7
Belmullet ...	29.30	44	42	SSE	1	b	*								

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

Weather fine in Ireland as well as in Denmark, North Germany, the coast of Norway and the greater part of Southern Europe. Chill elsewhere, with heavy snow over England and also over Central Russia and some part of France and Belgium. Some improvement taking place later in the west and south of England, but snow continuing to fall in the east. Heavy rain setting in at Valencia Island in evening.

Temperature highest 55° at Oran, 54° at Malta, and 52° at Bordini and Algiers; above 45° at most of the Mediterranean stations, as well as on the coasts of the Iberian Peninsula. Lowest (1) 4° at Munster, 7° at Berlin, 8° at Munich, 11° at Vienna and 13° at Sinsinmunde; (2) 10° at Moscow and Khankov, 14° at Petersburg, 15° at Uleaborg, and 17° at Kuopio; below 20° in many parts of Russia and Central Europe, and below the freezing point over the greater part of the United Kingdom.

Wind strong to gale from the W. over the Bay of Biscay, and the western parts of the English Channel, moderate to fresh from the same quarter in Spain. Moderate to strong from the S. over all the more northern and eastern parts of the United Kingdom, as well as over northern and central Europe. Light from the N. in Italy, variable in Austria and the south of France, S. in Algeria. Gale in Channel subsiding later, and falling light and variable on our western coast.

Barometer highest 30.7 ins. and upwards, in a large anticyclone lying over Russia, 30.1 ins. and upwards, in another system lying over the south of Spain. Lowest 29.2 ins. and less, in four small depressions lying respectively off the northwest of Scotland, and over the north of Ireland, North Wales, and the eastern part of the English Channel. Depression over Channel moving northwards later across the southeast of England; disturbances in west and northwest either falling up or passing away to the northward, but new system appearing off south of Ireland in evening.

### 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 21<sup>st</sup> DEC<sup>r</sup> 1890.  
 Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.

STATIONS.		YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
		BAROM.:	TEMP.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Sea. (0 to 5.)	SHADE TEMP.				
				Force. (0 to 12.)	Dir.		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.		
		Reading at 32° F. and Sea Level.	Dry.	Dir.	Force. (0 to 12.)	Weather.	Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Dir.	Force. (0 to 12.)	Weather.	Sea. (0 to 5.)	Max.	Min.	Amount of Rainfall.	
SCANDINAVIA.	Haparanda ...	30.01	31	SW	4	o	30.00	- .06	26	25	+ 11	W	4	bc	*	32	12	—	
	Hernösand ...	30.12	23	Z	0	b	30.23	+ .43	10	9	- 20	Z	0	c	*	32	?	—	
	Stockholm ...	30.13	27	NE	2	o	30.19	+ .16	34	33	+ 12	Z	0	f	*	36	21	0.08	
	Wisby ...	30.10	32	SE	4	b	30.19	+ .17	35	34	+ 12	SSE	2	a	*	?	21	—	
	Bodö ...	29.67	33	E	2	o	29.93	+ .20	39	37	+ 9	SW	6	c	3	?	27	0.16	
	Christiansund	29.85	33	ESE	6	b	30.10	+ .45	32	30	- 1	? ESE	2	b	4	34	32	—	
	Skudesnaes ...	30.00	34	ESE	4	o	30.12	+ .33	34	33	+ 3	SE	4	o	4	34	?	—	
	Christiania Fjord (Færd)	30.05	28	NE	4	o	30.12	+ .33	28	27	- 4	N	5	o	1	32	27	—	
	Skagen (The Scaw)	29.97	30	E	3	s	30.08	+ .23	31	30	+ 5	E	3	o	3	31	25	0.05	
	Fanö ...	30.01	28	NNE	4	o	30.07	+ .43	30	30	+ 6	WN	2	c	*	32	24	—	
BRITISH ISLANDS.	Sumburgh Head	29.80	39	N	3	c	30.15	+ .73	35	34	- 6	Z	0	b	3	43	32	0.02	
	Stornoway ...	29.89	37	Z	0	b	30.18	+ .59	37	35	+ 1	NW	2	bc	3	42	29	—	
	Wick ...	29.92	34	N	1	b	30.20	+ .67	28	27	- 11	N	1	b	0	39	26	—	
	Nairn ...	29.92	37	W	2	b	30.22	+ .60	30	29	- 7	WSW	1	b	1	40	25	—	
	Aberdeen ...	29.95	30	W	2	b	30.28	+ .57	24	23	- 8	W	1	bm	3	35	23	—	
	Leith ...	29.98	32	W	1	c	30.28	+ .54	29	29	+ 1	W	1	m	*	38	24	—	
	Shields ...	29.97	31	Z	0	bm	30.30	+ .52	27	27	0	W	3	bcm	2	35	24	—	
	Spurn Head ...	29.98	32	N	3	bc	30.28	+ .48	31	29	0	WN	1	b	3	36	29	—	
	York ...	30.03	23	N	1	bm	30.34	+ .51	16	16	- 7	N	1	b	*	28	15	—	
	Loughborough	30.01	27	WN	1	o	30.32	+ .50	14	14	- 13	WNW	1	bm	*	28	13	—	
GERMANY & HOLLAND.	Ardrossan ...	29.98	38	E	2	o	30.28	+ .50	32	32	- 6	ENE	2	c	2	41	30	—	
	Malin Head ...	29.94	36	SW	1	bc	30.25	+ .31	34	33	- 3	S	2	b	2	40	34	0.12	
	Mullaghmore ...	29.96	37	WNW	1	b	30.27	+ .49	35	34	- 3	SSE	1	b	2	41	28	0.07	
	Belmullet ...	29.96	36	NE	2	b	30.22	+ .40	32	32	- 4	E	1	b	*	41	32	0.10	
	Donaghadee ...	30.00	32	SW	2	bc	30.30	+ .51	28	28	- 10	WSW	1	f	0	38	26	—	
	Liverpool (Bidston)	30.04	20	SE	1	m	30.31	+ .52	24	24	+ 5	S	1	c	2	26	17	—	
	Holyhead ...	30.00	33	ENE	2	bc	30.30	+ .50	33	32	+ 2	E	3	b	3	35	28	—	
	Parsonstown ...	29.98	31	Z	0	b	30.30	+ .47	20	20	- 6	Z	0	b	*	34	20	—	
	Valencia ...	30.04	41	WNW	2	cp	30.25	+ .39	35	34	- 2	ENE	1	c	1	47	33	0.08	
	Roche's Point...	30.01	40	NNW	3	b	30.27	+ .44	33	32	- 2	E	3	bc	3	49	32	—	
FRANCE AND BELGIUM.	Pembroke (St. Ann's Hd.)	29.95	32	NE	2	b	30.23	+ .52	33	30	- 2	NE	3	cg	2	36	29	—	
	Scilly ...	29.78	44	NNE	5	bc	30.10	+ .55	41	40	- 2	NE	5	c	5	45	39	—	
	Prawle Point ...	29.87	31	NNE	5	s	30.16	+ .54	37	37	+ 1	NE	5	og	4	37	30	0.40	
	Jersey (St. Aubin's)	29.83	45	SSE	3	cg	30.11	+ .50	39	37	- 6	E	3	bm	3	46	36	—	
	Hurst Castle ...	29.87	34	NE	4	ofd	30.19	+ .53	38	37	+ 5	ENE	4	o	3	38	33	0.38	
	Dungeness ...	29.85	39	E	4	r	30.15	+ .48	38	37	+ 2	E	5	og	3	39	35	0.19	
	London ...	29.96	31	NE	2	os	30.23	+ .47	34	33	+ 11	ENE	2	o	*	34	23	0.18	
	Oxford ...	30.22	46	NE	3	o	30.28	+ .48	28	27	+ 7	NE	2	og	*	30	21	—	
	Cambridge ...	30.00	22	N	1	o	30.32	+ .49	23	23	- 3	N	1	b	*	27	19	—	
	Yarmouth ...	29.96	35	E	3	c	30.26	+ .50	36	34	+ 3	E	3	bcv	3	36	32	—	
PENINSULA.	Cuxhaven ...	29.91	30	SW	1	o	30.20	+ .55	32	31	+ 2	WNW	1	bc	*	33	30	—	
	Berlin ...	30.02	33	S	1	o	30.21	+ .35	33	32	+ 7	W	2	o	*	34	26	—	
	Wiesbaden ...	*	*	*	*	*	30.21	+ .36	26	25	- 6	Z	0	o	*	36	25	—	
	Munich ...	30.08	22	Z	0	b	30.16	+ .17	8	8	- 15	E	3	b	*	32	8	—	
	The Helder ...	30.04	30	N	1	c	30.28	+ .34	22	?	- 7	SSE	1	c	1	32	19	—	
	Brussels (9 a.m.)	*	*	*	*	*	30.21	+ .41	31	?	0	E	5	f	*	37	29	0.08	
	Cape Gris Nez	29.89	32	E	4	o	30.13	+ .46	31	31	- 1	E	5	m	5	36	30	0.24	
	Paris ...	29.94	36	SSE	1	b	30.06	+ .28	29	28	- 8	N	1	bc	*	45	28	—	
	Brest ...	? 29.94	46	NW	2	c	? 30.07	+ .56	42	39	- 3	NE	2	o	3	50	37	0.04	
	Lorient ...	29.82	42	ESE	2	b	30.08	+ .50	39	38	- 4	ENE	2	o	5	48	37	0.24	
FRANCE AND BELGIUM.	Rochefort ...	29.90	41	SSE	3	o	30.07	+ .37	37	37	- 2	E	3	o	*	45	30	—	
	Belfort ...	25	S	1	o	?	?	?	26	17	- 2	SE	1	f	*	?	21	—	
	Lyons ...	30.00	29	N	1	m	30.10	+ .13	27	27	+ 3	W	1	f	*	35	24	—	
	Nice ...	29.98	43	E	6	o	30.00	+ .02	48	?	+ 12	E	7	o	7	48	36	—	
	Perpignan ...	29.90	41	W	1	r	29.91	+ .08	36	36	- 15	NW	2	r	*	51	?	2.56	
	Biarritz ...	29.84	49	NW	3	o	29.94	+ .18	33	30	- 14	ESE	3	m	6	53	30	0.16	
	Corunna ...	*	*	*	*	*	30.04	+ .08	48	47	+ 1	NW	5	b	8	52	46	0.08	
	Lisbon ...	30.02	48	N	4	b	30.04	+ .08	48	47	+ 1	NW	5	b	8	52	46	0.08	

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

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



# WEATHER CHARTS

for 8 a.m. on

Sunday, 21<sup>st</sup> December,

1890.

## BAROMETER, WIND AND SEA.

### EXPLANATION OF MAP

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

Changes since previous morning are stated in words.

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

their barbs and feathers refer to force thus—

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

→ = forces 5 to 7; → = forces 1 to 4.

○ = dead calm.

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

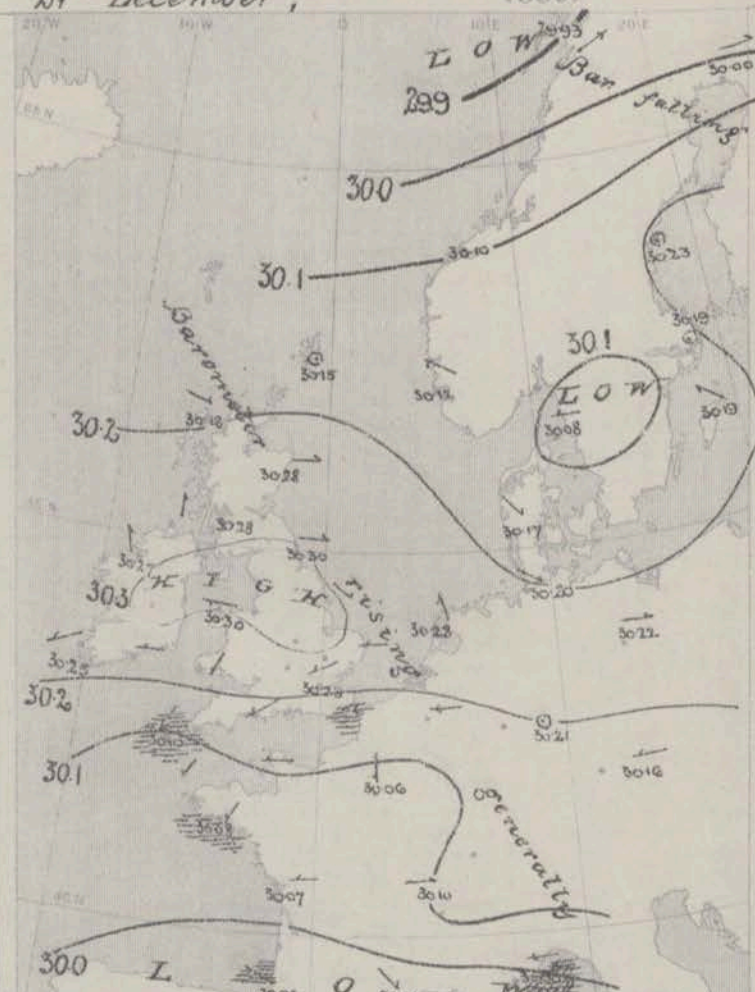
■ = Rough, ■ = High.

## MEAN HEIGHT OF THE BAROMETER

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

During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS
Sunbury Head	29.667
Stornoway	29.701
Wick	29.711
Nairn	29.739
Aberdeen	29.757
Leith	29.803
Shields	29.843
York	29.888
Loughborough	29.923
Ardrossan	29.819
Donaghadee	29.847
Holyhead	29.879
Liverpool	29.895
Parsonstown	29.900
Valencia	29.908
Roche's Point	29.915
Pembroke	29.918
Sally	29.932
Jersey	29.983
Harst Castle	29.930
Dover	29.937
LONDON	29.931
Oxford	29.964
Cambridge	29.938
Yarmouth	29.914



## 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.

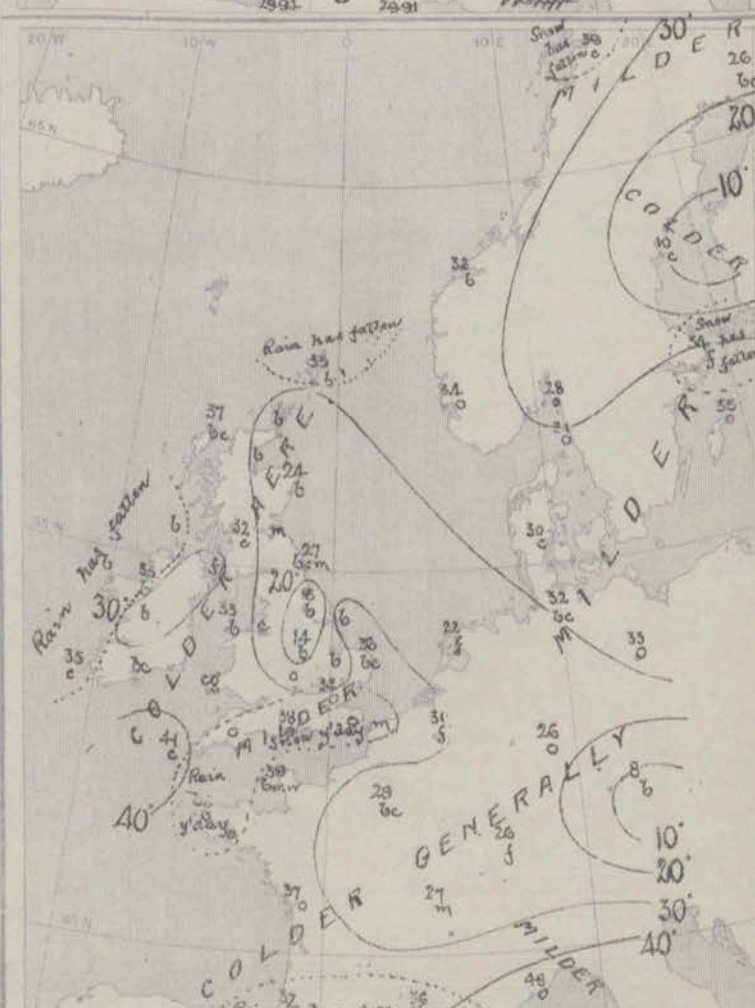
**RAINFALL**—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more are quoted in figures.

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

(For the month of December.)

STATIONS.	TEMPERATURE.				RAINFALL (Inches.)
	Daily Max.	Daily Min.	Daily Avg.	Daily Wet.	
Sunbury Head	42.5	35.0	39.5	37.9	4.33
Stornoway	44.4	33.9	39.2	38.2	5.66
Wick	42.1	32.6	38.0	36.6	3.18
Nairn	41.7	32.8	37.0	35.5	2.08
Aberdeen	42.0	32.5	36.9	35.3	3.34
Leith	44.2	33.7	38.6	37.0	2.01
Shields	43.1	34.3	38.5	37.2	2.74
York	42.7	32.4	36.8	35.7	2.45
Loughborough	43.1	32.9	36.9	35.9	2.36
Ardrossan	44.6	36.0	40.1	38.7	4.04
Donaghadee	45.1	36.2	40.2	39.2	2.84
Holyhead	46.7	39.3	43.0	41.4	3.84
Liverpool	43.8	35.0	39.3	37.6	3.70
Parsonstown	44.8	33.2	37.9	36.0	3.02
Valencia	50.9	40.0	44.5	42.3	5.82
Roche's Point	48.9	39.0	42.9	41.5	4.74
Pembroke	47.1	40.6	43.8	42.3	4.00
Sally	49.8	43.8	47.1	45.4	4.19
Jersey	47.7	40.1	43.4	41.8	3.87
Harst Castle	46.1	36.9	40.9	40.2	2.84
Dover	44.7	36.8	40.3	39.1	5.20
LONDON	43.7	34.6	38.5	37.4	2.14
Oxford	43.6	34.3	37.7	36.0	2.13
Cambridge	43.6	32.3	36.0	36.1	1.99
Yarmouth	42.4	34.2	38.3	37.6	2.06

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





# GENERAL SITUATION AT 8 A.M.

## PRESSURE

Highest, 30.3 in. and more to 30.2 in. in an anticyclone system lying over our Islands, and extending in ridge to North Germany.  
Lowest, 30.0 in. and less, over Limerick, 29.9 in. and less over the northern part of the Mediterranean.  
Gradients slight to moderate and very variable over Western Europe.  
Barometer rising quickly in most places.

## TEMPERATURE

Highest, 48° at Lisbon, 41° at Sicily, 35° at Bonn, 38° at Bingen, and 37° at Copenhagen.  
Lowest, (1) 8° at Munich, 26° at Belfast, 28° at Paris, 31° at Brussels, 33° at Berlin, (2) 14° at Loughborough, 16° at York, 23° at Cambridge, 24° at Aberdeen, 28° at Oxford, (3) 10° at Harrogate, 26° at Haparanda.  
 In London the thermometer has risen steadily to 34°; over the northern parts of England it has fallen fast.

## WIND

E at the more southern stations — moderate on the western and northern coast, a gale at Nice, fresh at our own Channel stations, light over the south-eastern and southern coasts — light in Ireland.  
 SW fresh over Lapland — very variable over the northern parts of our area generally.

## WEATHER

Clear and bright in Ireland, Scotland, and the north and east of England.  
 Fair over Scandinavia; dull and gloomy in most other places, foggy at Belfast, hazy at Lyons, rainy at Perpignan.  
 Rain has been very heavy at Perpignan and a good deal of snow has fallen over the south of England. In London it was 4 in. deep when the fall ended. Fine halos have been seen in the south of England.

## SEA

Rather rough at the mouth of the Channel, slight on our other coasts. At Nice it is high.

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

## FORECASTS

For the 24 hours ending at NOON on 22<sup>nd</sup> DEC<sup>r</sup> 1890.

### 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 ...	29.91	33	30	SE	2	o	3	Holyhead ...	29.90	33	32	ENE	3	c	2
Sumburgh Head ...	29.61	41	40	N	3	o	5	Valencia ...	29.98	47	44	NW	2	comp	2
Stornoway ...	29.77	42	40	W	3	bc	3	Scilly ...	29.77	45	43	NNE	5	c	3
Aberdeen ...	29.82	35	32	WSTW	1	bc	3	Jersey ...	29.73	45	43	S	3	c	5
Shields ...	29.90	35	35	W	1	c	2	Dungeness ...	29.75	39	38	E	4	r	8
Ardrossan ...	29.88	40	38	S	3	c	2	London ...	29.86	31	30	NE	2	os	3
Malin Head ...	29.83	38	37	S	2	o	3	Yarmouth ...	29.87	35	33	E	3	c	3
Mullaghmore ...	29.87	41	38	SW	3	cp	3	Rochefort ...	29.77	44	42	SSE	4	c	?
Belmullet ...	29.89	41	40	SW	2	or sp	*								

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

Weather cloudy or overcast generally, with fog in many parts of England and France, rain at the Channel stations, and snow in Finland, as well as over the Netherlands and some parts of France and Austria. Fine in the north and east of England and also over Italy and the south of Scandinavia. Heavy snow falling later in the south of England, and very heavy rain in the south of France, the largest amount measured in the latter region being 2.9 ins. at Lefalle and 2.6 ins. at Perpignan.

Temperature highest 56° at Malta, 55° at Oran and Algiers, 54° at Nemours, and 53° at Palermo; above 45° at most of the Mediterranean stations, as well as on the Spanish coasts. Lowest -2° F. at Moscow, 0 zero at Archangel, +5° at Kiev, and 6° at Casan and Kharkov; below 20° at most of the Russian stations and as low as 13° even at Liverpool. Daily maxima below 32° in many parts of England, but thermometer exceeding 50° over Southern Europe, and exceeding 60° in Algeria and the south of Italy.

Wind light or moderate from the SW<sup>nd</sup> over France, NE<sup>r</sup> over the southern parts of the United Kingdom, with a strong breeze in the Channel; light from the NW<sup>nd</sup> in Spain. S<sup>r</sup> or SE<sup>r</sup> over the greater part of northern, eastern, and central Europe, with a gale at Nemours. Light or moderate from the SW<sup>nd</sup> in the north of our Islands. Light from SW in Algeria and from W. in Italy. Strong winds in Channel subsiding later.

Barometer highest 30.8 ins. and upwards, in an anticyclone lying over Central Russia. Lowest 29.5 ins. and less in a depression lying off the north of Scotland and also in another disturbance lying near the mouth of the Channel, 29.7 ins. and less, in a third system lying near the mouth of the Elbe. Depressions all filling up later, barometer rising steadily over the whole of Western Europe, and anticyclone advancing over our Islands from the westward.

### EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

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

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

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

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



# DAILY WEATHER REPORT.

for *Monday, 22<sup>nd</sup> December, 1890.*  
*Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.*

STATIONS.		YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
		BAROM.  Reading at 32° F. and Sea Level.	TEMP.  Dry.	WIND.		Weather.	BAROMETR.		SHADE TEMP.			WIND.		Sea. (0 to 12.)	SHADE TEMP.		Amount of fall.		
				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.)		Weather.	Max.		Min.	
SCANDINAVIA.	Haparanda ...	30.15	22	Z	0	b	30.25	+ .25	8	7	- 18	Z	0	bc	*	32	?	0.04	
	Hernösand ...	30.21	20	NE	2	s	30.38	+ .15	23	21	+ 13	NE	2	0	*	23	7	0.04	
	Stockholm ...	30.22	34	E	2	0	30.26	+ .07	33	32	- 1	Z	0	f	*	34	24	0.08	
	Wisby ...	30.23	33	NEW	4	s	30.25	+ .06	32	30	- 3	SW	2	0	*	36	30	0.04	
	Bodo ...	30.17	38	SW	6	+	30.26	+ .33	35	33	- 4	E	2	0	1	41	34	0.16	
	Christiansund ...	30.23	33	SE	3	c	30.28	+ .18	80	29	- 2	ESE	3	0	3	34	30	-	
	Skudesnaes ...	30.25	38	SE	4	0	30.29	+ .17	80	30	- 4	NNE	1	0	2	37	?	-	
	Christiania Fjord (Færdø)	30.24	22	NW	5	b	30.30	+ .18	23	22	- 5	N	4	0	1	28	19	-	
	Skagen (The Scaw)	30.26	30	N	3	0	30.30	+ .22	27	25	- 4	N	1	0	0	34	27	-	
	Fanø ...	30.27	33	SW	1	b	30.30	+ .13	27	27	- 3	NW	2	f	*	34	24	-	
BRITISH ISLANDS.	Sunburgh Head	30.21	38	Z	0	c	30.07	- .08	40	39	+ 5	SE	2	0	3	42	33	0.01	
	Stornoway ...	30.16	42	SW	5	0	29.91	- .27	42	41	+ 5	SW	7	0	6	42	30	-	
	Wick ...	30.23	36	N	1	b	30.03	- .17	38	37	+ 10	S	4	c	2	38	27	-	
	Nairn ...	30.26	36	Z	0	b	30.07	- .15	36	35	+ 6	N	1	0	1	38	25	-	
	Aberdeen ...	30.32	21	W	2	bcm	30.17	- .11	29	27	+ 5	S	3	bcm	3	31	15	-	
	Leith ...	30.33	32	W	1	m	30.21	- .07	31	30	+ 2	W	1	bcm	*	36	22	-	
	Shields ...	30.35	29	WSW	1	f	30.28	- .02	26	26	- 1	WSW	2	bcm	2	32	21	-	
	Spurn Head ...	30.38	32	WNW	2	bc	30.34	+ .06	29	29	- 2	WNW	2	bcm	2	35	21	-	
	York ...	30.39	26	N	1	b	30.36	+ .02	16	16	0	Z	0	f	*	29	14	-	
	Loughborough	30.42	15	WNW	1	b	30.39	+ .07	10	10	- 4	SSW	1	f	*	26	7	-	
GERMANY & HOLLAND.	Ardrossan ...	30.33	34	NNE	1	b	30.17	- .11	37	37	+ 5	SE	5	0	4	37	22	-	
	Malin Head ...	30.22	35	S	4	0	29.92	- .33	37	35	+ 3	S	6	og	2	38	33	-	
	Mullaghmore ...	30.26	38	SE	3	cm	29.95	- .32	45	42	+ 10	S	7	og	5	45	34	0.01	
	Belmullet ...	30.19	36	SE	3	0	29.89	- .33	44	42	+ 12	S	6	0	*	44	32	0.02	
	Donaghadee ...	30.34	35	SSW	2	b	30.17	- .13	42	41	+ 14	SSW	5	c	3	42	28	-	
	Liverpool (Bidston)	30.39	25	SE	2	b	30.30	- .01	22	21	- 2	SE	3	bc	3	32	19	-	
	Holyhead ...	30.36	33	Z	0	b	30.25	- .05	33	32	0	SE	3	bcm	2	36	26	-	
	Parsonstown ...	30.28	32	Z	0	bc	30.06	- .24	40	39	+ 20	SE	1	0	*	41	20	-	
	Valencia ...	30.24	41	ESE	4	0	30.02	- .23	46	45	+ 11	ESE	7	rm	6	47	33	0.02	
	Roche's Point...	30.28	44	ESE	4	c	30.11	- .16	47	45	+ 14	S	8	c	4	47	33	-	
FRANCE AND BELGIUM.	Pembroke (St. Ann's Hd.)	30.34	36	E	3	bc	30.23	+ .02	37	36	+ 4	ESE	3	ogm	3	39	32	-	
	Scilly ...	30.25	45	ENE	4	0	30.20	+ .10	45	44	+ 4	S	4	0	5	45	40	-	
	Prawle Point ...	30.34	38	NE	3	0	30.29	+ .13	36	36	- 1	NE	3	cm	2	38	34	-	
	Jersey (St. Aubin's)	30.27	42	ENE	3	b	30.29	+ .18	41	39	+ 2	E	3	cm	3	45	38	-	
	Hurst Castle ...	30.33	37	ENE	3	m	30.34	+ .15	29	28	- 9	NNE	3	m	2	38	28	-	
	Dungeness ...	30.28	39	E	6	0	30.29	+ .14	35	34	- 3	E	4	0	3	40	34	-	
	London ...	30.22	34	NE	1	c	30.34	+ .11	15	15	- 19	SW	1	0	*	36	14	-	
	Oxford ...	30.40	20	Z	0	b	30.39	+ .11	9	9	- 19	Z	0	0	*	30	9	-	
	Cambridge ...	30.41	18	N	1	b	30.39	+ .09	4	4	- 19	Z	0	0	*	26	4	-	
	Yarmouth ...	30.35	36	E	3	bc	30.35	+ .09	27	27	- 9	N	1	bc	3	37	25	-	
PENIN- SULA.	Cuxhaven ...	30.34	32	NEW	2	bc	30.34	+ .14	28	27	- 4	NEW	2	c	*	33	28	-	
	Berlin ...	30.38	28	Z	0	c	30.38	+ .16	22	22	- 11	Z	0	c	*	36	18	-	
	Wiesbaden ...	*	*	*	*	*	30.22	+ .01	26	25	0	NE	1	c	*	39	25	-	
	Munich ...	30.21	13	N	1	m	30.15	+ .07	3	3	- 5	SE	2	m	*	23	1	-	
	The Helder ...	30.38	28	SSW	1	c	30.35	*	27	27	*	S	1	0	1	32	21	-	
	Brussels (9 a.m.)	*	*	*	*	*	30.31	+ .10	26	26	- 5	ENE	3	0	*	32	25	-	
	Cape Gris Nez	30.27	30	E	4	m	30.28	+ .15	28	28	- 3	SE	4	0	3	34	25	-	
	Paris ...	30.25	31	N	2	0	30.28	+ .22	29	29	0	NNE	2	0	*	40	28	-	
	Brest ...	30.27	42	E	1	b	30.27	+ .20	34	33	?	E	2	0	3	34	32	-	
	Lorient ...	30.21	41	NE	3	b	30.26	+ .18	32	32	- 7	ENE	1	0	5	41	32	-	
FRANCE AND BELGIUM.	Rochefort ...	30.14	41	NE	3	b	30.2	+ .14	31	30	- 6	NE	3	0	*	46	25	-	
	Belfort ...	?	23	S	1	0	?	?	25	?	- 1	S	1	0	*	28	20	-	
	Lyons ...	30.20	32	NW	1	0	30.22	+ .12	24	23	- 3	SE	1	0	*	36	22	-	
	Nice ...	30.06	47	NE	6	0	30.00	- .06	48	37	+ 10	E	4	0	4	50	?	-	
	Perpignan ...	30.07	39	WNW	2	r	30.10	+ .19	43	40	+ 7	NW	3	0	*	44	36	0.04	
	Biarritz ...	30.05	42	SE	1	m	30.19	+ .25	43	42	+ 11	S	3	0	*	43	?	-	
PENIN- SULA.	Corunna ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
	Lisbon ...	30.09	43	N	5	b	30.20	+ .16	43	39	- 5	N	3	0	?	54	43	-	

For Explanation of Columns, see bottom of p. 1.

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



# WEATHER CHARTS

for 8 a.m. on

Monday

22<sup>nd</sup> December

1890.

## BAROMETER, WIND AND SEA.

### EXPLANATION OF MAP

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

Changes since previous morning are stated in words.

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

— forces above 10; — forces 8 to 10;

— forces 5 to 7; — forces 1 to 4.

○ = dead calm.

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

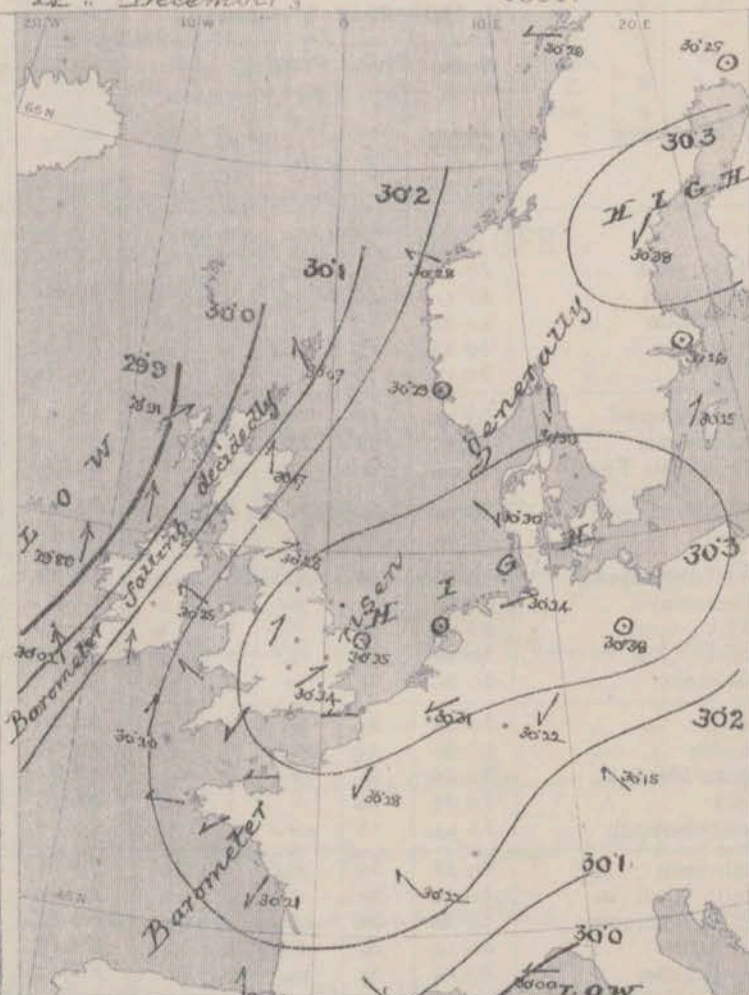
— = Rough. — = High.

## MEAN HEIGHT OF THE BAROMETER

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

During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS.
Sumburgh Head .....	29.667
Stornoway .....	29.701
Wick .....	29.711
Nairn .....	29.739
Aberdeen .....	29.757
Leith .....	29.803
Shields .....	29.843
York .....	29.888
Loughborough .....	29.923
Ardrossan .....	29.819
Donaghadee .....	29.847
Holyhead .....	29.879
Liverpool .....	29.895
Parsonstown .....	29.909
Valencia .....	29.908
Roche's Point .....	29.915
Pembroke .....	29.918
Silly .....	29.902
Jersey .....	29.985
Hurst Castle .....	29.959
Dover .....	29.957
LONDON .....	29.951
Oxford .....	29.954
Cambridge .....	29.938
Yarmouth .....	29.914



## 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.

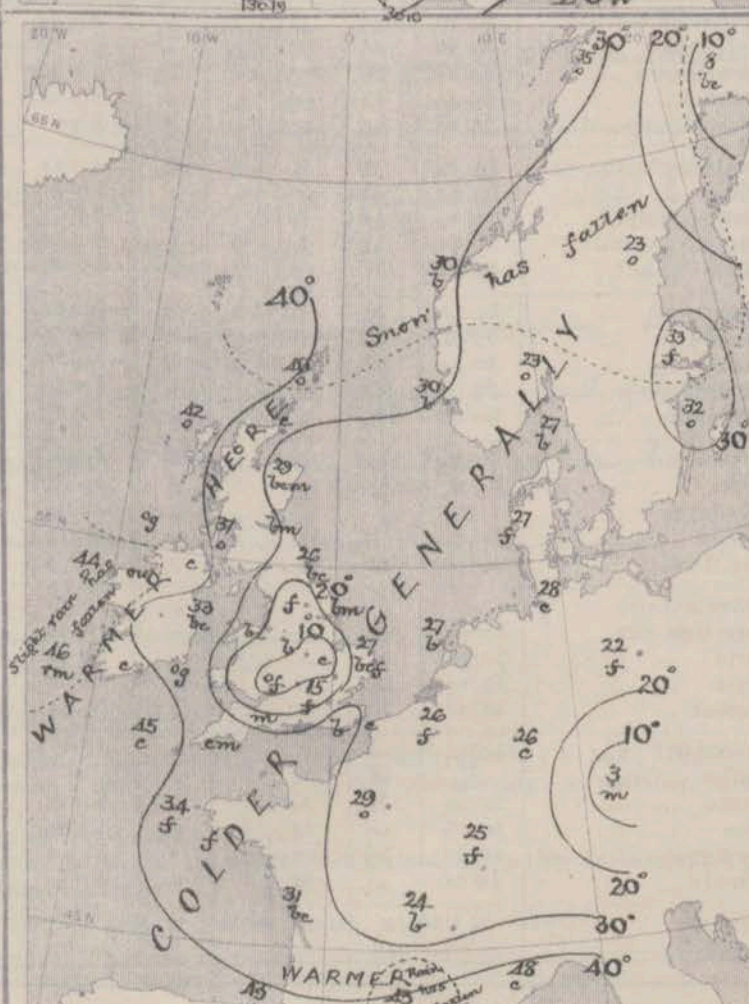
**RAINFALL**—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more are quoted in figures.

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

(For the month of December.)

STATIONS.	TEMPERATURE.				RAINFALL. (Inches.)
	Daily Max.	Daily Min.	At 8 a.m.	At 8 a.m.	
			Dry.	Wet.	
Sumburgh Head.....	42.5	35.0	39.5	37.9	4.33
Stornoway .....	44.4	35.9	39.2	38.2	5.68
Wick .....	43.1	32.5	38.0	36.6	3.18
Nairn .....	41.7	32.8	37.0	35.6	2.08
Aberdeen .....	42.0	32.5	36.9	35.3	3.34
Leith .....	44.2	33.7	38.6	37.0	2.01
Shields .....	43.1	31.3	38.5	37.2	2.74
York .....	42.7	32.4	36.8	35.7	2.45
Loughborough .....	43.1	32.9	38.9	35.9	2.36
Ardrossan .....	44.6	36.0	40.1	38.7	4.04
Donaghadee .....	45.1	36.2	40.2	39.2	2.84
Holyhead .....	46.7	39.3	43.0	41.4	3.84
Liverpool .....	43.8	36.0	39.3	37.6	2.70
Parsonstown .....	44.8	33.2	37.9	36.6	3.02
Valencia .....	50.0	40.0	44.6	42.3	5.82
Roche's Point .....	48.0	39.0	42.9	41.5	4.74
Pembroke .....	47.1	40.0	43.0	42.5	4.05
Silly .....	49.8	43.8	47.1	45.4	4.10
Jersey .....	47.7	40.1	43.4	41.8	3.87
Hurst Castle .....	46.1	36.9	40.9	40.2	2.81
Dover .....	44.7	36.8	40.3	39.1	3.20
LONDON .....	44.7	34.5	38.5	37.1	2.14
Oxford .....	43.6	34.3	37.7	36.0	2.13
Cambridge .....	43.5	32.3	36.9	35.1	1.99
Yarmouth .....	42.4	31.2	38.3	37.5	2.95

**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, 30.35 in. to 30.20 in. over England, France, and the countries lying to the eastward of the North Sea.  
Lowest, 29.9 in. and less, off our northwestern coast.

Gradients slight except over Ireland and Scotland, where they were rather steep for S winds.

Barometer falling in the west and north, steady in London, rising over Denmark, Holland, and France.

## TEMPERATURE

Highest, 44° to 47° in the west and south of Ireland, 45° at Scilly, 43° at Lisbon, 42° at St. Mary's, 40° at Lumburg, 38° at Paris.  
Lowest, (1) 4° at Cambridge, 3° at Oxford, 10° at Loughborough, 15° in London, 16° at York; (2) 3° at Munich, 2° at Berlin, 23° at St. Petersburg; (3) 8° at Riga, 23° at Harbin, and 27° at the Volga, and 23° at Aberdeen.  
It rose to 36° in London during yesterday, but fell to 14° by 7 am today.

## WIND

S over Ireland and Scotland - a moderate gale in the extreme west, and a moderate breeze elsewhere.  
SE at the Irish stations, calm over England, light NE over the Bay of Biscay.

## WEATHER

Cloudy in the west and northwest, with rain at Valencia Island.  
Fine on our northeast coasts, very foggy over England and in several parts of France and Germany.

## SEA

Still rough at the mouth of the Channel, off the west of Ireland and in the offing, slight or smooth in most other places.

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The southerly current in the west appears to be spreading eastwards very little, it may ultimately affect the English stations, but it is at present doubtful whether it will prove at all permanent, or do much towards breaking up the front now prevalent.

## FORECASTS

For the 24 hours ending at NOON on 23<sup>rd</sup> DEC<sup>r</sup> 1890.

### DISTRICTS.

### FORECASTS.

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

SW<sup>2</sup> and S<sup>2</sup> winds, strong, a gale in places; mild, rainy.

S<sup>2</sup> and SW<sup>2</sup> winds; fair to unsettled, milder.

Calm and very cold fog, <sup>possibly</sup> followed by S<sup>2</sup> breezes, and milder weather.

### DISTRICTS.

### FORECASTS.

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

Same as No. 0.

S<sup>2</sup> winds, increasing; rain at times, milder.

S<sup>2</sup> and SW<sup>2</sup> winds, strong to a gale; squally, rainy.

### WARNINGS

The SOUTH CONE has been hoisted this morning in district 6 and parts of 9 and 10.

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



# YESTERDAY'S 2 P.M. REPORTS.

	BAR.	THER.		WIND		WEA.	SEA.		BAR.	THER.		WIND		WEA.	SEA.
		D.	W.	D.	F.					D.	W.	D.	F.		
Skudesnaes ...	30.23	36	31	SE	2	0	3		Holyhead ...	30.33	28	33	SE	1	6
Sumburgh Head ...									Valencia ...						
Stornoway ...	30.19	41	40	Sw	3	0	3		Seilly ...						3
Aberdeen ...									Jersey ...	30.19	44	42	E.N.E.	1	6
Shields ...									Dungeness ...	30.23	40	38	E	6	0
Ardrossan ...									London ...						*
Mulin Head ...	30.25	36	35	S	4	0	2		Yarmouth ...						
Mullaghmore ...									Rochefort ...	30.09	47	45	E.E.	3	6
Belmullet ...	30.23	36	35	SSW	1	6	*								

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

*Weather* fine over the greater part of the United Kingdom, as well as in the north of Scandinavia, the south of Russia and some parts of Spain. Dull elsewhere with fog in many parts of Central Europe, rain in the extreme south of France, and snow at Helsingfors. Fog setting in later over the north of England, sky becoming overcast on our extreme west and northwest coasts.

*Temperature* highest 58° at Malta, 56° at Cagliari, 54° at Palma, 52° at Brindisi, and 49° at Algiers, above 45° at most of the Mediterranean stations and also on the coasts of the Iberian Peninsula. Lowest (1) -14° F. at Moscow -1° at Kiev and Kharkov +6° at Nicolaieff, and 11° at Odessa. (2) 8° at Munich, and 17° at Vienna; (3) 14° at Loughborough, and 16° at York; (4) 20° at Parsonstown; below the freezing point over Central Spain. Daily maxima over Central England below 32°, but thermometer reaching 36° in London.

*Wind* Light or moderate from the E. over the greater part of France the Netherlands, the south of our Islands and the west of Norway, but strong to a gale in the extreme south of France. Light from the W. in the north and east of our Islands, S. over the greater part of Russia; variable in Central Europe, N.E. in Spain and Italy; S. in Algeria. Freshening S.E. winds setting in later on our extreme western coasts.

*Barometer* highest 30.9 ins. and upwards in an anticyclone lying over Russia, 30.3 ins. to 30.1 ins. in a col. extending W. as far as our own western coasts. Lowest 29.8 ins. and less in two shallow depressions lying over the southern parts of the Mediterranean; 29.9 ins. and less in two other disturbances lying to the north-westward of Norway and the north of the White Sea. Slight fall taking place later in the extreme west of our Islands.

### SUMMARY OF CHANGES IN THE WEATHER OVER THE BRITISH ISLANDS AND THEIR NEIGHBOURHOOD FROM THE 1<sup>TH</sup> TO 20<sup>TH</sup> DEC. 1830.

The weather experienced over England and the Continent during this week has been very cold and wintry, especially over France & the southern, eastern and midland counties, where the thermometer has been almost continuously below the freezing point, and in many instances below 20° F. Thus early on Monday morning the minimum readings were as low as 19° in the Shade in London and at Hurst Castle, 16° at Cambridge and Oxford, 15° at Dungeness, and 14° at Loughborough, and after some little amelioration about the middle of the week 19° was again the minimum in London and at Cambridge on Saturday, and 17° at Oxford. The distribution of pressure has been very variable and the wind correspondingly unsteady both in force and direction. Snow, sleet and rain have fallen in all parts of the Kingdom, and on Friday and Saturday the fall in London continued during the greater part of each day.

In Ireland and Scotland the conditions were not so severe, the frost having alternated with spells of much higher temperature. After Thursday, however, snow fell in all parts of the Kingdom and together with cold rains, made up a large aggregate of "Rainfall" in the western regions.

### EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

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

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

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

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



# DAILY WEATHER REPORT.

for Tuesday 23<sup>rd</sup> December.

1890.

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

STATIONS.	YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
	BAROM.	TEMP.	WIND.			BAROMETER.	SHADE TEMP.			WIND.						SHADE TEMP.		
	Reading at 32° F. and Sea Level.	Dry.	Dir.	Force (0 to 12.)	Weather.	Reading at 32° F. and Sea Level.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Dir.	Force (0 to 12.)	Weather.	Sea (0 to 9.)			Max.	Min.	Amount of Rainfall.
SCANDINAVIA.	Haparanda ...	30.38	21	2	0	30.42	+17	26	26	+10	SE	2	0	•	•	2	5	—
	Hernösand ...	30.38	17	NE	2	30.32	-06	16	15	-7	NE	2	0	•	•	23	14	—
	Stockholm ...	30.26	31	NE	2	30.23	-03	26	25	-7	NNE	2	0	•	•	23	?	0.08
	Wisby ...	30.19	32	NW	2	30.17	-02	26	26	-6	SE	2	0	•	•	26	?	0.04
	Bodö ...	30.27	33	E	2	30.14	-12	32	31	-1	E	2	0	•	•	26	32	—
	Christiansund ...	30.15	31	SE	3	30.03	-25	33	30	+3	SE	5	0	•	•	2	30	—
	Skudesnaes ...	30.24	37	SE	6	30.11	-18	35	32	+3	SE	6	0	•	•	27	30	—
	Christiania Fjord (Fæder)	30.28	29	NW	4	30.17	-13	31	30	+1	N	5	0	•	•	27	?	—
	Skagen (The Seaw)	30.23	31	NE	1	30.13	-17	31	30	+4	ENE	3	0	•	•	2	27	—
	Fanö ...	30.24	27	NE	2	30.12	-18	30	30	+3	E	0	•	•	•	20	25	—
BRITISH ISLANDS.	Sumburgh Head	29.86	42	SE	4	29.66	-41	43	43	+3	SE	6	0	•	•	44	40	0.09
	Stornoway ...	29.68	45	SW	9	29.56	-38	46	45	+4	NW	6	0	•	•	46	42	0.02
	Wick ...	29.83	42	S	2	29.65	-38	42	41	+4	S	7	0	•	•	42	38	0.05
	Nairn ...	29.81	42	WSW	2	29.61	-46	44	43	+1	WSW	3	0	•	•	44	34	0.06
	Aberdeen ...	29.58	35	SE	4	29.77	-38	38	37	+9	S	5	0	•	•	38	29	0.15
	Leith ...	30.00	34	WSW	2	29.78	-43	41	40	+10	N	1	0	•	•	41	30	0.15
	Shields ...	30.12	28	SW	3	29.90	-38	31	31	+5	S	3	0	•	•	32	23	0.01
	Spurn Head ...	30.20	32	SW	3	30.01	-33	29	28	0	SW	4	0	•	•	34	25	—
	York ...	30.20	24	SE	1	29.99	-37	28	28	+12	S	1	0	•	•	29	16	—
	Loughborough	30.24	14	NE	1	30.02	-37	25	24	+15	ENE	2	0	•	•	25	10	—
GERMANY & HOLLAND.	Ardrossan ...	29.95	41	SE	4	29.79	-38	42	42	+6	S	5	0	•	•	43	36	0.11
	Malin Head ...	29.69	43	S	7	29.78	-14	46	44	+9	NW	4	0	•	•	46	37	—
	Mullaghmore ...	29.68	46	S	9	29.83	-12	45	44	0	WNW	4	0	•	•	49	45	0.05
	Belmullet ...	29.62	46	S	6	29.90	+01	42	41	-2	NW	1	0	•	•	49	41	0.05
	Donaghadee ...	29.94	45	SW	4	29.88	-34	44	44	+2	N	3	0	•	•	45	42	0.18
	Liverpool (Bilston)	30.11	25	SE	4	29.90	-40	31	30	+9	SE	3	0	•	•	32	21	0.14
	Holyhead ...	30.03	40	S	5	29.85	-40	41	41	+8	S	5	0	•	•	41	32	0.15
	Parsonstown ...	29.83	45	SE	3	29.87	-19	38	37	-2	E	0	•	•	•	47	38	0.07
	Valencia ...	29.74	50	SE	8	29.92	-10	47	45	+1	NNW	2	0	•	•	50	43	0.36
	Roche's Point ...	29.89	47	SW	7	29.80	-26	44	42	-3	NNW	3	0	•	•	49	44	0.40
FRANCE AND BELGIUM.	Pembroke (St. Ann's Hd.)	30.04	43	SE	5	29.84	-41	43	43	+6	SE	4	0	•	•	45	35	0.45
	Scilly ...	30.04	46	SE	5	29.77	-43	49	49	+4	SE	4	0	•	•	49	44	0.54
	Prawle Point ...	30.14	43	E	4	29.90	-39	44	44	+8	SE	4	0	•	•	44	35	—
	Jersey (St. Aubin's)	30.19	39	ENE	3	29.99	-39	36	35	-5	SE	3	0	•	•	41	33	—
	Hurst Castle ...	30.20	32	NE	3	29.99	-35	36	35	+7	NE	4	0	•	•	36	28	—
	Dungeness ...	30.21	39	E	4	30.04	-25	31	31	-4	SE	4	0	•	•	40	30	—
	London ...	30.22	16	E	2	30.03	-31	27	26	+12	E	1	0	•	•	27	15	—
	Oxford ...	30.22	12	E	2	30.03	-36	24	24	+15	NW	1	0	•	•	24	8	—
	Cambridge ...	30.25	14	E	2	30.05	-34	22	22	+18	E	0	•	•	•	22	4	—
	Yarmouth ...	30.22	33	NNE	1	30.07	-28	35	32	+3	SE	4	0	•	•	35	25	—
GERMANY & HOLLAND.	Cuxhaven ...	30.28	32	E	2	30.16	-18	32	31	+4	NNE	1	0	•	•	?	?	—
	Berlin ...	30.25	29	E	2	30.08	-30	27	27	+5	NE	3	0	•	•	29	?	0.04
	Wiesbaden ...	30.06	32	E	2	30.02	-30	27	26	+1	N	1	0	•	•	26	25	—
	Munich ...	30.06	32	E	2	29.98	-17	15	15	+12	SE	2	0	•	•	15	3	—
	The Helder ...	30.25	21	SE	1	30.13	-22	25	25	-2	ENE	1	0	•	•	22	19	—
	Brussels (9 a.m.)	30.19	24	E	2	30.10	-21	26	26	0	E	2	0	•	•	29	24	—
	Cape Gris Nez	30.19	28	NE	2	30.03	-25	25	24	-1	SE	1	0	•	•	26	23	—
	Paris ...	30.19	40	E	2	30.09	-19	25	25	-4	SE	1	0	•	•	?	?	—
	Brest ...	30.11	40	E	2	29.85	-42	44	44	+10	SE	5	0	•	•	?	?	—
	Lorient ...	30.18	35	E	2	29.96	-30	37	37	+5	ENE	4	0	•	•	41	32	—
FRANCE AND BELGIUM.	Rochefort ...	30.18	31	E	3	30.05	-16	28	28	-3	ENE	3	0	•	•	32	21	—
	Belfort ...	29.95	22	SE	1	29.91	-4	25	14	0	SW	1	0	•	•	32	14	—
	Lyons ...	30.10	28	N	3	30.01	-21	26	25	+2	NNW	3	0	•	•	32	?	—
	Nice ...	29.83	41	E	2	29.64	-36	44	35	-4	E	1	0	•	•	50	39	—
	Perpignan ...	29.96	40	NW	4	29.82	-28	43	36	0	NW	5	0	•	•	48	41	—
	Biarritz ...	30.12	30	N	4	30.02	-17	34	33	-9	SE	3	0	•	•	50	32	—
	Corunna ...	30.20	48	NNW	4	30.06	-20	48	48	+8	ENE	1	0	•	•	54	39	0.12
	Lisbon ...	30.20	48	NNW	4	30.15	-05	48	45	+5	N	3	0	•	•	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, 23<sup>rd</sup> December,

1890.

## BAROMETER, WIND AND SEA.

### EXPLANATION OF MAP

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

Changes since previous morning are stated in words.

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

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

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

○ = dead calm.

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

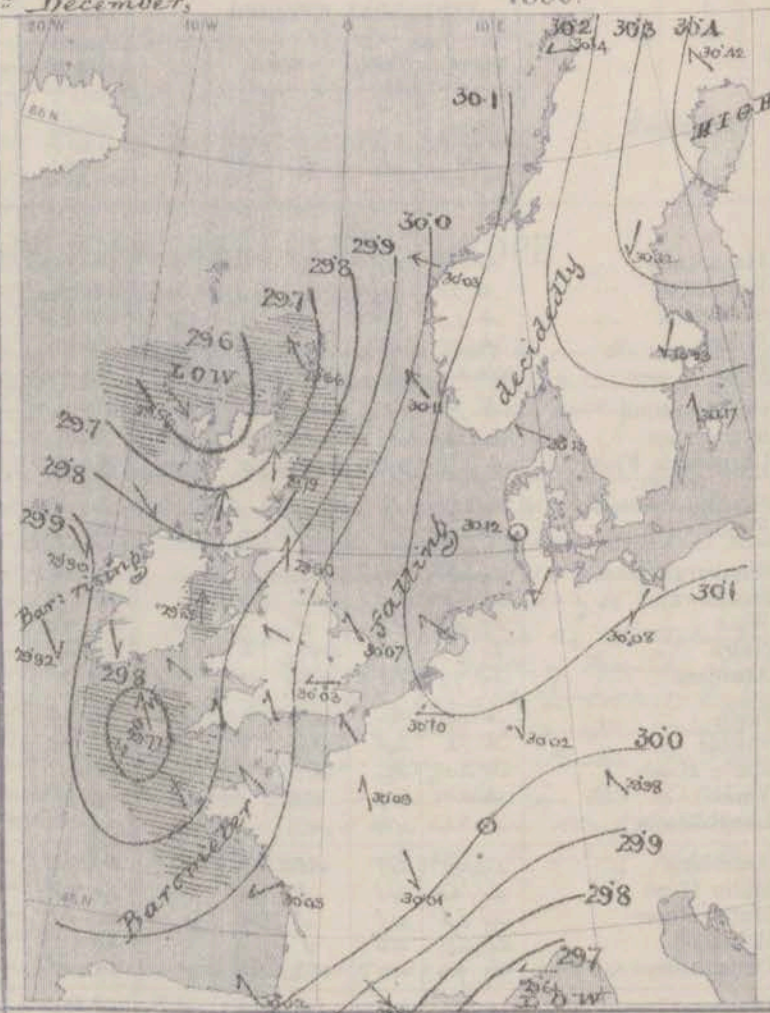
▨ = Rough. ▨ = High.

### MEAN HEIGHT OF THE BAROMETER

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

During the 15 Years; 1871—1885.

STATIONS.	MEAN READINGS.
Sumburgh Head .....	29.667
Stornoway .....	29.701
Wick .....	29.711
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Loughborough .....	29.923
Ardsossan .....	29.819
Donaghadee .....	29.847
Holyhead .....	29.879
Liverpool .....	29.893
Parsonstown .....	29.909
Valencia .....	29.908
Roche's Point .....	29.916
Pembroke .....	29.918
Sally .....	29.962
Jersey .....	29.985
Hurst Castle .....	29.959
Dover .....	29.957
LONDON .....	29.951
Oxford .....	29.954
Cambridge .....	29.968
Yarmouth .....	29.914



## 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.

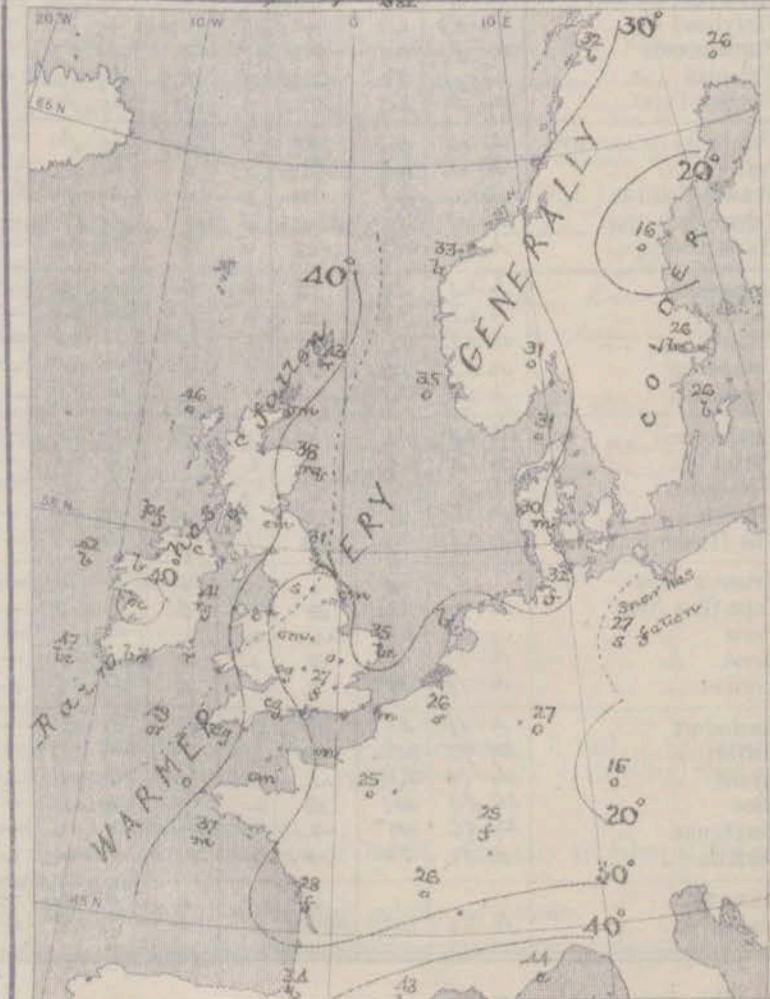
**RAINFALL**—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more are quoted in figures.

### MEANS OF TEMPERATURE IN SHADE, AND RAINFALL

(For the month of December.)

STATIONS.	TEMPERATURE.				RAINFALL (Inches.)
	Daily Max.	Daily Min.	at 8 a.m.	at 8 a.m.	
			Dry.	Wet.	
Sumburgh Head .....	42.5	35.0	39.5	37.0	4.33
Stornoway .....	41.4	33.9	39.2	38.2	5.66
Wick .....	42.1	32.6	38.0	36.6	3.18
Nairn .....	41.7	32.8	37.0	35.5	2.08
Aberdeen .....	42.0	32.5	36.9	35.3	3.34
Leith .....	44.2	33.7	38.6	37.0	2.01
Shields .....	43.1	34.3	38.6	37.2	2.74
York .....	43.7	32.4	36.8	35.7	2.45
Loughborough .....	43.1	32.9	36.9	35.9	2.30
Ardsossan .....	44.6	36.0	40.1	38.7	4.04
Donaghadee .....	45.1	36.2	40.2	39.2	2.84
Holyhead .....	46.7	39.3	43.0	41.4	3.84
Liverpool .....	43.8	36.0	39.3	37.0	2.70
Parsonstown .....	44.8	35.2	37.9	36.6	3.03
Valencia .....	50.0	40.0	41.6	42.3	5.82
Roche's Point .....	48.0	39.0	42.9	41.5	4.74
Pembroke .....	47.1	40.6	43.9	42.5	4.06
Sally .....	49.8	43.8	47.1	45.4	4.10
Jersey .....	47.7	40.1	43.4	41.8	3.87
Hurst Castle .....	46.1	36.9	40.9	40.2	2.84
Dover .....	44.7	36.8	40.3	39.1	3.20
LONDON .....	44.7	34.6	38.5	37.4	2.14
Oxford .....	43.6	34.3	37.7	36.6	2.13
Cambridge .....	43.5	32.3	36.9	36.1	1.99
Yarmouth .....	42.4	34.2	38.3	37.5	2.65

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





# GENERAL SITUATION AT 8 A.M.

PRESSURE	Highest, 30.4 in. and upwards, in the north of Sweden. Lowest, 29.6 in. and less, in the north of Scotland, 29.7 in. and less, over the Gulf of Genoa, 29.8 in. and less, in a small depression lying near Sicily. Gradients moderate over the northern part of our Islands and the North Sea, but slight elsewhere. Barometer rising again in Ireland, but falling elsewhere - chiefly over the eastern part of Great Britain.
TEMPERATURE	Highest, 40° at Scilly, 48° at Lisbon, 47° at Valentia Island, 46° at Stormoway and Malin Head, and 45° at Mullaghmore. Lowest, 15° at Munich, 16° at Kew, 22° at Cambridge, 24° at Lyford, and 25° at Loughborough, Capri, the Helles, Paris and Belfast. The maxima registered over England yesterday were exceedingly low; in the south of London the thermometer during the daytime did not exceed 13°, and during the evening fell to 15°, but afterwards rose to 23°.
WIND	S <sup>1</sup> in most parts of Great Britain, light or moderate in force generally, but strong in the north of Scotland. Light from the NW <sup>1</sup> in Ireland, and from the E <sup>1</sup> or NE <sup>1</sup> over France and Germany. Strong from SE. in the west of Norway, light from the N <sup>1</sup> in Sweden.
WEATHER	Bell generally, with mist or fog at many of the Continental stations, rain in the southwest of England, and snow at Shields, York and Berlin. Rain fell yesterday at most of our western and northern stations; the largest amount being 0.5 in. at Ambrose and Scilly.
SEA	Rough off the north of Scotland and rather rough off the west and southwest of England, but moderate to smooth elsewhere.

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The 'V-shaped' system over our western coasts will probably continue to spread eastwards, and snow is therefore likely in many parts of England. In the extreme west some decrease in temperature is probable.

## FORECASTS

For the 24 hours ending at NOON on 24<sup>TH</sup> DEC: 1890.

DISTRICTS.	FORECASTS.	DISTRICTS.	FORECASTS.
0 SCOTLAND NORTH	S <sup>1</sup> winds, strong to moderate; cloudy, some rain or sleet.	6 SCOTLAND WEST	S <sup>1</sup> winds, freshening; some rain at first then fair.
1 SCOTLAND EAST		7 ENGLAND N.W.	
2 ENGLAND N.E.	Same as No 5	8 ENGLAND S.W.	S <sup>1</sup> winds, shifting to the W <sup>1</sup> or NW <sup>1</sup> ; unsettled, some rain.
3 ENGLAND EAST		9 IRELAND NORTH	NW <sup>1</sup> winds, moderate or fresh; fair generally, cooler.
4 MIDLAND COUNTIES		10 IRELAND SOUTH	
5 ENGLAND SOUTH	SE <sup>1</sup> and S <sup>1</sup> winds freshening; unsettled, some snow.	WARNINGS	The SOUTH CONE has been lowered this morning in districts 6, 7, 9, and 10, but is still flying in districts 0 to 2, 8, and part of 5.

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.

	THER: WIND								THER: WIND						
	BAR:	D.	W.	D.	F.	WEA.	SEA		BAR:	D.	W.	D.	F.	WEA.	SEA
Skudesnaes ...	30.27	37	36	SE	4	0	2	Holyhead ...	30.12	38	36	S	4	cm	3
Sumburgh Head ...	29.94	42	41	SE	3	0	4	Valencia ...	29.85	49	45	SE	5	7m	6
Stornoway ...	29.77	40	44	SE	9	0	7	Scilly ...	30.12	46	45	SE	5	0m	3
Aberdeen ...	30.05	35	32	S	3	c	3	Jersey ...	30.24	41	39	ENE	3	0m	3
Shields ...	30.10	31	31	SE	3	m	2	Dungeness ...	30.23	39	37	E	4	0m	3
Ardrossan ...	30.05	39	38	SE	3	0	2	London ...	30.20	24	24	X	0	8m	3
Malin Head ...	29.81	42	40	S	6	0	3	Yarmouth ...	30.20	33	32	N	1	8m	3
Mullaghmore ...	29.80	47	43	S	8	0g	6	Rocheport ...	30.20	36	35	ENE	3	m	2
Belmullet ...	29.74	46	45	S	6	0	*								

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

Weather in morning fine and bright on the coast of Norway and on the various shores of the North Sea, and over the British Peninsula, very foggy over the inland parts of England, and at many of the French, German, and Austrian stations, dull elsewhere; rain falling at Valencia, and also at Malta and Palermo, afterwards becoming general at our western and northern stations, and falling in considerable quantity over Ireland. Dense fog over London all day.

Temperature risen in Spain, Ireland, Scotland, and Eastern Russia, fallen in most other places, rapidly in London, at Oxford and over the Baltic Provinces. Lowest morning readings (1) -11° F. at Moscow, -3° at Kharkov, +1° at Kiev, 3° at St. Petersburg, and 8° at Riga; (2) 3° at Munich, 14° at Vienna, 21° at Prague, 22° at Berlin, 27° at Paris; (3) 4° at Cambridge, 9° at Oxford, 10° at Loughborough, 15° in London, 16° at York and 22° at Liverpool. Changing very irregularly over our Islands later, and falling several degrees over England, though continuing below the freezing point all day; touching 52° at Valencia, 47° at Scilly, Roches Point, and Mullaghmore, and 47° at Carranstown.

Wind S<sup>3</sup> in Ireland and Scotland, and blowing a moderate gale at the extreme western stations, E<sup>3</sup> in the west and south of France and also in Norway, very variable and light elsewhere, calm over the inland parts of England. S<sup>3</sup> winds increasing in force later, blowing a strong gale in the Hebrides and west of Ireland, and spreading to Wales and the west of England. Calms continuing in London.

Barometer highest 30.4 ins. to 30.2 ins. in a complete anticyclone covering our Islands, the North Sea, Germany, and Austria, and 30.5 ins. to 30.8 ins. and more over Central Russia; exceeding 30.2 ins. over Spain. Lowest, 29.5 ins. and less, in a well-marked depression over Algeria, 29.9 ins. and less off our extreme northwest coasts. Falling at our western stations all day, and forming steep gradients for S<sup>3</sup> winds in those regions; fall spreading eastward.

### 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, 24<sup>th</sup> December, 1890.*  
*Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.*

STATIONS.		YESTERDAY EVENING.					8 A.M. TO DAY.								PAST 24 HOURS.			
		BAROM.: Reading at 32° F. and Sea Level.	TEMP. Dry.	WIND.		Weather.	BAROMETER. Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	SHADE TEMP.			WIND.		Weather.	Sea. (0 to 4).	SHADE TEMP.		Amount of Rainfall.
				Dir.	Force. (0 to 12).				Dry.	Wet.	Difference from 8 a.m. yesterday.	Dir.	Force. (0 to 12).			Max.	Min.	
SCANDINAVIA.	Haparanda ....	30.48	17	SE.	4	0	30.44	+0.2	17	17	-9	SE.	4	0	*	28	16	-
	Hernösand ...	30.30	26	E.	2	0	30.35	+0.3	30	29	+14	SE.	2	0	*	30	12	0.16
	Stockholm ...	30.29	26	E.	0	0	30.41	+1.8	28	27	+2	E.	2	0	*	31	25	-
	Wisby ...	30.23	31	SE.	4	6	30.27	+1.0	31	30	+5	ENE	4	0	*	32	25	0.08
	Bodo ...	30.09	33	E.	4	6	29.99	-1.5	35	33	+3	E.	2	0	1	?	30	-
	Christiansund ...	29.99	36	SE.	6	0	30.06	+0.3	39	36	+6	SEW	3	0	4	39	?	-
	Skudesnaes ...	30.13	36	SE.	6	0	30.26	+1.5	35	33	0	SE.	2	0	5	36	34	-
	Christiania Fjord (Færder) ...	30.23	31	SE.	3	0	30.36	+1.9	29	28	-2	E.	0	6c	1	32	28	-
	Skagen (The Seaw)	30.23	28	E.	0	0	30.35	+1.2	28	27	-3	SE.	1	0	1	?	21	-
	Fanø ...	30.21	24	ESE.	2	0	30.31	+1.9	20	20	-10	E.	1	6	*	30	19	-
BRITISH ISLANDS.	Sumburgh Head ...	29.78	44	WNW	3	0	30.11	+1.5	45	45	+2	W	2	0	3	46	41	0.08
	Stornoway ...	29.96	39	NW	4	0	30.17	+1.6	45	44	-1	SE.	4	0	4	46	36	0.02
	Wick ...	29.90	41	NW	1	6	30.20	+1.55	39	38	-3	SW	2	6c	1	43	35	0.03
	Nairn ...	29.95	41	WSW	2	0	30.22	+1.6	40	39	-4	WSW	1	6	1	47	34	-
	Aberdeen ...	29.98	38	W	2	6c	30.28	+1.49	33	31	-5	SW	1	6m	3	42	32	0.02
	Leith ...	29.98	39	W	1	6	30.28	+1.50	32	32	-9	E.	0	6	*	44	29	-
	Shields ...	29.99	33	SSW	2	0m	30.28	+1.38	38	36	+1	NW	2	6	2	38	29	0.14
	Spurn Head ...	30.07	30	SSW	3	0m	30.29	+1.28	30	30	+1	SW	1	0m	2	31	29	-
	York ...	30.08	30	S	1	0	?	?	33	33	+5	S	1	6	*	39	27	0.07
	Loughborough ...	30.07	29	E.	1	0	30.32	+1.30	30	29	+5	SE.	1	0gm	*	30	25	0.04
BRITISH ISLANDS.	Ardrossan ...	30.03	41	E.	0	6j	30.31	+1.52	33	33	-10	E.	0	6j	0	48	32	-
	Malin Head ...	30.06	45	WNW	3	6	30.29	+1.51	39	37	-7	S	2	6	2	46	38	0.01
	Mullaghmore ...	30.11	44	WNW	2	6c	30.32	+1.49	34	33	-11	E.	0	6	3	47	33	-
	Belmullet ...	30.14	42	N	1	0	30.33	+1.45	35	35	-7	SSE	1	6	*	47	33	-
	Donaghadee ...	30.06	47	NNE	3	6c	30.33	+1.50	37	37	-7	W	2	6c	0	48	34	0.01
	Liverpool (Bidston)	30.05	33	SE.	2	7	30.31	+1.41	35	34	+4	ESE	1	0j	1	35	31	0.13
	Holyhead ...	30.03	42	ESE	1	0	30.31	+1.46	30	29	-2	E.	0	0gm	0	43	38	0.23
	Parsonstown ...	30.09	37	E.	0	6	30.35	+1.48	26	26	-12	E.	0	6	*	44	26	-
	Valencia ...	30.12	47	N	3	0	30.35	+1.43	38	37	-9	NW	1	6	1	49	37	0.02
	Roche's Point...	30.06	43	N	3	6	30.30	+1.45	37	35	-7	N	2	6c	3	49	36	-
BRITISH ISLANDS.	Pembroke (St. Ann's Hd.)	30.00	30	ENE	4	7	30.29	+1.45	39	38	-4	E.	2	6	4	43	39	0.57
	Scilly ...	29.81	48	N	5	7	30.20	+1.43	44	42	-5	ENE	4	0	6	50	41	0.56
	Prawle Point ...	29.95	43	E.	5	7	30.26	+1.36	39	38	-5	ENE	4	0gm	3	44	37	0.23
	Jersey (St. Aubin's)	29.95	36	SE.	3	0	30.26	+1.27	31	30	-5	ESE	3	0m	3	36	31	-
	Hurst Castle ...	29.97	38	ESE	3	0q	30.30	+1.31	32	32	-4	ENE	4	6	1	39	32	-
	Dungeness ...	30.05	32	SSE	3	0q	30.27	+1.23	32	32	+1	SSE	4	0	2	32	30	-
	London ...	30.06	32	SSE	1	0	30.34	+1.31	28	27	+1	SSE	2	0j	*	33	27	-
	Oxford ...	30.11	31	ESE	1	0	30.35	+1.32	26	26	+2	E.	1	0m	*	32	24	-
	Cambridge ...	30.10	30	SE.	1	0	30.37	+1.32	29	29	+7	SE.	1	0	*	31	21	-
	Yarmouth ...	30.07	35	E.	3	0	30.32	+1.25	33	32	-2	SSE	3	0	3	35	31	-
GERMANY & HOLLAND.	Cuxhaven ...	30.13	29	NNE	1	5	30.32	+1.16	29	27	-3	NNE	2	0	*	?	27	-
	Berlin ...	30.06	28	NW	3	5	30.18	+1.10	30	29	+3	NW	2	0	*	30	25	0.04
	Wiesbaden ...	*	*	*	*	*	30.24	+1.22	29	28	+2	NNE	3	0	*	32	?	-
	Munich ...	30.00	18	SW	3	0	30.12	+1.16	21	20	+6	NW	2	0	*	21	15	0.04
	The Helder ...	30.19	20	SE.	1	5	30.37	+1.24	23	23	-2	SE.	1	6	1	25	19	-
	Brussels (St. Ann's)	*	*	*	*	*	30.33	+1.23	21	21	-5	ENE	1	6	*	28	21	-
	Cape Gris Nez ...	30.05	26	SSE	1	0	30.28	+1.25	24	23	-1	SE.	3	6c	2	36	23	-
	Paris ...	30.08	29	NNE	2	0	30.25	+1.16	25	24	0	NNE	3	6c	*	30	24	-
	Brest ...	29.88	41	SSE	5	7	30.15	+1.30	37	36	-7	E.	3	0	3	46	34	0.08
	Lorient ...	29.91	36	SE.	5	7	30.15	+1.19	29	28	-8	E.	5	0	5	37	28	0.08
FRANCE AND BELGIUM.	Rochefort ...	30.05	30	ESE	3	0	30.09	+1.04	30	29	+2	ENE	4	0	*	32	23	-
	Belfort ...	?	23	NW	1	0	?	?	25	?	0	NW	1	6	*	29	17	-
	Lyons ...	30.01	28	E.	3	0	30.09	+1.08	26	24	0	WNW	2	0	*	29	26	-
	Nice ...	29.65	43	E.	3	6	29.73	+1.09	40	34	-4	E.	4	6	2	50	34	-
	Perpignan ...	29.81	43	NW	4	6c	29.88	+1.06	43	36	0	NW	4	0	*	47	39	-
	Biarritz ...	29.97	42	SE.	3	0	29.98	+1.04	39	39	+5	SE.	3	0	2	46	?	-
	Corunna ...	30.09	*	*	*	*	30.09	-0.06	47	44	-1	WNW	4	6	?	32	46	0.08
	Lisbon ...	30.09	30	E.	4	6	30.09	-0.06	47	44	-1	WNW	4	6	?	32	46	0.08
	Peninsular ...	30.09	30	E.	4	6	30.09	-0.06	47	44	-1	WNW	4	6	?	32	46	0.08
	Peninsular ...	30.09	30	E.	4	6	30.09	-0.06	47	44	-1	WNW	4	6	?	32	46	0.08

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

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



# WEATHER CHARTS

for 8 a.m. on

Wednesday, 24<sup>th</sup> December,

1890.

## BAROMETER, WIND AND SEA.

### EXPLANATION OF MAP

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

Changes since previous morning are stated in words.

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

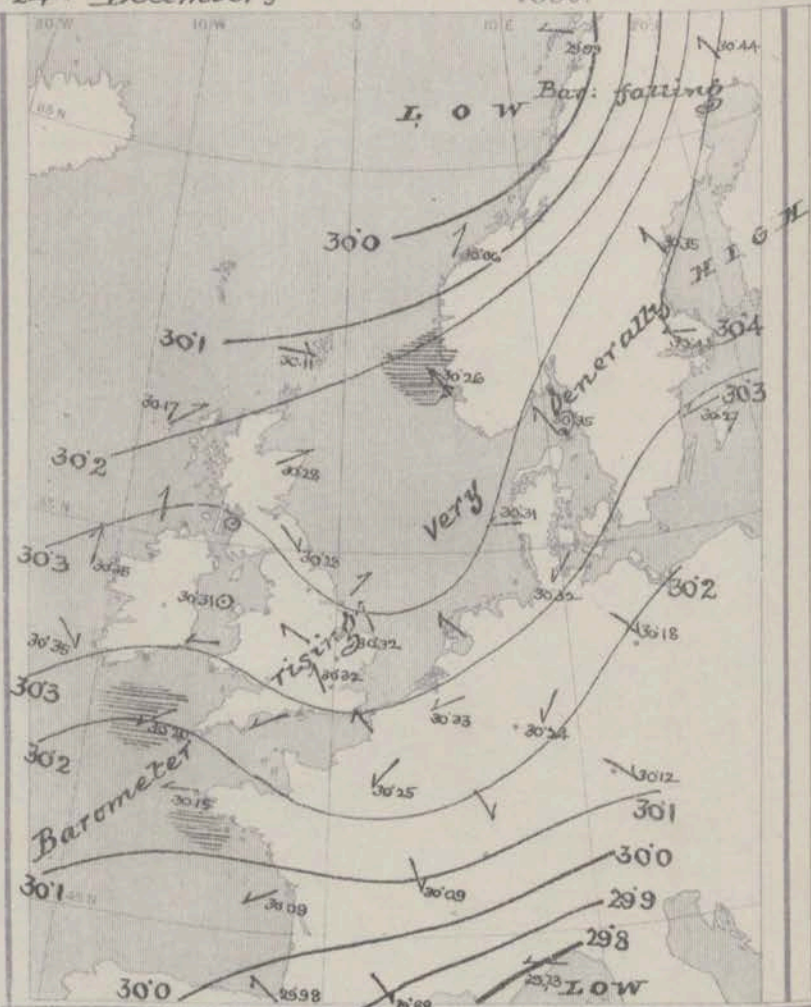
▨ = Rough. ▨ = High.

## MEAN HEIGHT OF THE BAROMETER

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

During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS.
Sumburgh Head	29.687
Stornoway	29.701
Wick	29.711
Nairn	29.739
Aberdeen	29.757
Leith	29.803
Shields	29.843
York	29.888
Loughborough	29.923
Ardrossan	29.819
Donaghadee	29.847
Holyhead	29.879
Liverpool	29.855
Parsonstown	29.900
Valencia	29.908
Roche's Point	29.915
Pembroke	29.918
Silly	29.962
Jersey	29.985
Hurst Castle	29.959
Dover	29.957
LONDON	29.951
Oxford	29.954
Cambridge	29.938
Yarmouth	29.914



## 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.

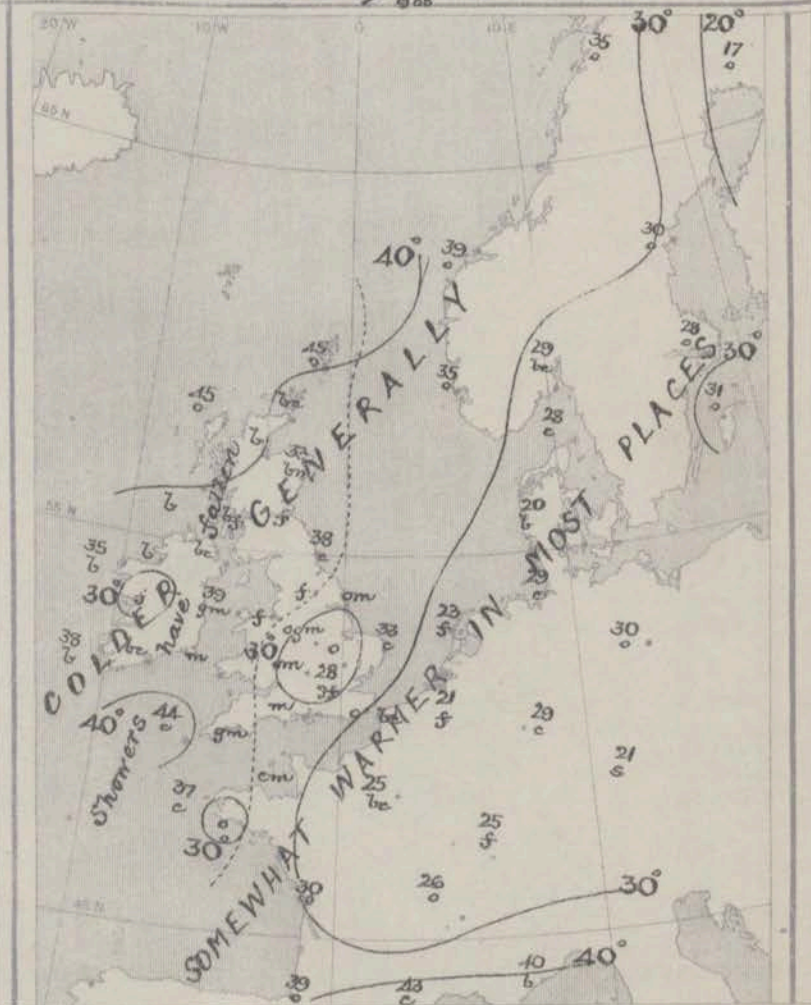
**RAINFALL**—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more are quoted in figures.

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(For the month of December.)

STATIONS.	TEMPERATURE.				RAINFALL. (Inches.)
	Daily Max.	Daily Min.	at 8 a.m. Dry.	Wet.	
Sumburgh Head	43.5	35.0	39.5	37.9	4.33
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Ardrossan	44.6	39.0	40.1	38.7	4.04
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Hurst Castle	46.1	36.9	40.9	40.2	2.84
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Oxford	43.6	34.3	37.7	36.0	2.13
Cambridge	43.5	32.3	36.9	36.1	1.99
Yarmouth	42.4	31.2	38.3	37.5	2.95

**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 the Gulf of Bothnia; 30.3 in: and upwards in a broad band extending southwards across Denmark and the Netherlands and eastwards across England and Ireland to the Atlantic.

Lowest, 29.8 in: and less, over the Gulf of Genoa; 30.0 in: and less, in a depression lying off the northwest of Norway.

Gradients, slight generally, but moderate over the northern part of Scandinavia. Barometer rising at all but a few of the Scandinavian stations.

## TEMPERATURE

Highest, 47° at Lybony, 45° at Lumburg, 44° at Lomoway, 44° at Kelly, 43° at Papieman, and 40° at Nain and Neis.

Lowest, 17° at Haparanda, 20° at Jarna, 21° at Brunel and Munich, 23° at the Helder, and 24° at Cape Gir Nez.

The maxima registered yesterday were below the freezing point at some of the English stations.

## WIND

Light or moderate from the E<sup>2</sup> over the greater part of England, France and the Netherlands.

Light from the SW<sup>2</sup> in the north of Scotland, SE in Scandinavia, with a gale at Skudesnaes.

Variable in Ireland, light from the NW<sup>2</sup> in Germany.

Time in Ireland, Scotland, Denmark, and the central and southern parts of France.

## WEATHER

Dull elsewhere with fog or mist in many places, and snow at Munich.

Rain or snow fell yesterday at most of our western and northern stations.

## SEA

Slight or smooth generally, but rough at the mouth of the Channel, and rather rough at Skudesnaes.

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

There are at present no indications of any decided change in the weather. That is likely to continue over England, with fog in many places.

## FORECASTS

For the 24 hours ending at NOON on 25<sup>th</sup> DEC: 1890.

### DISTRICTS.

### FORECASTS.

0 SCOTLAND  
NORTH

SW<sup>2</sup> winds, light or moderate; drizzle  
rain locally.

1 SCOTLAND  
EAST

Light variable airs; cold, foggy.

2 ENGLAND  
N.E.

3 ENGLAND  
EAST

4 MIDLAND  
COUNTIES

5 ENGLAND  
SOUTH

E<sup>2</sup> winds, light; drizzle, gloomy, local fogs.

### DISTRICTS.

### FORECASTS.

6 SCOTLAND  
WEST

7 ENGLAND  
N.W.

8 ENGLAND  
S.W.

9 IRELAND  
NORTH

10 IRELAND  
SOUTH

Same as No 1 and.

E<sup>2</sup> winds, light or moderate;  
cloudy, misty.

S<sup>2</sup> or SW<sup>2</sup> winds, light, fair generally.

Light breezes, chiefly E<sup>2</sup>, fair generally.

### WARNINGS

NONE ISSUED.

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



# YESTERDAY'S 2 P.M. REPORTS.

	BAR:	THER:		WIND				SEA		BAR:	THER:		WIND				SEA
		D.	W.	D.	F.	WEA.					D.	W.	D.	F.	WEA.		
Skudesnaes ...	30.09	36	32	SE	0	0	3			Holyhead ...	29.92	43	42	E	3	Agm	3
Sumburgh Head ...	29.69	44	44	SW	3	r	5			Valencia ...	30.03	49	46	N	3	60p	3
Stornoway ...	29.86	45	43	NW	3	bc	4			Scilly ...	29.77	50	50	N	4	of	3
Aberdeen ...	29.85	39	37	SW	2	c	4			Jersey ...	29.96	36	38	SE	3	c	3
Shields ...	29.93	32	32	SSW	2	oa	2			Dungeness ...	30.02	32	32	SEE	3	o	2
Ardrossan ...	29.91	40	39	NW	2	b	1			London ...	30.03	33	32	ESE	1	ofg	3
Malin Head ...	29.95	46	46	NW	3	bc	3			Yarmouth ...	30.04	34	33	SEE	3	8	4
Mullaghmore ...	29.99	46	46	NW	4	b	3			Rocheport ...	29.49	29	29	ESE	3	m	?
Belmullet ...							*										

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

Weather in morning fine and bright in Ireland, the northwest of Norway and also on the south and east coasts of Spain; dull and gloomy elsewhere, with rain at Sumburgh H<sup>d</sup>. in Wales, and the Scilly Islands, fog and haze in several parts of England and the north of France, snow in north Germany and at Lemberg. Considerable rain in Wales and the west of England later, and a smaller amount in Brittany; slight local falls over the northern part of England and in Germany. Sky continuously overcast in London.

Temperature risen fast over England, slightly over the North Sea, falling again in Ireland. Morning readings exceeding 40° in the western parts of our Islands and the Spanish Peninsula, (49° at Scilly and 47° at Valencia) and exceeding 50° in the south of Italy, and some parts of Algeria; below 30° over the eastern and midland counties of England, and as low as (1) -13° F. at Moscow, 0 (zero) at Kharkov, +5° at Petersburg, 6° at Kiev, 12° at Nicolaïff, Odessa and Riga; (2) 15° at Munich, 16° at Munster, 25° at Paris, 27° at Berlin and London. Touching the freezing point in London later, but falling fast again over Ireland.

Wind very variable. Very light from S and SE. over Russia, Germany and the Baltic, moderate S over England, strong over Scotland, and moderate NW to N over Ireland, E over the north of Italy, NW over the Gulf of Lyons and eastern and southern parts of the Mediterranean. S wind over Scotland dying out later, and winds becoming light over our Islands generally.

Barometer highest, 30.7 ins: and more to 30.2 ins: over Russia, Finland, Sweden, and the Gulf of Bothnia; lowest 29.5 ins: and less, in a large depression over the Mediterranean, 29.6 ins: and less, in another off our northern coast, and 29.8 ins: and less, in a small one near Scilly. Rising throughout our Islands later.

## NOTICE.

The Report for tomorrow (Christmas Day) will be issued on Saturday the 27<sup>th</sup> inst:.

## 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. ngly, 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 25<sup>th</sup> DEC<sup>r</sup> 1890.  
 Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.

STATIONS.		YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
		Barom. Reading at 32° F. and Sea Level.	Temp. Dry.	Wind.		Weather.	Barometer. Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Shade Temp.			Wind.		Sea. (0 to 10)	Shade Temp.				
				Dirce.	Force. (0 to 12.)				Dry.	Wet.	Difference from 8 a.m. yesterday.	Dirce.	Force. (0 to 12.)		Weather.	Max.	Min.	Amount of Rainfall.	
SCANDINAVIA.	Haparanda ...	30.51	26	SW	4	0	30.52	+ .08	28	28	+ 11	SW	4	0	•	•	16	0.04	
	Hernösand ...	30.56	18	Z	0	6	30.57	+ .02	17	15	- 13	Z	0	0	•	•	34	7	
	Stockholm ...	30.53	26	N	2	0	30.50	+ .09	27	26	- 1	Z	0	0	•	•	30	25	
	Wishby ...	30.32	24	ESE	4	0	30.36	+ .09	30	26	- 1	SE	4	0	•	•	32	27	
	Bodö ...	30.10	39	SSE	2	0	30.19	+ .20	41	35	+ 6	SSE	2	0	1	•	34	0.04	
	Christiansund ...	30.26	42	ESE	3	bc	30.22	+ .16	35	32	- 4	ESE	2	6	4	•	43	35	
	Skudesnaes ...	30.42	36	ESE	6	0	30.33	+ .07	34	31	- 1	SE	6	0	5	•	36	34	
	Christiania Fjord (Færdar)	30.50	29	NNE	2	0	30.44	+ .08	24	24	- 5	NNE	4	0	1	•	29	21	
	Skagen (The Scaw)	30.45	25	NE	2	6	30.48	- .07	28	27	0	NE	5	0	3	•	30	25	
	Fanö ...	30.29	25	N	2	0	30.21	- .00	25	25	+ 5	Z	0	0	•	•	27	16	
BRITISH ISLANDS.	Sumburgh Head	30.19	45	WSW	2	0	30.98	- .13	43	41	- 2	S	3	0	4	•	47	43	0.03
	Stornoway ...	30.14	46	SW	5	0	30.94	- .23	43	43	- 2	W	5	0	4	•	48	41	0.02
	Wick ...	30.23	42	Z	0	6	30.00	- .20	42	40	+ 3	SW	1	0	0	•	45	38	
	Nairn ...	30.04	36	Z	0	6	30.01	- .21	40	38	0	WSW	1	0	1	•	45	32	
	Aberdeen ...	30.29	34	SW	1	6	30.13	- .15	36	34	+ 3	S	2	0	3	•	38	29	
	Leith ...	30.30	35	Z	0	m	30.15	- .13	39	39	+ 7	SE	1	0	2	•	41	27	
	Shields ...	30.32	40	Z	0	m	30.19	- .09	34	34	+ 4	SSW	2	0	2	•	42	32	
	Spurn Head ...	30.25	21	S	2	cm	30.26	- .03	30	29	0	SW	3	0	3	•	32	28	
	York ...	30.34	32	S	1	0	30.35	- .01	30	30	- 3	SSE	1	0	•	•	33	27	
	Loughborough	30.17	29	SE	1	0	30.32	- .00	21	21	- 9	WNW	1	0	•	•	30	21	
GERMANY & HOLLAND.	Ardrossan ...	30.29	38	ENE	1	6	30.12	- .19	43	43	+ 10	S	4	0	3	•	43	32	0.01
	Malin Head ...	30.25	38	S	3	bc	30.07	- .22	43	42	+ 4	NY	3	0	3	•	44	35	
	Mallaghmore ...	30.28	39	S	2	6	30.14	- .15	41	40	+ 7	SW	4	0	3	•	43	38	
	Belmullet ...	30.26	38	SE	2	6	30.19	- .16	44	42	+ 9	NNW	1	0	•	•	45	34	0.12
	Donaghadee ...	30.32	24	SW	2	bc	30.18	- .15	36	36	+ 1	SW	2	0	0	•	45	34	
	Liverpool (Bidston)	30.34	35	SE	1	0	30.27	- .04	28	27	- 7	SE	3	0	2	•	38	28	
	Holyhead ...	30.32	39	Z	0	0	30.24	- .07	40	38	+ 1	SSW	3	0	2	•	42	38	0.01
	Parsonstown ...	30.30	26	Z	0	6	30.22	- .13	36	35	+ 10	Z	0	0	•	•	37	24	
	Valencia ...	30.28	41	ESE	2	0	30.24	- .11	45	45	+ 7	S	1	0	2	•	45	37	0.03
	Roche's Point...	30.30	45	SE	4	0	30.26	- .04	42	41	+ 5	WNW	3	0	4	•	45	37	
FRANCE AND BELGIUM.	Pembroke (St. Ann's Id.)	30.35	28	E	2	m	30.28	- .01	36	35	- 3	SE	3	0	2	•	40	38	
	Scilly ...	30.26	42	E	3	bc	30.26	+ .06	40	39	- 4	Z	0	0	5	•	44	39	
	Prawle Point ...	30.31	36	ENE	3	0	30.33	+ .07	30	30	- 9	N	2	0	1	•	39	29	
	Jersey (St. Aubin's)	30.32	33	E	3	0	30.31	+ .05	31	28	0	E	2	0	2	•	38	29	
	Hurst Castle ...	30.35	34	NE	2	0	30.33	+ .03	20	20	- 12	NE	3	0	1	•	34	20	
	Dungeness ...	30.24	24	SSE	3	0	30.20	+ .03	28	28	- 4	Z	0	0	1	•	38	26	
	London ...	30.40	29	SE	1	0	30.33	- .01	24	23	- 2	SW	1	0	•	•	34	22	
	Oxford ...	30.40	27	E	1	0	30.33	- .04	24	23	- 5	E	1	0	•	•	34	22	
	Cambridge ...	30.29	30	E	1	0	30.33	- .04	24	23	- 5	E	1	0	•	•	34	22	
	Yarmouth ...	30.36	32	SSE	1	0	30.30	- .02	29	29	- 4	SSE	2	0	3	•	33	27	
GERMANY & HOLLAND.	Cuxhaven ...	30.26	28	NE	3	f	30.30	- .02	31	30	+ 2	ENE	1	0	•	•	31	28	
	Berlin ...	30.25	29	N	3	0	30.30	+ .12	23	22	- 7	SW	2	0	•	•	32	28	
	Wiesbaden ...	*	*	*	*	*	30.28	+ .04	29	25	0	N	2	0	•	•	32	28	
	Munich ...	30.18	21	Z	0	5	30.13	+ .01	19	19	- 2	NE	7	0	•	•	25	19	0.04
	The Helder ...	30.44	23	SE	1	5	30.28	- .09	27	27	+ 4	E	1	0	1	•	32	23	0.16
	Brussels (9 a.m.)	*	*	*	*	*	30.34	+ .01	21	21	0	NNE	1	0	•	•	23	19	
	Cape Gris Nez	30.32	20	E	2	m	30.30	+ .02	19	19	- 5	SE	1	0	1	•	28	18	
	Paris ...	30.29	26	NNE	3	0	30.29	+ .04	21	20	- 4	NE	2	0	•	•	31	20	
	Brest ...	30.28	35	E	3	0	30.28	+ .13	32	30	- 5	E	2	0	3	•	41	25	
	Lorient ...	30.19	32	NE	5	bc	30.26	+ .11	29	26	0	NE	2	0	4	•	36	28	
FRANCE AND BELGIUM.	Rochefort ...	30.13	32	ENE	5	0	30.16	+ .07	26	26	- 4	ENE	5	0	2	•	34	19	
	Belfort ...	30.08	23	SW	1	0	30.19	+ .10	17	17	- 9	E	1	0	•	•	28	17	
	Lyons ...	30.15	24	N	1	0	30.19	+ .10	17	17	- 9	W	1	0	•	•	29	16	
	Nice ...	30.10	26	SW	3	6	30.10	+ .22	26	25	- 17	SW	2	0	•	•	57	25	
	Perpignan ...	29.93	42	?	3	m	30.10	+ .12	32	31	- 7	E	3	0	3	•	45	28	
	Biarritz ...	30.02	35	?	3	m	30.10	+ .12	32	31	- 7	E	3	0	3	•	45	28	
	Corunna ...	*	*	*	*	*	30.11	+ .11	39	38	- 9	SW	1	0	5	•	52	26	0.04
	Lisbon ...	?	47	NNW	4	6	30.00	- .09	27	26	- 10	NE	4	0	5	•	54	37	

For Explanation of Columns, see bottom of p. 1.

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



# WEATHER CHARTS

for 8 a.m. on

Thursday, 25<sup>th</sup> December,

1890.

## BAROMETER, WIND AND SEA.

### EXPLANATION OF MAP.

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

Changes since previous morning are stated in words.

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

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

→ = forces 5 to 7; → = forces 1 to 4.

○ = dead calm.

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

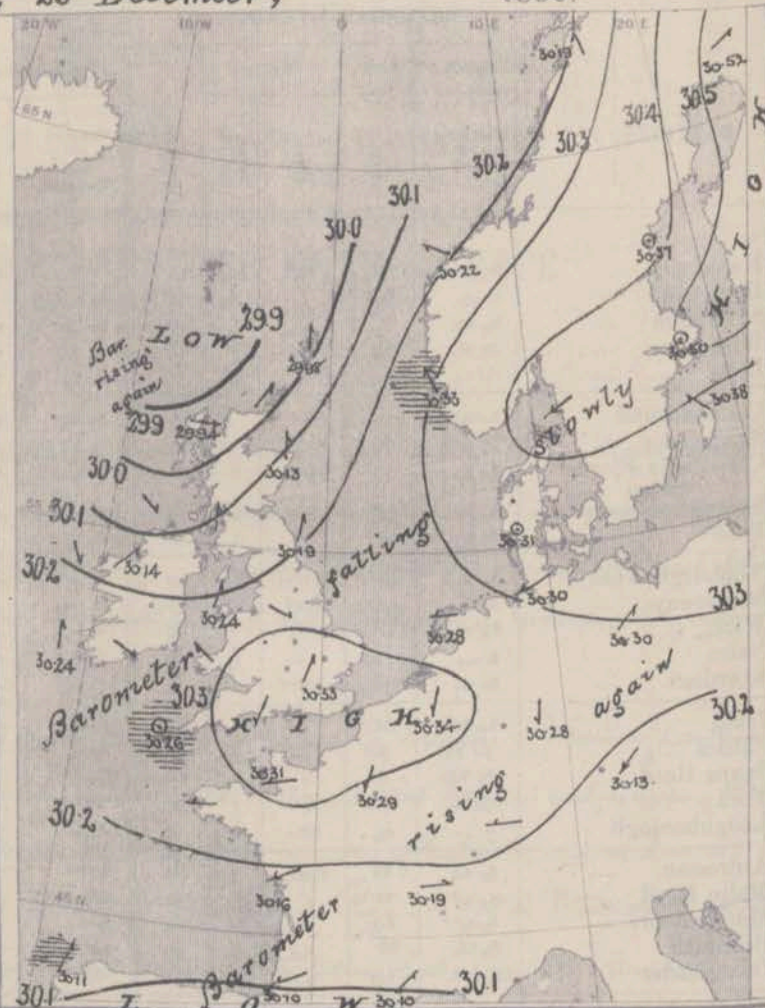
■ = Rough. ■ = High.

### MEAN HEIGHT OF THE BAROMETER

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

During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS.
Sumbargh Head .....	29.667
Stornoway .....	29.701
Wick .....	29.711
Nairn .....	29.739
Aberdeen .....	29.757
Leith .....	29.803
Shields .....	29.843
York .....	29.888
Loughborough .....	29.923
Ardrossan .....	29.819
Donaghadee .....	29.847
Holyhead .....	29.879
Liverpool .....	29.895
Parsonstown .....	29.909
Valencia .....	29.908
Roche's Point .....	29.915
Pembroke .....	29.918
Sally .....	29.962
Jersey .....	29.985
Hurst Castle .....	29.939
Dover .....	29.957
LONDON .....	29.961
Oxford .....	29.954
Cambridge .....	29.938
Yarmouth .....	29.914



## 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.

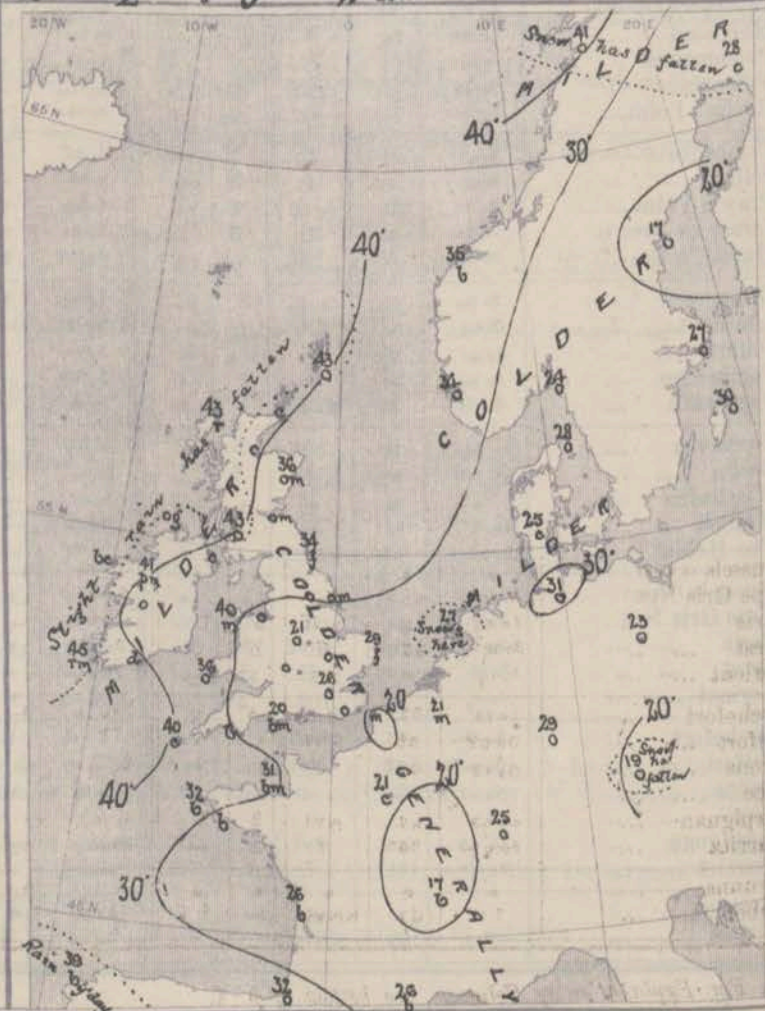
**RAINFALL**—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more are quoted in figures.

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

(For the month of December.)

STATIONS.	TEMPERATURE.				RAINFALL. (Inches.)
	Daily Max.	Daily Min.	at 8 a.m.		
			Dry.	Wet.	
Sumburgh Head.....	42.5	35.0	39.5	37.9	4.33
Stornoway .....	41.4	33.9	39.2	38.2	5.66
Wick .....	42.1	32.6	38.0	36.6	3.18
Nairn .....	41.7	32.8	37.0	35.5	2.08
Aberdeen .....	42.0	32.5	36.9	35.3	3.34
Leith .....	44.2	33.7	38.6	37.0	2.01
Shields .....	43.1	34.3	38.5	37.2	2.74
York .....	42.7	32.4	36.8	35.7	2.45
Loughborough .....	43.1	32.9	36.9	35.9	2.36
Ardrossan .....	44.6	35.0	40.1	38.7	4.04
Donaghadee.....	43.1	36.2	40.2	39.2	2.84
Holyhead .....	46.7	39.3	43.0	41.4	3.84
Liverpool .....	43.8	35.0	39.3	37.6	2.70
Parsonstown .....	44.8	33.2	37.9	36.6	3.02
Valencia .....	50.0	40.0	41.6	42.3	5.82
Roche's Point .....	48.0	39.0	42.9	41.5	4.74
Pembroke.....	47.1	40.6	43.0	42.5	4.06
Scilly .....	49.8	43.8	47.1	45.4	4.10
Jersey .....	47.7	40.1	43.4	41.8	3.87
Hurst Castle .....	46.1	36.9	40.9	40.2	2.84
Dover .....	44.7	36.8	40.3	39.1	3.20
LONDON .....	44.7	34.6	38.5	37.4	2.14
Oxford .....	43.6	34.3	37.7	36.6	2.13
Cambridge .....	43.5	32.3	36.9	36.1	1.99
Yarmouth .....	42.4	34.2	38.3	37.5	2.95

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





# GENERAL SITUATION AT 8 A.M.

PRESSURE	<i>Highest 30.5 ins. and upwards in an anticyclone lying over Lapland and Finland, 30.3 ins. and upwards in another system lying over Belgium, the north of France and the south of England.</i>
TEMPERATURE	<i>Lowest 29.9 ins. less in a depression lying to the north of the Hebrides.</i> <i>Gradients slight. Barometer falling at all but the French &amp; German stations, most in the north of Scotland.</i> <i>Highest 45° at Valencia Island, 44° at Balnakeil, and 43° at Lumburgh, Stornoway, Ardrossan &amp; Malin Head.</i> <i>Lowest 11° at Hertsford and Lyons, 10° at Cape Gris Nez &amp; Munich, 20° at Hurst Castle, 21° at Loughborough, Brussels &amp; Paris.</i> <i>Sharp frost was experienced over England last night, the thermometer falling to 20° at Hurst Castle, and 21° at Loughborough.</i>
WIND	<i>Light or moderate from the S.W. or S.W. over the northern and eastern parts of the United Kingdom.</i> <i>Moderate to strong from the S.E. in the west of Norway; calm or S.W. in Sweden.</i> <i>Light from the E. or N.E. over the Channel and the greater part of France; variable in Germany and the E. of France.</i>
WEATHER	<i>Fine over Spain, France the Channel and the extreme south of England.</i> <i>Dull elsewhere with fog in the east of England, rain in the south of Ireland &amp; at Stornoway &amp; snow at the Hebrides.</i> <i>A little rain fell yesterday at several of our western and northern stations.</i>
SEA	<i>Moderate to smooth generally, but rather rough at the mouth of the Channel, as well as at Corunna and Lisbon.</i>

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

## FORECASTS

For the 24 hours ending at NOON on 26<sup>TH</sup> DECEMBER 1890.

DISTRICTS.	FORECASTS.	DISTRICTS.	FORECASTS.
0 SCOTLAND NORTH	NONE ISSUED	6 SCOTLAND WEST	NONE ISSUED
1 SCOTLAND EAST		7 ENGLAND N.W.	
2 ENGLAND N.E.		8 ENGLAND S.W.	
3 ENGLAND EAST		9 IRELAND NORTH	
4 MIDLAND COUNTIES		10 IRELAND SOUTH	
5 ENGLAND SOUTH			
		WARNINGS	NONE ISSUED

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

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



# YESTERDAY'S 2 P.M. REPORTS.

	BAR.	THER.		WIND		WEA.	SEA.		BAR.	THER.		WIND		WEA.	SEA.
		D.	W.	D.	F.					D.	W.	D.	F.		
Skudesnaes ...	30.26	36	39	SE	7	0	5		Holyhead ...	30.24	42	41	E	1	bm
Sumburgh Head ...	30.16	46	46	W	2	0	3		Valencia ...	30.29	43	40	L	0	bm
Stornoway ...	30.17	48	47	SW	3	c	3		Scilly ...	30.26	44	42	NE	4	bc
Aberdeen ...	30.29	38	35	SW	1	bm	3		Jersey ...	30.25	37	35	ENE	3	c
Shields ...	30.21	42	39	W	2	c	2		Dungeness ...	30.23	31	30	SSE	4	0
Ardrossan ...	30.24	39	35	ENE	1	bc	1		London ...	30.21	34	32	ESE	1	om
Malin Head ...	30.27	43	40	S	2	bc	3		Yarmouth ...	30.25	32	32	SSE	2	c
Mullaghmore ...	30.20	42	41	L	0	bm	2		Rocheport ...	30.10	34	31	E	5	0
Belmullet ...	30.22	42	41	SSE	1	b	*								

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

Weather fine over the Spanish Peninsula, Ireland, and Scotland, as well as at Paris, cloudy or overcast elsewhere, with snow very generally over Austria and South Germany, as well as in some parts of Finland, fog over England, Holland, and the east of France. Not much change later.

Temperature continuing very low for the time of year in almost all places. Morning readings exceeding 50° at Malta, Buda, and over Algeria, and exceeding 40° in Portugal, as well as in the north of Scotland, much lower elsewhere. Lowest -6°F at Moscow, 0 (F) at Kharkov, +5° at Riga, and below 20° over the north of Russia and Finland. Several degrees below the freezing point over Germany, France, and most of the inland parts of England and Ireland. Rising a good deal in Ireland later, little change elsewhere.

Wind mainly E to N over Southern Europe, as well as over the Bay of Biscay, the southern parts of the British Isles and Baltic; SE over Finland, SW in Scotland; very variable elsewhere. Strong to moderate over the Adriatic and northern parts of the Mediterranean, light to moderate at the other stations - a gale reported at Skudesnaes. SE winds settling in over Ireland later, and E breeze freshening over Bay of Biscay.

Barometer rising fast over the British Isles and Northwestern Europe. Highest in morning 30.5 ins. to 30.8 ins. over Russia, 30.5 ins. to 30.8 ins. over Russia, 30.2 ins. to 30.3 ins. and now over the North Sea and British Islands. Lowest 29.7 ins. and less, in a complex depression over the southeastern part of the Mediterranean, 30.0 ins. and less, off the northwest of Norway. Falling a little on the Atlantic coasts of Europe and the British Islands later, rising briskly over England, the North Sea, and Germany.

### EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

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

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

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

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# DAILY WEATHER REPORT.

for *Friday 26th. December.* 1890.  
 Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.

STATIONS.	YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
	BAROM.  Reading at 32° F. and Sea Level.	TEMP.  Dry.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Sea. (0 to 12.)	SHADE TEMP.				
			Direct.	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.	Direct.	Force. (0 to 12.)		Weather.	Max.	Min.	Amount of Rainfall.	
SCANDINAVIA.																		
Haparanda ...	30.44	13	SE	4	0	30.21	-0.31	27	27	+6	S	4	S	30	10	—	—	
Hernösand ...	30.41	25	S	0	0	30.36	-0.01	28	27	+11	S	2	0	28	3	—	—	
Stockholm ...	30.42	32	S	2	0	30.49	-0.01	31	30	+4	S	0	0	32	25	—	—	
Wisby ...	30.37	31	SEW	4	bc	30.45	+0.09	30	28	0	S	4	0	?	27	—	—	
Bodö ...	30.04	32	E	2	bc	30.10	-0.09	34	34	-7	NW	S	m	41	30	—	—	
Christiansund	30.09	37	SE	4	bc	30.42	+0.20	37	34	+2	NW	6	S	37	35	—	—	
Skudesnaes ...	30.26	35	SE	6	S	30.44	+0.11	34	33	0	E	2	0	35	32	—	—	
Christiania Fjord (Færder)	30.32	20	N	3	0	30.43	-0.01	27	26	+3	N	2	0	?	25	—	—	
Skagen (The Scaw)	30.31	26	ESE	2	0	30.39	+0.11	31	30	+3	SE	1	0	?	9	—	—	
Fanö ...	30.31	27	SE	2	C	30.39	+0.08	26	26	+1	SE	4	0	28	25	—	—	
Sumburgh Head	30.09	40	N	2	C	30.51	+0.53	35	34	-8	N	1	bc	44	34	0.08	—	
Stornoway ...	30.22	38	NW	4	C	30.51	+0.57	36	35	-7	NW	3	0	43	30	0.01	—	
Wick ...	30.15	39	NW	2	bc	30.55	+0.55	36	35	-6	NE	2	bc	42	33	—	—	
Nairn ...	30.18	38	NW	1	bc	30.51	+0.50	37	35	-3	NE	1	C	41	34	0.02	—	
Aberdeen ...	30.13	38	NW	4	0.9	30.50	+0.57	36	33	0	N	3	bc	38	35	0.31	—	
Leith ...	30.17	39	SE	1	0	30.44	+0.29	38	36	-1	N	2	C	41	34	0.10	—	
Shields ...	30.13	37	SW	1	P	30.32	+0.19	42	40	+8	NNW	4	0	42	32	0.28	—	
Spurn Head ...	30.18	30	SW	4	om	30.27	+0.01	33	32	+3	S	0	om	33	28	—	—	
York ...	30.17	33	S	1	0	30.33	-0.22	35	35	+5	ESE	1	0	36	29	0.10	—	
Loughborough	30.25	27	S	0	0	30.30	-0.22	30	30	+9	S	0	ogm	30	21	0.01	—	
Ardrossan ...	30.18	40	W	1	bc	30.46	+0.34	36	38	-7	S	0	bc	44	33	—	—	
Malin Head ...	30.25	44	NNW	4	bc	30.47	+0.40	41	37	-2	NE	4	bc	47	40	0.01	—	
Mullaghmore ...	30.31	43	N	5	bc	30.48	+0.34	36	35	-5	S	0	bc	45	34	—	—	
Belmullet ...	30.36	42	NNW	2	bc	30.44	+0.30	36	35	-5	E	1	bc	45	34	0.05	—	
Donaghadee ...	30.21	43	NW	4	bc	30.46	+0.28	42	41	+6	NE	5	bc	44	35	0.10	—	
Liverpool (Bidston)	30.21	35	SE	2	0	30.35	+0.08	37	35	+9	NNW	2	0	38	28	0.05	—	
Holyhead ...	30.20	39	S	3	7.2m	30.38	+0.14	42	39	+2	NE	5	C	45	38	0.49	—	
Parsonstown ...	30.30	35	S	0	0	30.45	+0.33	23	23	-13	S	0	bc	41	23	—	—	
Valencia ...	30.36	44	NNE	2	C	30.46	+0.22	35	34	-10	S	0	bc	48	32	0.10	—	
Roche's Point...	30.30	43	NNW	3	bc	30.40	+0.14	35	33	-7	NE	3	bc	47	34	—	—	
Pembroke (St. Ann's Hd.)	30.21	42	NE	3	bc	30.34	+0.06	39	38	+3	NE	3	C	44	33	0.25	—	
Scilly ...	30.22	45	W	4	T	30.24	-0.02	45	44	+5	NE	4	bc	45	42	0.10	—	
Prawle Point ...	30.28	40	NW	2	0	30.29	-0.04	40	39	+10	SE	3	og	40	30	0.14	—	
Jersey (St. Aubin's)	30.32	31	ESE	6	bm	30.35	+0.04	36	32	+5	SE	3	bm	38	28	—	—	
Hurst Castle ...	30.29	31	E	1	m	30.33	0.0	35	35	+15	SW	1	S	38	20	0.03	—	
Dungeness ...	30.28	32	SW	2	bc	30.31	+0.0	36	35	+8	SW	3	C	37	27	—	—	
London ...	30.28	26	SE	1	C	30.33	-0.0	32	31	+6	S	0	0	32	24	—	—	
Oxford ...	30.29	25	S	1	0	30.33	-0.01	30	30	+6	S	0	ogfs	30	24	0.02	—	
Cambridge ...	30.30	25	S	0	bc	30.32	-0.01	29	29	+5	S	1	0	30	18	—	—	
Yarmouth ...	30.24	28	SW	2	bc	30.31	+0.01	30	30	+1	SW	2	f	32	25	—	—	
GERMANY & HOLLAND.																		
Cuxhaven ...	30.29	30	W	1	f	30.38	+0.08	27	26	-4	S	1	0	22	26	—	—	
Berlin ...	30.35	22	SE	2	C	30.40	+0.10	22	22	-1	SE	2	0	28	19	—	—	
Wiesbaden ...	30.31	21	S	0	0	30.31	+0.03	30	29	+1	S	0	0	32	28	—	—	
Munich ...	30.30	21	S	0	0	30.25	+0.12	20	20	+1	ESE	3	0	25	19	—	—	
The Helder ...	30.28	29	S	1	C	30.34	+0.06	22	22	-5	NE	1	C	30	21	0.08	—	
FRANCE AND BELGIUM.																		
Brussels (9 a.m.)	30.40	23	S	1	m	30.40	+0.06	23	23	+2	E	2	0	24	?	0.04	—	
Cape Gris Nez	30.38	26	S	1	m	30.34	+0.04	27	?	+8	S	1	m	30	?	—	—	
Paris ...	30.33	22	NNE	2	0	30.38	+0.09	19	19	-2	NNW	2	0	27	19	—	—	
Brest ...	30.32	33	E	1	bc	30.24	-0.04	38	37	+6	S	3	0	38	32	—	—	
Lorient ...	30.31	32	NE	2	bc	30.30	+0.04	33	31	+4	E	1	0	34	27	—	—	
Rocheport ...	30.24	29	NE	4	bc	30.30	+0.13	28	21	-3	E	3	bc	34	16	—	—	
Belfort ...	?	23	E	1	0	?	?	26	17	?	N	1	0	29	19	—	—	
Lyons ...	30.23	25	NNW	1	0	30.27	+0.08	23	23	+6	NNW	1	0	26	?	—	—	
Nice ...	30.09	41	E	4	C	30.15	?	39	35	?	E	2	2	45	37	—	—	
Perpignan ...	30.13	36	NNW	2	bc	30.21	+0.11	29	27	+8	W	2	bc	41	?	—	—	
Biarritz ...	30.18	40	N	3	S	30.23	+0.13	32	28	0	E	3	0	41	28	—	—	
PENINSULA.																		
Corunna ...	30.05	47	NE	4	0	30.06	+0.06	42	39	+5	NNE	4	bc	50	?	—	—	
Lisbon ...	+	47	NE	4	0	30.06	+0.06	42	39	+5	NNE	4	bc	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

Friday, 26<sup>th</sup> December,

1890.

## BAROMETER, WIND AND SEA.

### EXPLANATION OF MAP.

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

Changes since previous morning are stated in words.

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

their barbs and feathers refer to force thus—

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

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

○ = dead calm.

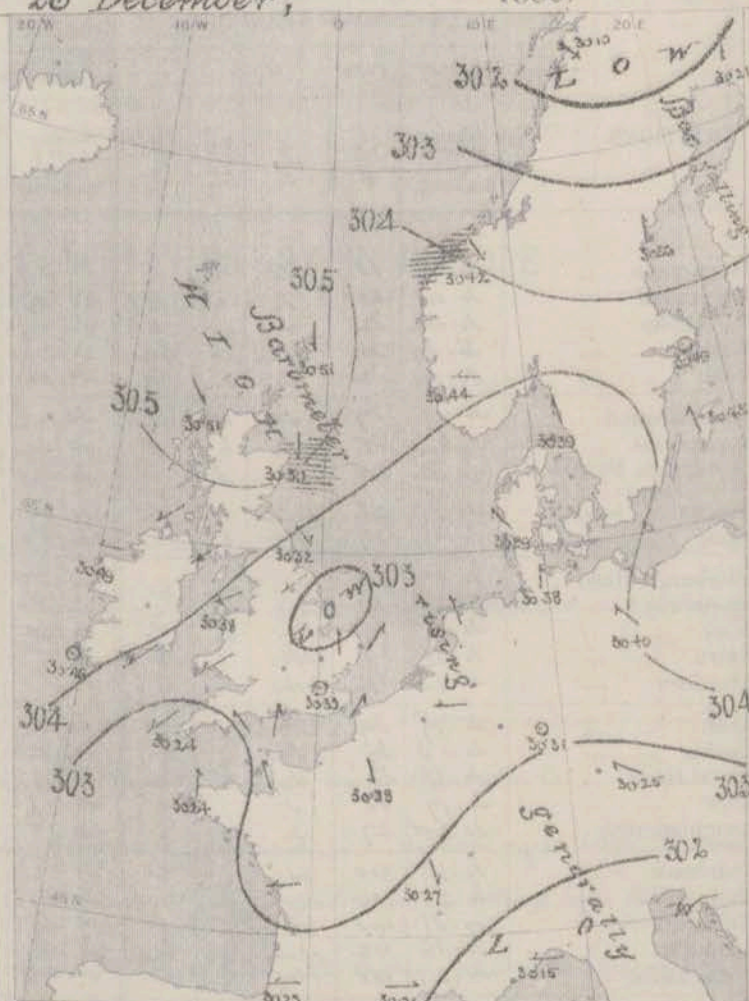
**SEA DISTURBANCE**—Where considerable, is shown thus:

☼ = Rough. ☼ = High.

## MEAN HEIGHT OF THE BAROMETER

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

STATIONS.	MEAN READINGS.
Sumbagh Head .....	29.067
Sternway .....	29.791
Wick .....	29.711
Nairn .....	29.730
Aberdeen .....	29.747
Leith .....	29.803
Shields .....	29.843
York .....	29.888
Loughborough .....	29.923
Ardrossan .....	29.819
Donaghadee .....	29.847
Holyhead .....	29.879
Liverpool .....	29.803
Parsonstown .....	29.909
Valencia .....	29.908
Rocha's Point .....	29.916
Pembroke .....	29.915
Silly .....	29.962
Jersey .....	29.980
Hurst Castle .....	29.959
Dover .....	29.957
LONDON .....	29.951
Oxford .....	29.954
Cambridge .....	29.938
Yarmouth .....	29.914



## 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.

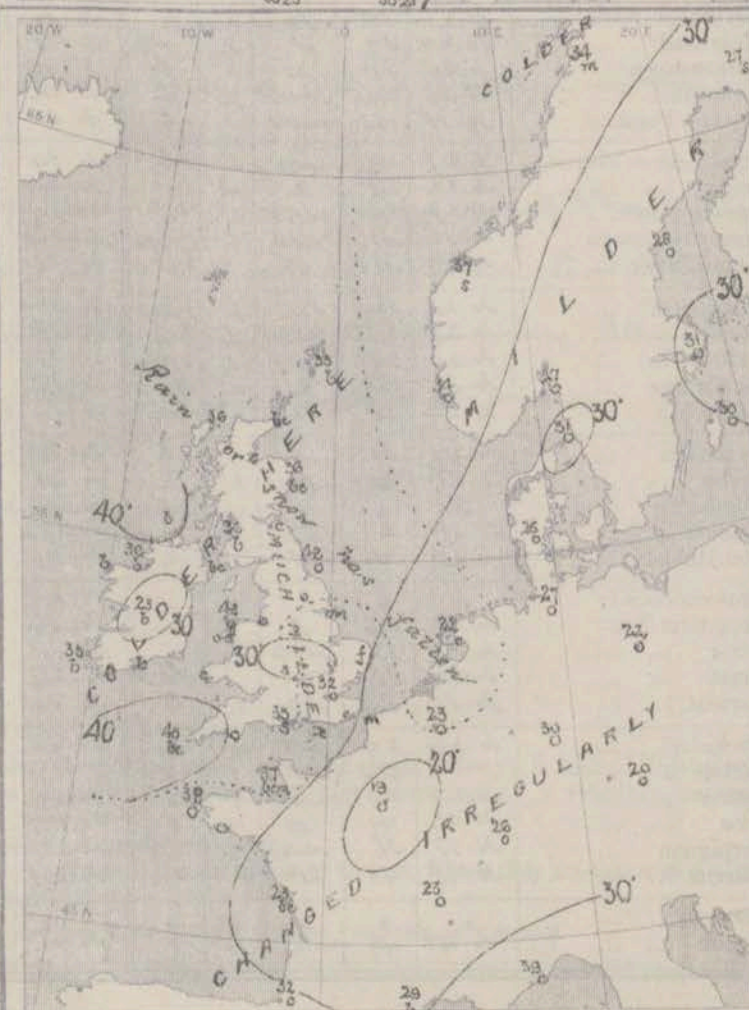
**RAINFALL**—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more are quoted in figures.

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

(For the month of December.)

STATIONS.	TEMPERATURE.				RAINFALL (Inches.)
	Daily Max.	Daily Min.	At 8 a.m. Dry.	At 8 a.m. Wet.	
Sumbagh Head .....	42.5	35.0	39.5	37.9	4.33
Sternway .....	44.4	33.9	39.2	38.2	5.66
Wick .....	42.1	32.0	38.0	36.5	3.18
Nairn .....	41.7	32.8	37.9	35.5	2.08
Aberdeen .....	42.0	32.5	36.9	35.3	3.34
Leith .....	44.2	33.7	38.6	37.0	2.01
Shields .....	43.1	31.3	38.5	37.2	2.74
York .....	42.7	32.4	36.8	35.7	2.45
Loughborough .....	43.1	32.9	36.9	35.9	2.30
Ardrossan .....	44.6	39.0	40.1	38.7	4.04
Donaghadee .....	45.1	36.2	40.2	39.2	2.84
Holyhead .....	46.7	39.3	43.0	41.4	3.84
Liverpool .....	43.8	35.0	39.3	37.6	2.70
Parsonstown .....	44.8	33.2	37.0	36.6	3.02
Valencia .....	50.0	40.0	44.6	42.3	5.82
Rocha's Point .....	48.0	33.0	42.9	41.5	4.74
Pembroke .....	47.1	40.5	43.9	42.5	4.06
Silly .....	49.8	43.8	47.1	45.4	4.10
Jersey .....	47.7	40.1	43.4	41.8	3.87
Hurst Castle .....	46.1	35.9	40.9	40.2	2.84
Dover .....	44.7	36.8	40.3	39.1	3.20
LONDON .....	44.7	34.6	38.5	37.4	2.14
Oxford .....	43.6	34.3	37.7	36.6	2.13
Cambridge .....	43.5	32.3	36.9	36.1	1.99
Yarmouth .....	42.4	34.2	38.3	37.5	2.35

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





# GENERAL SITUATION AT 8 A.M.

PRESSURE	<p>Highest, 30.5 in. and upwards, in an anticyclone lying over and to the northward of Scotland.</p> <p>Lowest, 30.1 in. and less, in a depression lying over the north of Scandinavia.</p> <p>Gradients slight and irregular.</p> <p>Barometer rising generally, but falling a little in the northern parts of Scandinavia.</p>
TEMPERATURE	<p>Highest, <del>at Stockholm</del>, 45° at Scilly, 42° at Shields, Donaghadee, and Holyhead, 41° at Malin Head, and 40° at Howland Point.</p> <p>Lowest, 19° at Paris, 20° at Munich, 22° at Berlin, 23° at Amsterdam, Brussels, Rotterdam and Lyons, and 25° at Rome.</p> <p>The maxima registered yesterday were below 32° over the inland parts of England.</p>
WIND	<p>Light or moderate from the N<sup>W</sup> or NE<sup>W</sup> over all the more western and northern parts of the United Kingdom and from the E<sup>W</sup> at the coast of France.</p> <p>Calm or light S<sup>W</sup> in the southeast of England; light or moderate SE<sup>W</sup> over Germany and the western shores of the North Sea.</p> <p>Moderate S<sup>W</sup> in Sweden; strong to a gale from the NW<sup>W</sup> in the west of Norway.</p>
WEATHER	<p>Fine in the west and north of our Islands, but dull elsewhere, with mist or fog in many parts of England, and more at Oxford and Hunt Castle, as well as at Christiansund.</p> <p>Fair fall yesterday at many of our western and northern stations, and lunar halos were seen in London and at Jersey.</p>
SEA	<p>Slight or smooth generally, but rather rough at Christiansund and Aberdeen.</p>

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

Anticyclone conditions are again prevalent over the whole of Western Europe, and cold weather seems likely to continue generally, with mist or fog in many of the inland districts.

## FORECASTS

For the 24 hours ending at NOON on 27<sup>th</sup> DEC<sup>r</sup>. 1890.

### DISTRICTS.

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

### FORECASTS.

N<sup>W</sup> and NE<sup>W</sup> winds, light; fair generally.

Same as No 5.

Variable breezes, finally NE<sup>W</sup>; cloudy, mist or fog locally, possibly slight snow.

### DISTRICTS.

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

### FORECASTS.

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

### WARNINGS

NONE ISSUED.

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

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



# YESTERDAY'S 2 P.M. REPORTS.

	THER: WIND								THER: WIND						
	BAR	D.	W.	D.	F.	WEA	SEA		BAR:	D.	W.	D.	F.	WEA	SEA
Skudesnaes ...	30.25	34	30	SE	6	0	5	Holyhead ...	30.19	38	38	S	3	TMZ	2
Sumburgh Head ...	27.97	41	41	WNW	1	7	4	Valencia ...							
Stornoway ...	30.09	42	39	NW	5	6e	4	Scilly ...							
Aberdeen ...								Jersey ...	30.30	36	33	ENE	2	6	2
Shields ...								Dungeness ...	30.27	38	33	2	0	m	0
Ardrossan ...	30.10	44	42	W	2	c	1	London ...							*
Mulin Head ...	30.15	44	42	NNW	5	6	3	Yarmouth ...							
Mullaghmore ...	30.23	45	41	NW	5	c	4	Rochefort ...	30.20	32	30	NE	5	6	9
Belmullet ...	30.28	45	41	NNW	2	c	*								

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

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).

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for *Saturday 27<sup>th</sup> December.* 1890.  
 Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.

STATIONS.	YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
	Barom. Reading at 32° F. and Sea Level.	Temp. Dry.	Wind.		Weather.	Barometer. Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Shade Temp.			Wind.		Weather.	Sea. (0 to 12.)	Shade Temp.		Amount Rainfall.	
			Dirce.	Force. (0 to 12.)				Dry.	Wet.	Difference from 8 a.m. yesterday.	Dirce.	Force. (0 to 12.)			Max.	Min.		
SCANDINAVIA.	Haparanda ...	30.44	21	2	0	f	30.79	+58	8	7	-19	2	0	f	*	32	30	—
	Hernösand ...	30.70	21	2	0	f	30.91	+55	9	9	-19	2	0	f	*	30	29	—
	Stockholm ...	30.33	28	2	0	o	30.84	+35	20	29	-1	2	0	o	*	34	27	—
	Wisby ...	30.57	28	like	4	c	30.75	+30	27	26	-3	ENE	4	o	*	30	25	—
	Bodö ...	30.54	34	NW	8	f	30.76	+66	35	34	+1	W	6	o	*	30	20	—
	Christiansund ...	30.71	33	ENE	4	f	30.76	+34	31	28	-6	ENE	4	f	5	36	30	—
	Skudesnaes ...	30.61	32	2	0	f	30.67	+23	35	31	+1	ENE	2	o	3	30	20	—
	Christiania Fjord (Færder) ...	30.6	28	N	0	bc	30.77	+34	20	27	+1	NNE	5	o	1	30	27	—
	Skagen (The Scaw) ...	30.58	31	SE	3	o	30.70	+31	28	28	-3	SE	4	o	3	32	27	—
	Fanö ...	30.52	28	ENE	4	c	30.51	+12	28	28	+2	ENE	4	o	*	28	25	—
BRITISH ISLANDS.	Sumburgh Head ...	30.62	38	NW	1	o	30.58	+07	38	37	+3	NE	3	o	3	39	35	0.02
	Stornoway ...	30.57	37	E	4	bc	30.48	-06	37	35	+1	SE	4	bc	3	40	31	—
	Wick ...	30.60	40	NW	2	bc	30.54	-01	40	39	+4	N	2	c	1	40	35	0.10
	Nairn ...	30.57	37	E	1	o	30.51	00	31	30	-6	2	o	o	1	39	28	—
	Aberdeen ...	30.55	37	N	2	c	30.53	+03	38	36	+2	ENE	4	oq	5	40	36	0.02
	Leith ...	30.51	38	NNE	2	bc	30.48	+01	36	36	-2	SE	1	cm	*	41	35	0.02
	Shields ...	30.39	42	NE	4	c	30.41	+09	39	37	-3	ENE	4	o	4	42	34	0.11
	Spurn Head ...	30.27	34	NNE	3	om	30.38	+11	35	33	+2	ENE	3	bc	4	37	32	0.11
	York ...	30.34	36	N	1	c	30.42	+09	32	31	-3	E	1	f	*	38	31	0.09
	Loughborough ...	30.35	33	NW	1	o	30.37	+07	32	32	+2	E	3	o	*	34	30	0.05
GERMANY & HOLLAND.	Ardrossan ...	30.49	36	NE	3	cm	30.44	-02	35	35	-1	NB	2	c	1	38	31	—
	Malin Head ...	30.49	40	E	5	o	30.34	-13	40	38	-1	ENE	5	bc	3	41	36	—
	Mullaghmore ...	30.48	37	E	2	f	30.35	-13	36	34	0	E	5	o	3	39	33	—
	Belmullet ...	30.42	34	E	2	f	30.31	-11	34	33	-2	ENE	2	f	*	40	31	—
	Donaghadee ...	30.49	42	NE	4	bc	30.39	-10	40	39	-2	E	6	c	5	43	40	—
	Liverpool (Biston) ...	30.39	36	NE	1	c	30.33	-02	33	32	-4	E	4	o	3	38	33	0.04
	Holyhead ...	30.41	40	NE	3	c	30.30	-08	36	35	-6	E	4	oq	4	42	36	—
	Parsonstown ...	30.48	27	2	0	f	30.30	-15	25	24	+2	2	o	o	*	35	22	—
	Valencia ...	30.40	37	NNE	1	cm	30.25	-21	34	33	-1	NNE	1	f	1	45	32	0.01
	Roche's Point ...	30.39	35	NE	3	f	30.26	-14	33	32	-2	NB	2	f	3	43	32	—
FRANCE AND BELGIUM.	Pembroke (St. Ann's Id.) ...	30.36	39	NE	3	c	30.25	-09	36	35	-3	E	2	cm	1	41	32	—
	Scilly ...	30.27	44	E	3	c	30.20	-04	40	40	-5	ENE	4	o	4	45	39	0.03
	Prawle Point ...	30.34	37	NNE	2	o	30.26	-03	34	34	-6	NE	1	oq	0	41	33	0.30
	Jersey (St. Aubin's) ...	30.38	38	ENE	1	f	30.26	-09	37	33	+1	E	3	cm	3	38	27	—
	Hurst Castle ...	30.33	38	NW	2	c	30.29	-04	35	35	0	ENE	4	cm	2	37	34	0.02
	Dungeness ...	30.32	36	2	0	c	30.27	-04	32	31	-4	NNE	1	oq	1	38	31	0.01
	London ...	30.36	34	2	0	om	30.33	00	30	29	-2	NE	1	cm	*	37	30	0.02
	Oxford ...	30.35	33	2	0	o	30.34	+01	32	31	+2	ENE	2	o	*	33	30	0.02
	Cambridge ...	30.33	34	2	0	o	30.37	+05	27	27	-2	2	o	bc	*	34	26	0.02
	Yarmouth ...	30.30	32	NW	1	f	30.34	+03	34	33	+4	E	5	oq	5	34	29	0.22
PENINSULA.	Cuxhaven ...	30.41	29	NE	2	o	30.44	+06	27	25	0	ENE	4	f	*	30	25	—
	Berlin ...	30.44	20	ENE	3	o	30.47	+03	15	14	-7	E	4	f	*	25	14	—
	Wiesbaden ...	30.23	22	SE	4	o	30.28	+05	30	29	0	E	3	o	*	32	28	—
	Munich ...	30.23	22	SE	4	o	30.21	-04	21	21	+1	SE	3	o	*	25	19	—
	The Helder ...	30.42	23	ENE	1	f	30.39	+05	27	27	+5	E	2	o	3	28	21	—
	Brussels (9 a.m.) ...	30.32	30	NW	1	m	30.27	-07	27	27	0	E	3	m	2	34	19	—
	Cape Gris Nez ...	30.32	26	N	2	o	30.27	-11	25	25	+6	N	2	o	*	32	27	—
	Paris ...	30.28	30	E	3	f	30.26	+02	30	30	-8	E	1	f	1	36	27	—
	Brest ...	30.31	30	ENE	2	bc	30.22	-08	28	26	-5	NE	3	f	2	36	27	—
	Lorient ...	30.31	30	ENE	2	bc	30.22	-08	28	26	-5	NE	3	f	2	36	27	—

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

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



# WEATHER CHARTS

for 8 a.m. on Saturday, 27<sup>th</sup> December, 1890.

## BAROMETER, WIND AND SEA.

### EXPLANATION OF MAP

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

Changes since previous morning are stated in words.

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

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

→ = forces 5 to 7; → = forces 1 to 4.

○ = dead calm.

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

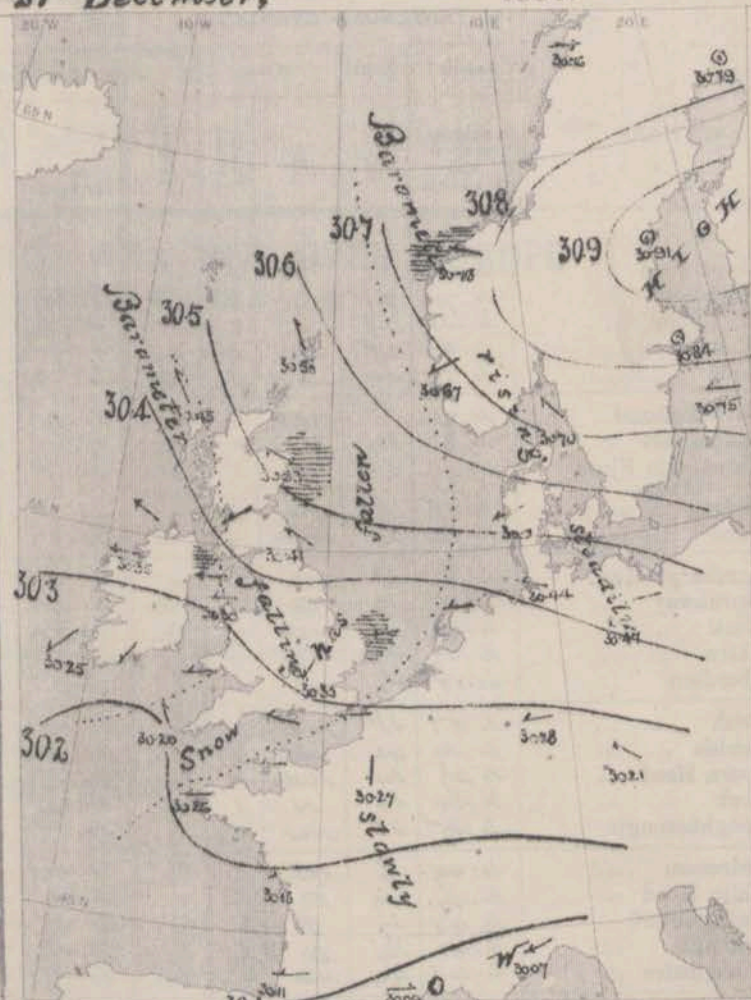
■ = Rough. ■ = High.

## MEAN HEIGHT OF THE BAROMETER

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

During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS.
Sumburgh Head .....	29.667
Stornoway .....	29.701
Wick .....	29.711
Nairn .....	29.730
Aberdeen .....	29.757
Leith .....	29.803
Shields .....	29.843
York .....	29.888
Loughborough .....	29.923
Ardrossan .....	29.819
Donaghadee .....	29.847
Holyhead .....	29.879
Liverpool .....	29.875
Parsonstown .....	29.909
Valencia .....	29.908
Roche's Point .....	29.915
Pembroke .....	29.918
Scilly .....	29.962
Jersey .....	29.985
Hurst Castle .....	29.959
Dover .....	29.957
LONDON .....	29.951
Oxford .....	29.954
Cambridge .....	29.938
Yarmouth .....	29.914



## 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.

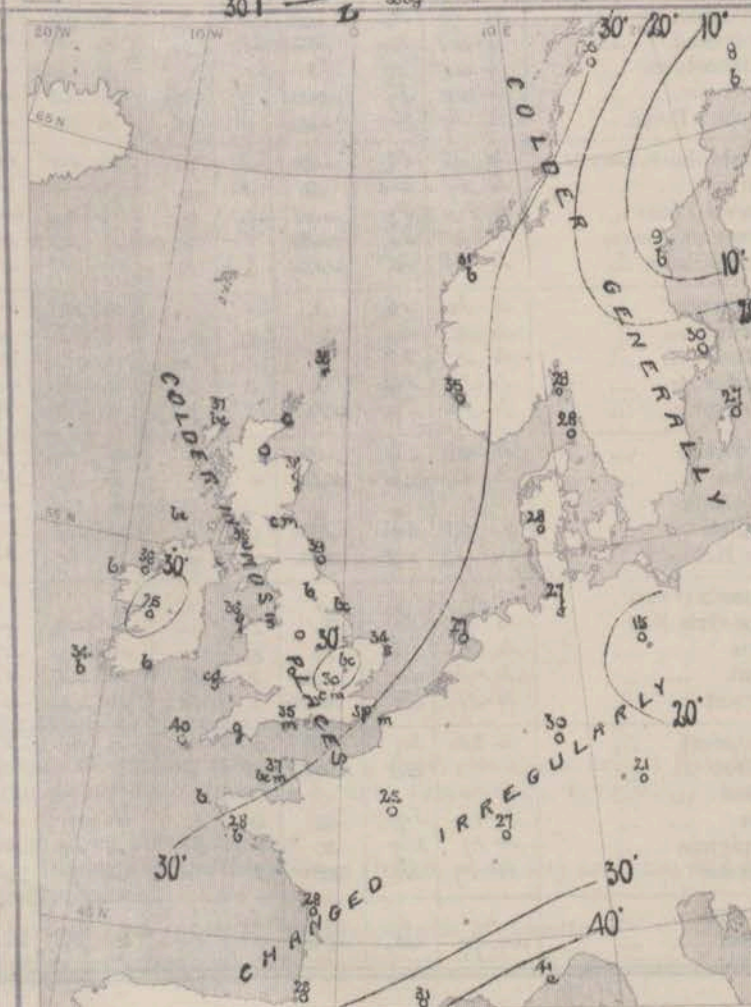
**RAINFALL**—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more are quoted in figures.

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

(For the month of December.)

STATIONS.	TEMPERATURE.				RAINFALL (Inches.)
	Daily Max.	Daily Min.	Daily at 8 a.m.	at 8 a.m. Dry. Wet.	
Sumburgh Head .....	42.5	35.0	39.5	37.9	4.33
Stornoway .....	44.4	33.9	39.2	38.2	5.66
Wick .....	42.1	32.6	38.0	36.6	3.18
Nairn .....	41.7	32.8	37.0	35.5	2.08
Aberdeen .....	42.0	32.5	36.9	35.3	3.34
Leith .....	44.2	33.7	38.6	37.0	2.01
Shields .....	43.1	34.3	38.5	37.2	2.74
York .....	42.7	32.4	36.8	35.7	2.45
Loughborough .....	43.1	32.0	35.9	35.0	2.36
Ardrossan .....	44.6	36.0	40.1	38.7	4.04
Donaghadee .....	46.1	36.2	40.2	39.2	2.84
Holyhead .....	46.7	39.3	43.0	41.4	3.84
Liverpool .....	43.8	36.0	39.3	37.6	2.70
Parsonstown .....	44.8	33.2	37.9	36.6	3.02
Valencia .....	50.0	40.0	44.6	42.3	5.82
Roche's Point .....	48.0	39.0	42.9	41.5	4.74
Pembroke .....	47.1	40.6	43.9	42.5	4.06
Scilly .....	49.8	43.8	47.1	45.4	4.10
Jersey .....	47.7	40.1	43.4	41.8	3.87
Hurst Castle .....	46.1	36.9	40.9	40.2	2.84
Dover .....	44.7	36.8	40.3	39.1	3.26
LONDON .....	44.7	34.6	38.5	37.4	2.14
Oxford .....	43.6	34.3	37.7	36.6	2.13
Cambridge .....	43.5	32.3	36.9	36.1	1.99
Yarmouth .....	42.4	34.2	38.3	37.6	2.95

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





# GENERAL SITUATION AT 8 A.M.

## PRESSURE

Highest, 30.7 ins. to 30.9 ins. over Scandinavia.  
 Lowest, 29.9 ins. and less, over the southern parts of the Spanish Peninsula.  
 Gradient slight. Barometer rising decidedly in Scandinavia, and slightly in the east of England, but falling elsewhere most in Ireland.

## TEMPERATURE

Highest, 41° at Nise, 40° at Wick, Malen Ht., Donaghadee and Scilly, 39° at Shields, and 38° at Sumburgh Ht., Aberdeen, and Limer.  
 Lowest, 8° at Haparanda, 9° at Helsingfors, 15° at Berlin, 21° at Munich, and 25° at Harbin and Paris.

## WIND

Chiefly E<sup>ly</sup>, but SE<sup>ly</sup> in Scotland and NE<sup>ly</sup> in the south of Ireland; light or moderate in force generally.  
 Calm in Sweden, but strong from the W<sup>ly</sup> at Rode.

## WEATHER

Fine at several of the Irish stations, as well as in the northeast of England and many parts of Scandinavia.  
 Dull in most other localities, with snow showers at Liverpool, Dungeness, and Yarmouth, and fog at the mouth of the Elbe.  
 A little rain or snow fell yesterday in many parts of the United Kingdom, and a solar halo was seen at Jersey.

## SEA

Rather rough at Christiansund, Aberdeen, Donaghadee, and Yarmouth, but moderate to smooth elsewhere.

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

As the barometer is high, and rising, to the northward of the United Kingdom, while it is relatively low, and falling in the extreme west and southwest there is a tendency for some increase in the force of the easterly wind. Temperature over England is likely to fall somewhat.

## FORECASTS

For the 24 hours ending at NOON on 28<sup>th</sup> DEC<sup>r</sup> 1890.

### DISTRICTS.

### FORECASTS.

- |   |                  |  |
|---|------------------|--|
| 0 | SCOTLAND NORTH   | E <sup>ly</sup> and SE <sup>ly</sup> winds, freshening; cloudy, rain or sleet locally. |
| 1 | SCOTLAND EAST    |  |
| 2 | ENGLAND N.E.     | Same as No 5.  |
| 3 | ENGLAND EAST     |  |
| 4 | MIDLAND COUNTIES |  |
| 5 | ENGLAND SOUTH    | E <sup>ly</sup> winds, moderate or fresh; cloudy, some snow showers.                   |

### DISTRICTS.

### FORECASTS.

- |          |               |  |
|----------|---------------|--|
| 6        | SCOTLAND WEST | E <sup>ly</sup> winds, light; fair generally.  |
| 7        | ENGLAND N.W.  | E <sup>ly</sup> winds, fresh or strong; cloudy, some snow showers.                   |
| 8        | ENGLAND S.W.  | Same as No 0 and 1.  |
| 9        | IRELAND NORTH | Same as No 7.  |
| 10       | IRELAND SOUTH | NE <sup>ly</sup> to E <sup>ly</sup> winds, freshening; fair to cloudy and unsettled. |
| 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.

THER: WIND								THER: WIND							
	BAR:	D.	W.	D.	F.	WEA.	SEA		BAR:	D.	W.	D.	F.	WEA.	SEA
Skudesnaes ...	30.52	38	31	N	1	c	3	Holyhead ...	30.39	42	39	N/E	4	bc	3
Sumburgh Head								Valencia ...	30.43	41	39	E/N/E	4	bc	1
Stornoway ...	30.56	40	37	SE	3	b	3	Scilly ...	30.27	43	43	E/N/E	4	o	4
Aberdeen ...	30.54	38	33	N	3	c	5	Jersey ...	30.35	37	37	SE	2	cm	2
Shields ...	30.54	38	33	NNE	4	c	4	Dungeness ...	30.31	37	35	2	0	b	0
Ardrossan ...	30.46	38	35	NE	3	b	2	London ...	30.36	37	35	2	0	of	2
Malin Head ...	30.49	40	37	E	4	b	3	Yarmouth ...	30.31	37	32	WNW	2	fo	2
Mullaghmore ...	30.49	37	36	E/N/E	4	b	3	Rochefort ...	30.28	29	29	E/N/E	4	T	?
Belmullet ...	30.49	43	40	E/N/E	2	b	*								

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

*Weather* fine and bright over Scotland, Ireland, the southwestern parts of England and France, and the coast of Portugal, as well as over Northern Russia, Eastern Germany, and Southern Russia; cloudy or overcast elsewhere, with fog or haze in several places, snow in a few widely spread localities. Some cold rain and sleet later in the north and east of our Islands.

*Temperature* fallen decidedly in Ireland, risen over England. Low for time of year over most inland districts, but especially over Russia and Eastern Germany. Lowest morning values  $-2^{\circ}$  to  $-14^{\circ}$  F. over Russia,  $+3^{\circ}$  at Cuxow,  $5^{\circ}$  at Gensburg,  $6^{\circ}$  at Thunfakwasser,  $7^{\circ}$  at Warsaw,  $9^{\circ}$  at Piza and Mermel,  $13^{\circ}$  at Paris,  $23^{\circ}$  at Racoonatoron,  $30^{\circ}$  to  $35^{\circ}$  over the inland parts of England. Highest  $50^{\circ}$  and more at Brindisi, Malta and La Calle, and above  $40^{\circ}$  over Portugal and the coast of Spain, as well as at Scilly.

*Wind* strong to a gale from the NW<sup>nd</sup> over the northern parts of Norway, moderate to fresh from SE. over Finland, the Baltic Provinces and Western Russia; moderate NE<sup>ly</sup> over the northern and eastern parts of our Islands, the Iberian Peninsula and the south of France, N<sup>ly</sup> to NW<sup>ly</sup> over Italy, very variable over Central Europe and at the mouth of the English Channel. No great change later.

*Barometer* highest 31.1 ins. to 30.5 ins. over Russia, Poland, and Hungary, and exceeding 30.5 ins. over the northwest of our Islands; lowest 30.1 ins. over the western parts of Lapland, and also over the southeastern parts of the Mediterranean. Very shallow local disturbances over Bedfordshire and Lincolnshire and also at the mouth of the English Channel. Very little change later.

## EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

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

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

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

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



# DAILY WEATHER REPORT.

for Sunday 24<sup>th</sup> December. 1890.  
Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.

STATIONS.	YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
	BAROM.  Reading at 3 <sup>24</sup> P. and Sea Level.	TEMP.  Dry.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Weather.	Sea. (0 to 9.)	SHADE TEMP.		Amount of Rainfall.	
			Direc.	Force. (0 to 12.)		Reading at 3 <sup>24</sup> P. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Direc.	Force. (0 to 12.)			Max.	Min.		
SCANDINAVIA.	Haparanda ...	30.82	7	2	0	C	30.74	-0.08	9	9	+1	2	0	bc	•	20	1	—
	Hernösand ...	30.98	3	2	0	b	30.98	+0.07	19	18	-11	2	0	b	•	21	1	—
	Stockholm ...	30.94	30	E	2	b	31.01	+0.07	20	21	-4	2	2	b	•	20	18	—
	Wibby ...	30.85	19	SE	4	b	30.94	+0.09	20	21	-4	2	2	b	•	20	18	—
	Bodö ...	30.75	32	ENE	2	b	30.71	-0.04	26	23	-9	E	2	b	1	27	23	—
	Christiansund ...	30.70	32	ENE	3	b	30.69	-0.01	30	27	-1	ENE	1	b	3	32	27	—
	Skudesnaes ...	30.69	32	E	2	b	30.66	-0.03	33	28	-2	E	4	b	3	36	32	—
	Christiania Fjord (Færder) ...	30.78	29	N	6	C	30.88	+0.10	28	26	0	ENE	5	b	2	29	27	—
	Skagen (The Scaw) ...	30.75	25	SE	5	b	30.76	+0.01	27	23	-1	SE	4	b	4	28	25	—
	Fanö ...	30.52	25	ENE	6	0	30.52	+0.00	21	20	-7	ENE	6	b	•	28	21	—
BRITISH ISLANDS.	Sumburgh Head ...	30.52	38	ENE	5	T	30.49	-0.03	37	37	-1	SE	4	T	6	41	37	0.12
	Sornoway ...	30.37	39	SE	4	b	30.33	-0.04	40	39	+3	SE	4	0	4	42	33	—
	Wick ...	30.43	39	SE	5	T	30.41	-0.02	37	35	-3	SE	6	0	6	40	35	0.35
	Nairn ...	30.42	34	E	3	b	30.36	-0.06	35	34	+4	E	2	0	2	39	29	—
	Aberdeen ...	30.45	37	SE	4	oggy	30.41	-0.04	36	33	-2	ENE	4	oggy	6	39	35	0.07
	Leith ...	30.38	37	SE	2	0	30.33	-0.05	36	35	0	E	2	C	•	38	35	0.01
	Shields ...	30.36	38	ENE	3	T	30.28	-0.08	37	36	-2	SE	4	T	5	40	35	0.17
	Spurn Head ...	30.27	35	E	4	T	30.23	-0.04	35	33	0	E	6	0	5	37	33	0.05
	York ...	30.32	35	ENE	1	m	30.28	-0.04	34	33	+2	E	1	0	•	36	31	0.07
	Loughborough ...	30.27	33	ENE	2	0	30.24	-0.03	31	30	-1	ENE	2	oggy	•	32	29	0.03
BRITISH ISLANDS.	Ardrossan ...	30.36	36	NE	3	C	30.30	-0.06	36	35	+1	NE	2	om	1	38	34	—
	Malin Head ...	30.27	35	SE	4	b	30.20	-0.07	38	37	-2	SE	5	C	1	42	34	—
	Mullaghmore ...	30.25	37	ENE	5	bc	30.21	-0.04	37	36	+1	ENE	4	om	2	39	34	—
	Belmullet ...	30.21	35	ENE	2	b	30.18	-0.03	36	35	+2	ENE	2	b	•	38	32	—
	Donaghadee ...	30.32	39	ENE	4	b	30.23	-0.09	39	39	-1	SE	4	C	2	41	38	0.02
	Liverpool (Bidston) ...	30.30	34	ENE	2	0	30.25	-0.05	32	31	-3	E	1	od	2	44	32	0.01
	Holyhead ...	30.28	33	ENE	3	b	30.22	-0.06	32	32	+8	2	0	0	•	35	25	—
	Parsonstown ...	30.20	33	2	0	b	30.10	-0.10	40	39	+6	ENE	3	cm	4	45	33	0.01
	Valencia ...	30.11	40	E	2	og	30.11	-0.00	35	33	+2	ENE	2	b	3	40	33	0.10
	Roche's Point ...	30.16	35	NE	3	bc	30.15	-0.01	33	32	-3	E	3	og	3	38	31	—
BRITISH ISLANDS.	Pembroke (St. Ann's Hd.) ...	30.20	36	E	3	bc	30.15	-0.05	33	32	-3	E	3	og	3	38	31	—
	Scilly ...	30.12	40	2	0	bc	30.06	-0.06	39	37	-1	NE	3	bc	4	43	36	0.09
	Prawle Point ...	30.18	34	ENE	3	C	30.12	-0.06	34	34	0	ENE	1	og	0	37	31	0.24
	Jersey (St. Aubin's) ...	30.16	35	E	2	og	30.12	-0.04	32	31	-4	E	4	om	3	37	31	—
	Hurst Castle ...	30.19	33	NE	4	mo	30.15	-0.04	32	32	-3	E	5	om	3	36	32	—
	Dungeness ...	30.19	32	ENE	2	C	30.16	-0.03	31	30	+1	ENE	4	0	3	34	29	—
	London ...	30.23	32	ENE	1	om	30.19	-0.04	31	30	+1	ENE	1	og	•	34	27	0.04
	Oxford ...	30.22	31	NE	3	0	30.22	-0.00	27	26	-5	ENE	1	0	•	32	22	0.04
	Cambridge ...	30.21	34	NE	1	0	30.23	+0.02	31	31	+4	ENE	1	0	•	34	26	0.02
	Yarmouth ...	30.24	33	ENE	5	og	30.21	-0.03	31	31	-3	E	4	og	4	35	29	0.03
GERMANY & HOLLAND.	Cuxhaven ...	30.48	23	ENE	5	0	30.45	+0.03	15	13	-12	ENE	5	b	•	27	14	—
	Berlin ...	30.49	14	E	4	0	30.55	+0.06	6	6	-9	E	4	b	•	19	5	—
	Wiesbaden ...	30.20	20	•	•	•	30.25	+0.05	20	21	-7	NE	3	b	•	22	20	—
	Munich ...	30.15	20	SE	4	0	30.16	+0.01	15	15	-6	NE	4	0	•	25	14	—
	The Helder ...	30.31	24	E	3	0	30.30	-0.01	18	18	-9	E	2	0	3	27	18	—
	Brussels (9 a.m.) ...	30.18	27	•	•	•	30.16	-0.02	27	27	0	SE	3	m	2	30	23	—
	Cape Gris Nez ...	30.17	30	•	•	•	30.13	-0.04	20	20	-5	NE	1	b	•	32	19	—
	Paris ...	30.17	30	•	•	•	30.06	-0.11	35	31	+5	NE	2	0	3	41	27	—
	Brest ...	30.21	33	•	•	•	30.06	-0.15	35	31	+5	NE	2	0	3	41	27	—
	Lorient ...	30.15	31	•	•	•	30.06	-0.09	35	31	+5	NE	1	m	2	32	27	—
FRANCE AND BELGIUM.	Rochefort ...	30.09	29	•	•	•	30.06	-0.03	29	29	+1	E	3	0	•	32	25	—
	Belfort ...	30.15	26	•	•	•	30.15	0.00	25	25	-2	N	1	0	•	28	18	—
	Lyons ...	30.15	26	•	•	•	30.17	+0.02	15	15	-8	NNW	1	b	•	31	14	—
	Nice ...	29.99	44	•	•	•	29.89	-0.10	48	35	+2	NE	5	b	•	48	41	—
	Perpignan ...	30.00	36	•	•	•	29.97	-0.03	40	38	+2	W	2	0	•	40	38	0.04
	Biarritz ...	30.04	31	•	•	•	30.01	-0.03	30	25	+2	E	3	b	•	36	27	—
	Corunna ...	29.91	43	•	•	•	29.94	+0.03	33	32	-1	NE	1	b	•	45	33	—
	Lisbon ...	29.91	43	•	•	•	29.97	+0.06	37	35	-1	NNE	3	b	•	46	37	—

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, 28<sup>th</sup> December,

1890.

## BAROMETER, WIND AND SEA.

### EXPLANATION OF MAP.

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

Changes since previous morning are stated in words.

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

their barbs and feathers refer to force thus—

— forces above 10; — forces 8 to 10;

— forces 5 to 7; — forces 1 to 4.

○ = dead calm.

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

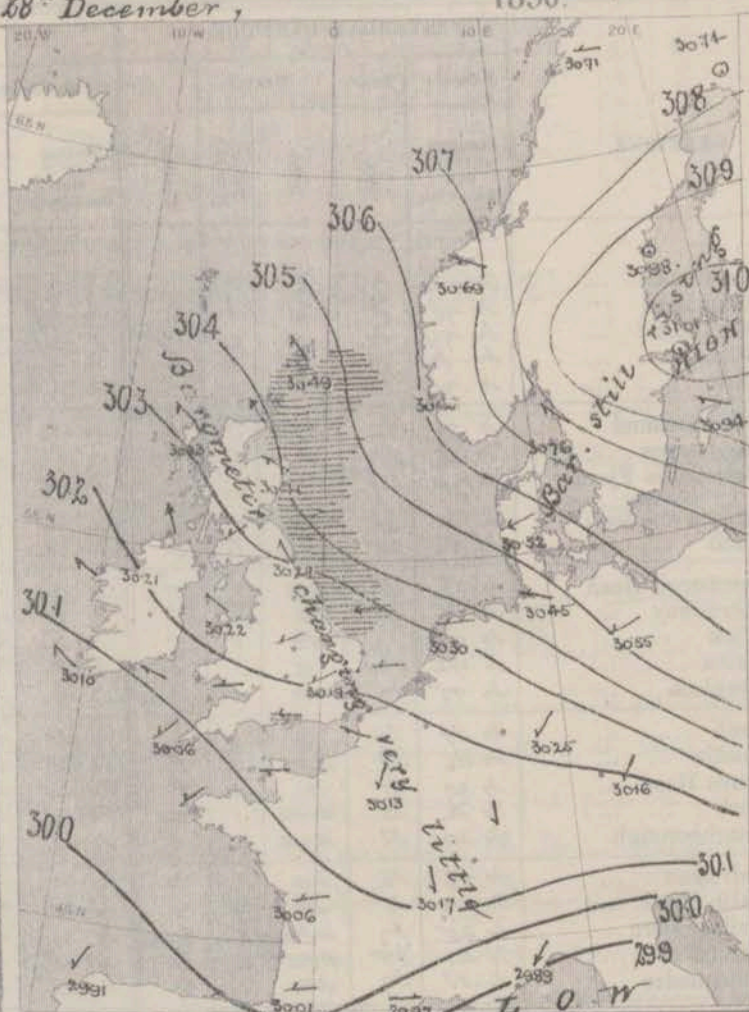
— Rough. — High.

## MEAN HEIGHT OF THE BAROMETER

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

During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS.
Sumburgh Head	29.687
Stornoway	29.701
Wick	29.711
Nairn	29.739
Aberdeen	29.757
Leith	29.803
Shields	29.843
York	29.888
Loughborough	29.923
Ardrossan	29.819
Donaghadee	29.847
Holyhead	29.879
Liverpool	29.895
Parsonstown	29.900
Valencia	29.908
Roche's Point	29.915
Pembroke	29.918
Silly	29.982
Jersey	29.985
Hurst Castle	29.959
Dover	29.957
LONDON	29.951
Oxford	29.954
Cambridge	29.938
Yarmouth	29.914



## 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.

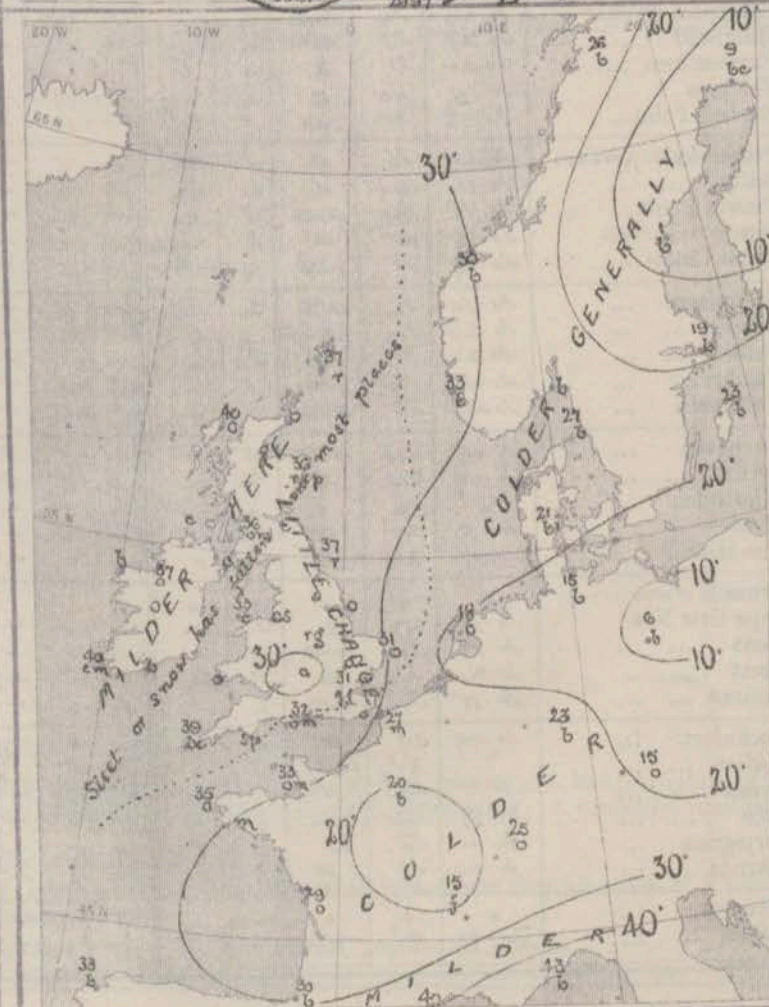
**RAINFALL**—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more are quoted in figures.

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

(For the month of December.)

STATIONS.	TEMPERATURE.				RAINFALL (Inches.)
	Daily Max.	Daily Min.	at 8 a.m. Dry.	Wet.	
Sumburgh Head	42.5	35.0	39.5	37.9	4.33
Stornoway	41.4	33.9	39.2	38.2	5.66
Wick	42.1	32.6	38.0	36.6	3.18
Nairn	41.7	32.8	37.0	35.6	2.08
Aberdeen	42.0	32.5	36.9	35.3	3.34
Leith	44.2	33.7	38.6	37.0	2.01
Shields	43.1	34.3	38.5	37.2	2.74
York	42.7	22.4	35.8	35.7	2.45
Loughborough	43.1	32.9	36.9	35.9	2.36
Ardrossan	44.5	35.0	40.1	38.7	4.04
Donaghadee	45.1	34.2	40.2	39.2	2.84
Holyhead	46.7	39.3	43.0	41.4	3.84
Liverpool	43.8	36.0	39.3	37.6	2.70
Parsonstown	44.8	33.2	37.9	36.6	3.92
Valencia	50.0	40.0	44.6	42.3	5.82
Roche's Point	48.0	39.0	42.9	41.5	4.74
Pembroke	47.1	40.6	43.9	42.6	4.06
Silly	49.8	43.8	47.1	45.4	4.10
Jersey	47.7	40.1	43.4	41.8	3.87
Hurst Castle	46.1	36.9	40.9	40.2	2.84
Dover	44.7	36.8	40.3	39.1	3.20
LONDON	44.7	34.6	38.6	37.4	2.14
Oxford	43.6	34.3	37.7	36.0	2.13
Cambridge	43.5	32.3	36.9	36.1	1.99
Yarmouth	42.4	34.2	38.3	37.5	2.95

**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 31.01 ins at Stockholm; 30.7 ins. and upwards over nearly the whole of the Scandinavian peninsula. Lowest 29.9 ins and less in the extreme south of France. Gradients slight but somewhat irregular. Barometer falling at all but the Swedish stations.
TEMPERATURE	Highest 43° at Nice, 40° at Stornoway, Valencia Island & Perpignan, 39° at Donaghadee & Lillib, 38° at Malen. H. Lowest 1° at Hernösand, 6° at Berlin, 9° at Haparanda, 15° at Copenhaven and Munich, 18° at Helder & 19° at Stockholm. During last night the thermometer fell to 22° at Oxford, to 26° at Cambridge, and to 27° in London.
WIND	SE <sup>2</sup> in Ireland, Scotland and the west of Norway, light or moderate in force generally, but strong at Wick. E <sup>2</sup> over England, Denmark, the Netherlands, France and Germany, but N <sup>2</sup> in Spain, and calm in Sweden. parts of France.
WEATHER	Fine in the west and south of Ireland, and also in Scandinavia, Denmark, Germany and the central and southern parts of France. Dull elsewhere, with snow at several of the English stations, and sleet on our northeast coasts. Snow or sleet fell yesterday in nearly all parts of the United Kingdom.
SEA	Rough or rather so on our north and northeast coasts, but moderate to smooth elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

## FORECASTS

For the 24 hours ending at NOON on 29<sup>TH</sup> DEC. 1890.

DISTRICTS.	FORECASTS.	DISTRICTS.	FORECASTS.
0 SCOTLAND NORTH	NONE ISSUED	6 SCOTLAND WEST	NONE ISSUED
1 SCOTLAND EAST		7 ENGLAND N.W.	
2 ENGLAND N.E.		8 ENGLAND S.W.	
3 ENGLAND EAST		9 IRELAND NORTH	
4 MIDLAND COUNTIES		10 IRELAND SOUTH	
5 ENGLAND SOUTH		WARNINGS	NONE ISSUED

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



# YESTERDAY'S 2 P.M. REPORTS.

THER: WIND								THER: WIND							
BAR:		D.	W.	D.	F.	WEA.	SEA	BAR:		D.	W.	D.	F.	WEA.	SEA
Skudesnaes ...	30.69	36	31	SE	4	c	3	Holyhead ...	30.29	36	35	ESE	4	c	4
Sumburgh Head ...	30.58	40	37	SE	4	c	5	Valencia ...	30.16	43	40	E	2	bcn	2
Stornoway ...	30.39	42	38	SE	4	c	4	Scilly ...	30.15	41	40	SSE	4	c	4
Aberdeen ...	30.48	38	36	SE	4	oggy	5	Jersey ...	30.21	35	33	ESE	4	c	1
Shields ...	30.39	38	36	ESE	4	o	5	Dungeness ...	30.20	32	32	E	2	c	1
Ardrossan ...	30.38	37	35	NE	2	bm	1	London ...	30.26	34	33	NE	1	of s	5
Malin Head ...	30.31	37	36	SE	4	o	2	Yarmouth ...	30.28	34	33	E	5	og	?
Mullaghmore ...	30.26	39	36	E	5	c	4	Rocheport ...	30.13	31	30	E	3	og	?
Belmullet ...	30.24	38	37	ESE	2	c	*								

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

Weather in morning fine and bright over southeastern, eastern and northern Europe as well as on the western coasts of the British Islands, and in Brittany, dull elsewhere; snow falling at some of the English stations, haze prevalent at others, rain at Sumburgh Head and also over central Algeria. Snow, sleet or cold rain later at most of the British stations, also in the south of France, and heavy rain at Brindisi, Cagliari, Algiers and San Fernando.

Temperature changing little and rather irregularly, very low generally especially at inland stations — lowest values of all being from zero to -12° Fahr.; over the southern half of Russia and at Etacour, +3° to 8° over the Baltic Provinces, Poland and Hungary, 8° at Kapatanda, 9° at Hornsund; 15° at Berlin, 23° at Lyons, 25° at Paris, as well as at Papanstouren, 30° in London, 31° at Nauri, 32° at York. Highest 50° to 57° over the southeastern parts of the Mediterranean, and exceeding 40° on the coasts of Spain and Portugal. No great or general change later.

Wind E by S to SE by E over nearly all the central and western countries of Europe — light to moderate in force, NE by E in the south of Ireland, N by E in Portugal, calms and variable air reported over Finland and Russia; SW by S breeze over Algeria, N by E over Italy. Becoming still more S by E over Scotland and the north of Ireland later.

Baromet. highest 30.9 inches to 30.6 inches, in an anticyclone lying over Russia, Finland the Baltic and Scandinavia; lowest 29.7 inches over Morocco and below 29.9 inches over all the SW by S & S by E parts of the Mediterranean. Rising to 31.0 inches over Finland later, falling to about 29.5 inches in a depression appearing between Sardinia and Tunis; little change elsewhere.

### EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

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

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

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

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



# DAILY WEATHER REPORT.

for *Monday, 29<sup>th</sup> December, 1890.*  
*Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.*

STATIONS.		YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
		BAROM.  Reading at 32° F. and Sea Level.	TEMP.  Dry.	WIND.		Weather.	BAROMETR.		SHADE TEMP.			WIND.		Weather.	Sea. (0 to 3.)	SHADE TEMP.			
				Dir.	Force. (0 to 12.)		Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Dir.	Force. (0 to 12.)			Max.	Min.	Amount of Rainfall.	
SCANDINAVIA.	Haparanda ...	30.65	6	N	0	b	30.44	- .24	3	2	- 6	Z	0	b	*	10	-2		
	Hernösand ...	30.87	17	SW	2	b	30.77	- .21	-3	-3	- 4	Z	0	b	*	27	2		
	Stockholm ...	30.97	17	Z	0	o	30.95	- .06	24	24	+ 6	Z	0	b	*	32	14		
	Widby ...	30.93	26	SE	4	c	30.89	- .05	28	27	+ 5	E	2	c	*	2	16		
	Bodö ...	30.66	26	E	1	b	30.42	- .20	41	37	+ 15	SE	6	o	3	?	?		
	Christiansund ...	30.71	28	ESE	1	b	30.67	- .02	28	27	- 2	ESE	1	b	3	?	27		
	Skudesnaes ...	30.67	33	ESE	6	b	30.80	+ .14	32	27	- 1	ESE	4	bc	3	34	32		
	Christiania Fjord (Færder) ...	30.90	26	N	4	o	30.90	+ .02	25	24	- 3	NNE	6	o	2	28	23		
	Skagen (The Skaw) ...	30.80	27	E	5	b	30.82	+ .06	25	21	- 2	E	4	b	4	28	25		
	Fanø ...	30.86	27	E	6	b	30.63	+ .11	21	20	0	ENE	6	b	*	23	18		
BRITISH ISLANDS.	Sumburgh Head ...	30.47	33	SE	5	o	30.53	+ .06	38	36	+ 1	SE	2	o	6	40	37	0.02	
	Stornoway ...	30.32	37	SE	3	o	30.43	+ .10	33	31	- 7	Z	0	bc	2	40	31		
	Wick ...	30.40	38	S	7	o	30.50	+ .09	37	36	0	S	5	o	5	40	36	0.12	
	Nairn ...	30.36	34	E	1	c	30.46	+ .09	26	25	- 9	Z	0	o	2	35	24		
	Aberdeen ...	30.40	36	ESE	4	oggy	30.47	+ .06	37	34	+ 1	ESE	4	oggy	6	38	34	0.15	
	Leith ...	30.32	37	E	2	r	30.44	+ .11	36	35	0	ENE	1	o	*	37	30		
	Shields ...	30.27	37	NE	5	o	30.37	+ .09	37	35	0	NE	3	o	5	38	34	0.11	
	Spurn Head ...	30.24	33	E	3	o	30.29	+ .06	34	33	- 1	NE	5	c	5	35	31		
	York ...	30.26	32	E	1	o	30.37	+ .09	34	32	0	NNE	1	o	*	38	31		
	Loughborough ...	30.24	29	E	1	o	30.31	+ .07	30	29	- 1	NE	2	og	*	32	28		
GERMANY & HOLLAND.	Ardrossan ...	30.31	36	NE	2	cm	30.42	+ .12	30	29	- 6	NE	2	bm	1	36	28		
	Malin Head ...	30.26	37	SSE	3	oggy	30.40	+ .20	37	35	- 1	ENE	2	bc	1	41	35	0.02	
	Mullaghmore ...	30.24	38	ESE	2	cm	30.40	+ .19	36	34	- 1	NE	2	b	0	31	31		
	Belmullet ...	30.21	35	E	2	c	30.41	+ .23	32	32	- 4	NE	2	b	*	37	32		
	Donaghadee ...	30.27	39	SSE	4	r	30.40	+ .17	38	38	- 1	NE	4	b	2	40	39	0.12	
	Liverpool (Bidston) ...	30.25	32	E	1	o	30.36	+ .11	31	30	- 1	ENE	1	o	2	34	30		
	Holyhead ...	30.23	34	E	2	c	30.35	+ .13	33	32	0	E	3	ogm	3	34	31		
	Parsonstown ...	30.21	33	Z	0	o	30.34	?	30	29	- 3	Z	0	o	*	35	29		
	Valencia ...	30.14	36	NE	3	b	30.32	+ .22	36	33	- 4	E	3	bc	3	42	32		
	Roche's Point ...	30.14	34	ENE	4	s	30.29	+ .18	35	33	0	ENE	3	o	4	40	32	0.10	
FRANCE AND BELGIUM.	Pembroke (St. Ann's Hd.) ...	30.17	33	E	3	c	30.26	+ .11	33	31	0	ENE	3	o	2	34	31		
	Scilly ...	30.06	39	E	3	chp	30.22	+ .16	39	39	0	ENE	4	o	3	40	36	0.12	
	Prawle Point ...	30.09	34	NE	5	o	30.21	+ .09	34	34	0	NE	6	og	5	36	33	0.14	
	Jersey (St. Aubin's) ...	30.08	33	SSE	3	o	30.17	+ .05	36	34	+ 3	E	4	om	3	36	32		
	Hurst Castle ...	30.14	33	NE	6	bm	30.23	+ .08	32	32	0	NE	4	o	3	33	31		
	Dungeness ...	30.16	32	SSE	4	o	30.17	+ .01	32	31	0	NE	4	o	3	34	29		
	London ...	30.18	32	ENE	2	o	30.23	+ .06	29	28	- 2	NNE	2	og	*	33	29		
	Oxford ...	30.22	29	ENE	2	o	30.27	+ .05	29	28	+ 2	NE	2	og	*	31	27		
	Cambridge ...	30.25	31	ENE	1	o	30.28	+ .05	28	28	- 3	NE	1	og	*	32	27		
	Yarmouth ...	30.21	32	SE	3	og	30.24	+ .03	28	28	- 3	E	4	og	4	33	26	0.01	
PENIN- SULA.	Cuxhaven ...	30.43	18	ESE	6	b	30.49	+ .04	16	14	+ 1	ESE	6	b	*	23	14		
	Berlin ...	30.57	9	ESE	4	b	30.56	+ .01	6	6	0	E	5	b	*	16	5		
	Wiesbaden ...	30.08	7	*	*	*	30.17	- .09	21	20	- 2	NE	3	b	*	32	19		
	Munich ...	30.32	16	E	2	b	30.04	- .12	1	1	- 14	N	2	m	*	16	0		
	The Helder ...	30.32	16	E	2	b	30.32	+ .02	14	13	- 4	E	4	m	3	19	14		
	Brussels (9 a.m.) ...	30.18	20	E	3	m	30.19	- .00	15	15		E	3	m	*	28	8		
	Cape Gris Nez ...	30.15	25	WSE	1	o	30.16	+ .01	20	20	0	NNE	2	b	2	30	21		
	Paris ...	30.04	32	E	2	o	30.11	+ .03	31	30	- 4	E	2	o	3	37	27		
	Brest ...	30.04	31	ENE	1	m	30.10	+ .04	31	30	+ 2	NE	3	m	2	32	28		
	Lorient ...	30.04	31	ENE	1	m	30.10	+ .04	31	30	+ 2	NE	3	m	2	32	28		
FRANCE AND BELGIUM.	Rochefort ...	29.96	34	NE	4	o	30.02	- .04	20	20	+ 1	ENE	4	o	*	36	23		
	Belfort ...	29.97	19	W	1	b	30.14	- .03	19	19	+ 4	ENE	1	o	*	25	13		
	Lyons ...	30.12	17	ENE	1	b	30.14	- .03	19	19	+ 4	ENE	1	o	*	23	15		
	Nice ...	29.82	47	E	4	c	29.95	+ .06	42	36	- 1	S	1	o	4	50	41		
	Perpignan ...	29.91	43	W	3	b	30.00	+ .03	33	31	- 7	W	2	o	*	52	31		
	Biarritz ...	29.95	34	E	4	b	30.00	- .01	36	34	+ 6	E	3	o	2	39	30		
PENIN- SULA.	Corunna ...	29.93	47	ESE	4	o	29.98	- .09	47	45	+ 10	SE	4	o	?	48	?		
	Lisbon ...	29.93	47	ESE	4	o	29.98	- .09	47	45	+ 10	SE	4	o	?	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

Monday, 29<sup>th</sup> December,

1890.

## BAROMETER, WIND AND SEA.

### EXPLANATION OF MAP.

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

Changes since previous morning are stated in words.

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

→ forces above 10; → forces 8 to 10;

→ forces 5 to 7; → forces 1 to 4.

○ = dead calm.

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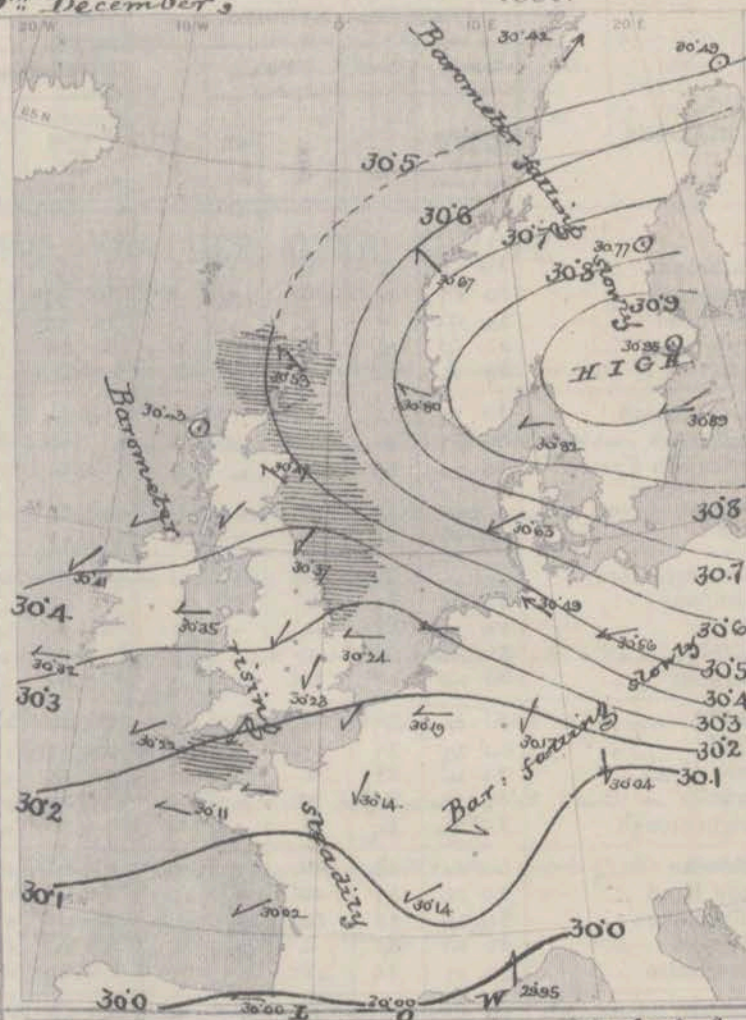
■ = Rough. ■ = High.

## MEAN HEIGHT OF THE BAROMETER

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

During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS.
Sumburgh Head .....	29.667
Stornoway .....	29.701
Wick .....	29.711
Nairn .....	29.739
Aberdeen .....	29.757
Leith .....	29.803
Shields .....	29.843
York .....	29.888
Loughborough .....	29.924
Ardrossan .....	29.819
Donaghadee .....	29.847
Holyhead .....	29.879
Liverpool .....	29.893
Parsonstown .....	29.909
Valencia .....	29.908
Roche's Point .....	29.913
Pembroke .....	29.918
Silly .....	29.962
Jersey .....	29.983
Hurst Castle .....	29.959
Dover .....	29.957
LONDON .....	29.951
Oxford .....	29.954
Cambridge .....	29.938
Yarmouth .....	29.914



## 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.

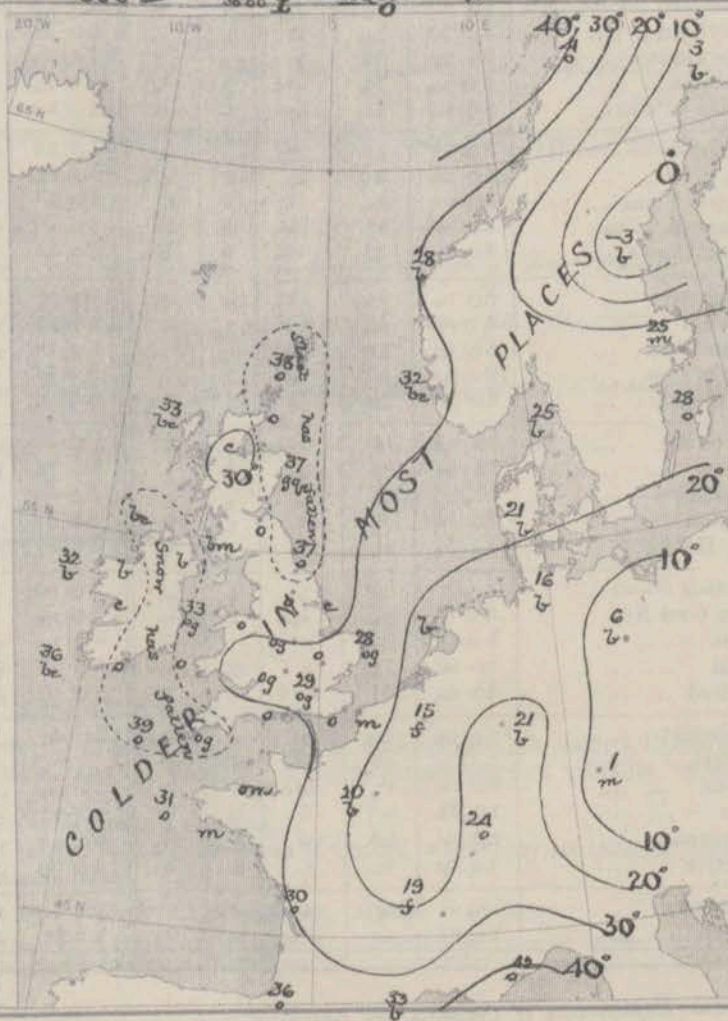
**RAINFALL**—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more are quoted in figures.

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

(For the month of December.)

STATIONS.	TEMPERATURE.				RAINFALL. (Inches.)
	Daily Max.	Daily Min.	at 8 a.m.		
			Dry.	Wet.	
Sumburgh Head.....	42.5	35.0	39.5	37.9	4.33
Stornoway .....	41.4	33.9	39.2	38.2	5.66
Wick .....	42.1	32.6	38.0	36.6	3.18
Nairn .....	41.7	32.8	37.0	35.6	2.08
Aberdeen .....	42.0	32.5	36.9	35.3	3.34
Leith .....	44.2	33.7	38.6	37.0	2.01
Shields .....	43.1	34.3	38.5	37.2	2.74
York .....	42.7	32.4	36.8	35.7	2.45
Loughborough .....	43.1	32.9	36.9	35.0	2.36
Ardrossan .....	44.6	36.0	40.1	38.7	4.04
Donaghadee .....	45.1	36.2	40.2	39.2	2.84
Holyhead .....	46.7	39.3	43.0	41.4	3.84
Liverpool .....	43.8	36.0	39.3	37.6	2.70
Parsonstown .....	44.8	33.2	37.9	36.6	3.02
Valencia .....	50.0	40.0	44.6	42.3	5.82
Roche's Point .....	48.0	39.0	42.9	41.5	4.74
Pembroke .....	47.1	40.6	43.9	42.5	4.05
Silly .....	49.8	43.8	47.1	45.4	4.10
Jersey .....	47.7	40.1	43.4	41.8	3.87
Hurst Castle .....	46.1	36.9	40.9	40.2	2.84
Dover .....	44.7	36.8	40.3	39.1	3.20
LONDON .....	44.7	34.6	38.5	37.4	2.14
Oxford .....	43.6	34.3	37.7	36.6	2.13
Cambridge .....	43.5	32.3	36.9	36.1	1.99
Yarmouth .....	42.4	34.2	38.3	37.5	2.95

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 30.9 in. and upwards in the south of Sweden; 30.7 in. and upwards over the north of Denmark and the southern half of Scandinavia.  
Lowest 29.9 in. and less over the southern parts of the Iberian peninsula.  
Gradient moderate over Denmark, Germany and the North Sea, but slight elsewhere.  
Barometer falling over the greater part of Scandinavia, as well as over Germany & the Netherlands, but rising elsewhere.

## TEMPERATURE

Highest 44° at Linton, 42° at Trice, 41° at Bodo, 39° at Seilly, 38° at Lumburg, 42° at Donaghadee & 37° at Wick, Aburdeen & Sheriff.  
Lowest - 3° Fahrenheit at Nemisand, +1° at Munich, 6° at Berlin, 13° at Haparanda, 14° at Heller & 15° at Brussels.  
The maxima registered over England yesterday ranged a little above or below the freezing point.

## WIND

Chiefly E & NE, light or moderate in force generally, but fresh or strong at some of our eastern & southern stations.  
In the east of Scotland and the west of Norway and SW at Bodo.

## WEATHER

Fine in Ireland and the west of Scotland as well as in Denmark, Germany, Holland and the west of Norway.  
Dull elsewhere, with fog at Brussels.  
A little snow or sleet fell yesterday in many parts of the United Kingdom.

## SEA

Rough or rather so on our north and northeast coasts, but moderate to smooth elsewhere.

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

There are at present no signs of any important change in the weather over our islands, but depressions are beginning to approach the northern parts of Scandinavia from the westward, and the large anticyclone is apparently moving slowly southward.

## FORECASTS

For the 24 hours ending at NOON on 30<sup>th</sup> December 1890.

### DISTRICTS.

### FORECASTS.

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

SE winds, moderate or fresh;  
dull, rain or sleet locally.

NE to E winds, moderate or fresh;  
dull, gloomy, some snow showers.

### DISTRICTS.

### FORECASTS.

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

NE winds, light; fair generally.

Same as N° 5.

Same as N° 6.

### 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.		
Skudeanaes ...	30.64	34	24	ESE	4	C	3		Holyhead ...	30.22	31	23	E	3	3
Sumburgh Head									Valencia ...						
Stornoway ...	30.34	40	28	SE	4	C	4		Scilly ...						
Aberdeen ...									Jersey ...	30.09	33	32	ESE	3	3
Shields ...									Dungeness ...	30.15	31	31	ESE	3	2
Ardrossan ...									London ...						
Malin Head ...	30.24	42	28	ESE	4	O	1		Yarmouth ...						
Mullaghmore ...									Rochefort ...	30.12	34	34	ESE	3	2
Belmullet ...	30.20	37	30	E	1	O	*								

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

Weather fine and bright at the majority of the European stations, cloudy or overcast in our islands and on the shores of the Mediterranean, very gloomy in places, with cold rain or snow in several parts of England, fog at Riga, snow at Moscow; rain at Brindisi also. Rainfall later (including snow), slight at the British stations - none reported from the Continent.

Temperature still very low generally; morning values as low as (1) zero to -12°F. over the south of Russia and some parts of Austria, and 10° to 20° further north; 1° at Neu Fahrwasser, 6° at Berlin and Breslau, 13° at Munich, 18° at the Meider, 20° at Paris, 27° at Oxford, 31° in London, and at Cambridge, 33° at Pantonstown, 44° at Madrid; 1° to 9° over the northern half of Sweden. No great change elsewhere.

Wind (1) Strong NE<sup>4</sup> to N<sup>4</sup> on the northern shores of the Mediterranean, SE<sup>4</sup> over the Adriatic; (2) mainly E<sup>4</sup> over Germany, Denmark, the North Sea and England, SE<sup>4</sup> in Ireland and Scotland; very light and variable over Poland, Hungary and the south of Russia, E<sup>4</sup> wind freshening somewhat over the south of England later, and wind backing to NE in the south of Ireland.

Barometer falling over central and northern Russia; highest 31.1 ins. to 30.6 ins. in a large anticyclone having its centre near Hango, and ranging from 30.4 ins. on the northeast coast of Scotland, to rather below 30.1 ins. off our southwest coasts. Lowest 29.8 ins. to 29.5 ins. and less in a depression over the Mediterranean, with its centre near Cagliari. No important change in our islands and their neighbourhood later.

## SUMMARY OF CHANGES IN THE WEATHER OVER THE BRITISH ISLANDS AND THEIR NEIGHBOURHOOD FROM THE 21<sup>ST</sup> TO 27<sup>TH</sup> DEC. 1890.

In the course of the past week the weather over England has been chiefly anticyclonic and temperature has therefore remained very low, the daily maxima being frequently below the freezing point. In Ireland and Scotland, however, where conditions have been at times cyclonic the weather has been milder, the daily maxima occasionally rising above 40°, and sometimes reaching 50°.

At the commencement of the week an anticyclone lay directly over the United Kingdom, and light variable breezes with hard frost prevailed over all our more central districts, the thermometer on the night of the 21<sup>st</sup> falling as low as 4° at Cambridge, 9° at Oxford, 10° at Loughborough, and 15° in London. On the following day (the 22<sup>nd</sup>) the maximum reading observed in the south of London between 8 am and 6 pm was as low as 19°. In the meantime a large "V" shaped depression having at least two well defined minima spread in over our western and northern districts from the Atlantic, and on the 23<sup>rd</sup> when S<sup>4</sup> winds set in over England the thermometer rose decidedly. The daily maxima were, however, below the freezing point at many of the inland stations. The large depression in the west soon dispersed and on the 24<sup>th</sup> an anticyclonic band stretched across the United Kingdom, SW<sup>4</sup> breezes being reported in the north, but E<sup>4</sup> or NE<sup>4</sup> breezes in the south, with frosty foggy weather in most places. A large though somewhat shallow depression now skirted our north coasts, but in its rear the barometer rose briskly, and at the close of the week an anticyclonic system of considerable size and height extended from Scandinavia over all our more northern districts, pressure being lowest to the south and southwest of our islands. The wind was therefore generally E<sup>4</sup> with fair weather in the west and north, but with occasional snow over England. Temperature remained very low generally, the daily maxima at the end of the week being below the freezing point in some of the inland parts of England.

## EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

**WEATHER.** - Beaufort Scale is b. blue sky; c. detached clouds; d. drizzling rain; f. fog; g. dark, gloomy; h. hail; l. lightning; m. misty (hazy); o. overcast; p. passing showers; q. equally; 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 30<sup>TH</sup> DECEMBER. 1890.

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

STATIONS.	YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
	BAROM.  Reading at 3 <sup>30</sup> P. and Sea Level.	TEMP.  Dry.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Weather.	Sea. (0 to 3.)	SHADE TEMP.		Amount of Rainfall.	
			Direc.	Force. (0 to 12.)		Reading at 3 <sup>30</sup> P. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Direc.	Force. (0 to 12.)			Max.	Min.		
SCANDINAVIA.	Haparanda ...	30.56	24	WPN	6	c	30.55	-14	21	21	+18	NW	4	b	+	25	0	—
	Hernösand ...	30.63	-6	2	0	b	30.61	-16	30	28	+23	NW	2	b	+	25	-9	—
	Stockholm ...	30.44	24	W	2	0	30.75	-20	16	15	-9	W	2	b	+	28	16	—
	Wisby ...	30.84	21	ESE	2	b	30.75	-14	30	27	+2	W	4	0	+	18	—	—
	Bodö ...	30.25	37	WPN	8	b	30.47	+05	34	32	-7	W	4	0	+	41	30	—
	Christiansund	30.70	37	SW	3	0	30.73	+06	39	35	+11	SW	5	0	4	39	37	—
	Skudesnaes ...	30.79	24	2	0	b	30.79	-01	30	28	-2	SE	1	b	2	34	23	—
	Christiania Fjord (Færder)	30.80	24	NNE	2	0	30.82	-08	17	15	-8	N	2	0	1	25	16	—
	Skagen (The Seaw)	30.86	25	E	1	c	30.77	-05	26	23	+1	E	1	0	1	27	23	—
	Fanö ...	30.62	24	ENE	6	b	30.63	0.0	24	24	+3	ENE	6	c	+	25	21	—
BRITISH ISLANDS.	Sumburgh Head	30.62	40	SE	2	0	30.73	+20	39	37	+1	SE	1	0	4	40	36	—
	Stornoway ...	30.50	35	E	2	b	30.60	+17	37	35	+4	SE	5	b	4	38	30	—
	Wick ...	30.65	39	SE	5	0	30.72	+22	39	38	+2	SE	3	0	3	40	35	0.03
	Nairn ...	30.57	30	2	0	0	30.65	+20	35	34	+9	E	1	0	1	40	25	0.01
	Aberdeen ...	30.54	39	ESE	4	0	30.67	+22	37	34	0	E	4	0	6	39	36	—
	Leith ...	30.46	37	E	1	0	30.59	+15	38	35	+2	E	3	0	+	38	34	—
	Shields ...	30.40	39	E	3	c	30.53	+16	37	34	0	ENE	7	0	7	39	34	—
	Spurn Head ...	30.29	32	E	7	b	30.35	+06	33	31	-1	E	8	b	6	35	32	—
	York ...	30.35	34	NNE	1	b	30.42	+05	32	32	-1	NE	1	0	+	35	31	—
	Loughborough	30.24	29	ENE	3	0	30.34	+03	29	27	-1	ENE	4	0	+	31	20	—
BRITISH ISLANDS.	Ardrossan ...	30.40	35	NE	1	0	30.54	+12	36	34	+6	NE	4	b	2	36	29	—
	Malin Head ...	30.43	37	NE	3	b	30.48	+05	38	37	+1	SE	6	0	3	39	35	—
	Mullaghmore ...	30.43	38	NE	4	b	30.42	+02	36	34	0	ENE	6	0	4	38	31	—
	Belmullet ...	30.46	34	E	2	0	30.42	+01	35	34	+3	E	4	b	+	41	32	—
	Donaghadee ...	30.41	39	ENE	4	c	30.46	+06	38	37	0	ESE	8	b	6	40	37	0.01
	Liverpool (Bidston)	30.32	32	NE	2	b	30.38	+02	32	32	+2	ENE	5	0	4	34	31	—
	Holyhead ...	30.33	36	ENE	5	0	30.36	+01	35	33	+2	E	5	c	5	38	33	—
	Parsonstown ...	30.36	38	2	0	0	30.31	-03	33	30	+3	NE	1	b	+	38	29	—
	Valencia ...	30.36	37	NE	3	b	30.26	-06	35	33	-1	E	2	0	4	38	34	—
	Roche's Point...	30.31	35	NE	4	0	30.23	-06	35	33	0	ENE	4	0	4	35	34	—
BRITISH ISLANDS.	Pembroke (St. Ann's Hd.)	30.25	32	NE	3	c	30.25	-01	26	25	-7	ENE	2	b	1	33	25	—
	Scilly ...	30.26	39	NE	4	0	30.08	-14	34	32	-5	ENE	5	0	3	40	31	—
	Prawle Point ...	30.19	30	NE	3	0	30.18	-01	30	29	-4	NE	7	0	5	34	27	—
	Jersey (St. Aubin's)	30.12	37	NE	3	0	30.09	-03	30	29	-6	NE	6	0	4	35	29	—
	Hurst Castle ...	30.19	29	NE	4	0	30.16	-07	30	30	-2	ENE	5	c	3	33	27	—
	Dungeness ...	30.14	29	NE	5	c	30.16	-01	27	27	-5	ENE	6	0	5	32	24	—
	London ...	30.20	28	NE	3	0	30.23	0.0	26	25	-3	ENE	4	0	+	30	25	—
	Oxford ...	30.25	24	NE	3	0	30.28	+01	23	22	-6	NE	3	0	+	29	23	—
	Cambridge ...	30.28	28	NE	1	0	30.30	0.0	24	23	-4	NE	3	0	+	29	20	—
	Yarmouth ...	30.24	28	E	5	c	30.30	+06	24	24	-4	E	6	0	6	28	22	—
GERMANY & HOLLAND.	Cuxhaven ...	30.57	22	E	5	b	30.55	+06	12	11	-4	E	4	b	+	22	10	—
	Berlin ...	30.58	7	E	5	b	30.54	-02	4	3	-2	E	5	b	+	9	3	—
	Wiesbaden ...	30.04	7	2	0	m	30.17	0.0	14	14	-7	NNE	3	b	+	25	14	—
	Munich ...	30.04	7	2	0	m	30.06	+02	6	6	+5	E	4	m	+	16	1	—
	The Helder ...	30.34	18	ENE	5	b	30.41	+09	9	9	-5	ENE	5	b	4	18	9	—
	Brussels (9 a.m.)	30.20	14	ENE	3	m	30.20	+01	3	3	-12	NE	5	b	+	17	3	—
	Cape Gris Nez	30.19	14	ENE	3	m	30.19	0.0	11	11	-14	E	5	m	4	37	9	—
	Paris ...	30.18	21	N	1	b	30.10	-04	12	12	-8	N	1	b	+	27	12	—
	Brest ...	30.16	36	E	1	0	30.01	-10	30	32	+4	E	2	0	2	41	28	—
	Lorient ...	30.11	32	ENE	4	b	29.99	-11	30	28	-1	ENE	2	m	2	37	30	—
FRANCE AND BELGIUM.	Rochefort ...	30.03	27	ENE	5	b	29.96	-06	24	23	-6	ENE	5	0	+	32	16	—
	Belfort ...	30.17	17	W	1	0	30.12	-02	14	14	-10	W	1	b	+	22	8	—
	Lyons ...	30.15	19	NW	1	b	30.07	-02	17	17	-2	SE	1	b	+	22	17	—
	Nice ...	30.02	43	SE	3	b	30.07	+12	39	38	-3	E	4	0	4	50	37	0.04
	Perpignan ...	30.02	37	NE	2	b	29.95	-05	36	36	+6	NE	2	0	+	48	37	—
	Biarritz ...	29.99	42	E	3	0	29.86	-14	40	37	+4	SE	2	0	2	46	36	—
	Corunna ...	30.00	30	W	3	b	30.00	0.0	30	30	0	W	3	0	+	30	30	—
	Lisbon ...	30.00	30	W	3	b	30.00	0.0	30	30	0	W	3	0	+	30	30	—
	Algarve ...	30.00	30	W	3	b	30.00	0.0	30	30	0	W	3	0	+	30	30	—
	Malaga ...	30.00	30	W	3	b	30.00	0.0	30	30	0	W	3	0	+	30	30	—

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, 30<sup>th</sup> December,

1890.

## BAROMETER, WIND AND SEA.

### EXPLANATION OF MAP.

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

Changes since previous morning are stated in words.

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

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

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

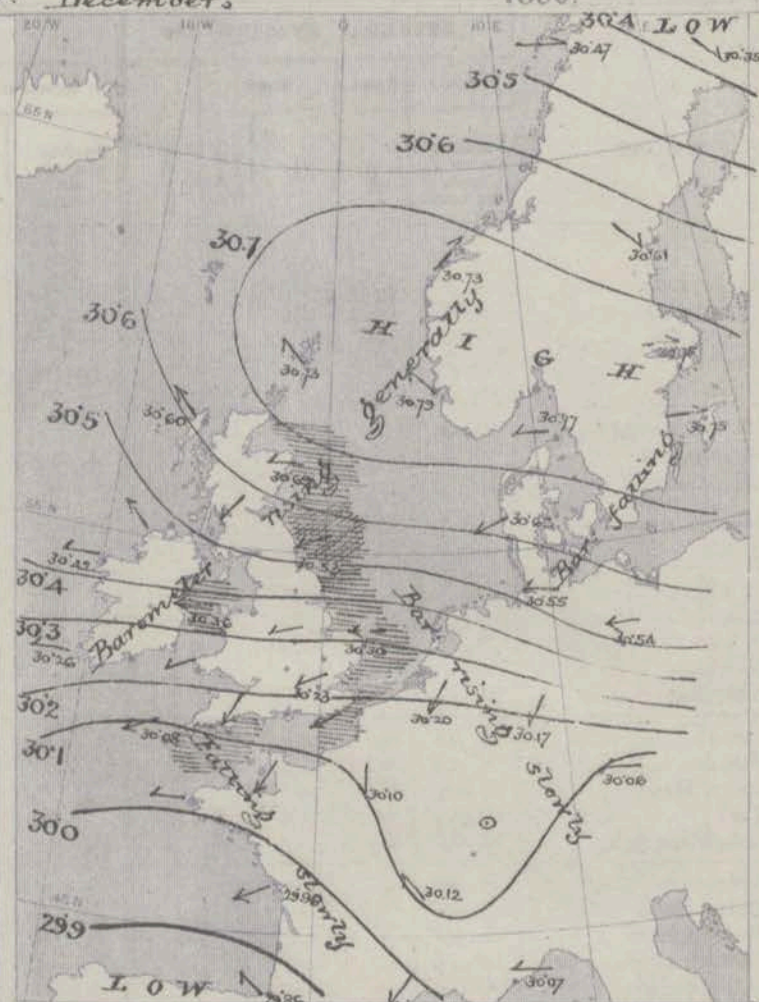
▨ = Rough. ▨ = High.

## MEAN HEIGHT OF THE BAROMETER

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

During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS.
Sumburgh Head .....	29.667
Stornoway .....	29.701
Wick .....	29.711
Nairn .....	29.739
Aberdeen .....	29.757
Leith .....	29.803
Shields .....	29.843
York .....	29.888
Loughborough .....	29.923
Ardrossan .....	29.819
Donaghadee .....	29.847
Holyhead .....	29.879
Liverpool .....	29.895
Parsonstown .....	29.909
Valencia .....	29.908
Roche's Point .....	29.915
Pembroke .....	29.918
Silly .....	29.962
Jersey .....	29.985
Hurst Castle .....	29.959
Dover .....	29.957
LONDON .....	29.951
Oxford .....	29.954
Cambridge .....	29.938
Yarmouth .....	29.914



## 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.

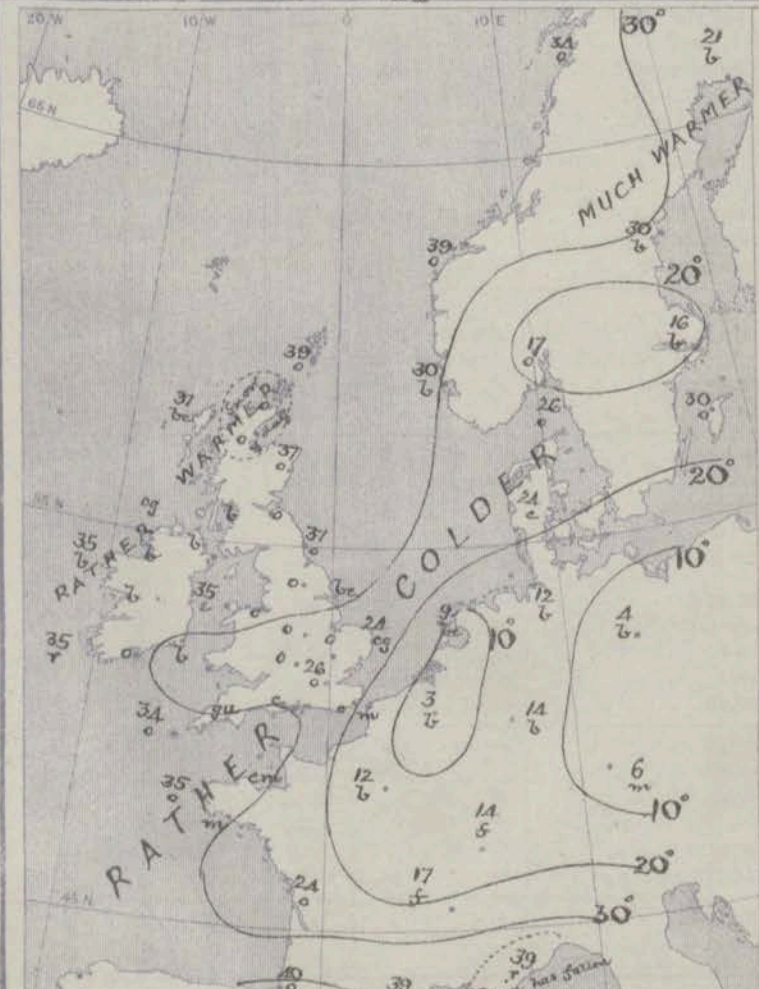
**RAINFALL**—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more are quoted in figures.

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

(For the month of December.)

STATIONS.	TEMPERATURE.				RAINFALL (Inches.)
	Daily Max.	Daily Min.	At 8 A.M.	At 8 A.M.	
			Dry.	Wet.	
Sumburgh Head .....	42.5	35.0	39.5	37.9	4.33
Stornoway .....	44.4	33.9	39.2	38.2	5.68
Wick .....	42.1	32.5	38.0	36.6	3.18
Nairn .....	41.7	32.8	37.0	35.5	2.08
Aberdeen .....	42.0	32.5	36.9	35.3	3.34
Leith .....	44.2	33.7	38.6	37.0	2.01
Shields .....	43.1	34.3	38.5	37.2	2.74
York .....	42.7	32.4	36.8	35.7	2.45
Loughborough .....	43.1	32.9	36.9	35.9	2.36
Ardrossan .....	44.6	35.0	40.1	38.7	4.04
Donaghadee .....	46.1	36.2	40.2	39.2	2.84
Holyhead .....	46.7	39.3	43.0	41.4	3.84
Liverpool .....	43.8	36.0	39.3	37.6	2.70
Parsonstown .....	44.8	33.2	37.9	36.6	3.02
Valencia .....	50.0	40.0	44.6	42.3	5.82
Roche's Point .....	48.0	39.0	42.9	41.5	4.74
Pembroke .....	47.1	40.6	43.9	42.5	4.06
Silly .....	49.8	43.8	47.1	45.4	4.10
Jersey .....	47.7	40.1	43.4	41.8	3.87
Hurst Castle .....	46.1	36.9	40.9	40.2	2.84
Dover .....	44.7	36.8	40.3	39.1	3.20
LONDON .....	44.7	34.6	38.5	37.4	3.14
Oxford .....	43.6	34.3	37.7	36.6	2.13
Cambridge .....	43.5	32.3	36.9	36.1	1.99
Yarmouth .....	42.4	34.2	38.3	37.5	2.90

**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 30.8 ins. to 30.5 ins. in an anticyclone covering Scandinavia, the North Sea and Scotland. Lowest 29.9 ins. and less over the Spanish Peninsula. Gradients somewhat steep over the North Sea and north of England, as well as over the Netherlands and North Germany. Barometer was rising in our Islands, but apparently falling over France and the Bay of Biscay.
TEMPERATURE	Highest 40° at Biarritz, 39° at Christiansand, Lurnburgh Head and Wick, 35° in the west of Ireland. Lowest 1° F. at Brussels, 4° at Berlin, 6° at Munich, 9° at the Helles, 12° at Paris, 13° at Oxford, 16° in London. It had been as low as 1° at Munich during the night.
WIND	E <sup>2</sup> to NE <sup>2</sup> over nearly the whole of our area, but SW <sup>2</sup> to W <sup>2</sup> over the northern parts of Sweden and Norway. It was blowing strongly on our coasts generally, and fresh gale at Spurn Head and Donaghadee.
WEATHER	Clear and bright over North Germany, the Netherlands, some parts of France and the northwestern parts of the British Islands, cloudy or overcast elsewhere.
SEA	Moderate to rather rough on our western, southern, eastern and northeastern coasts. Moderate in the far north, smooth off the west of France.

### PROBABLE CHANGES IN SYSTEM NOW PREVALENT

*No great change is indicated at present.*

## FORECASTS

For the 24 hours ending at NOON on 31<sup>ST</sup> DECEMBER 1890.

### DISTRICTS.

### FORECASTS.

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

{ SE<sup>2</sup> and E<sup>2</sup> winds, fresh, cold, dry.  
 { E<sup>2</sup> winds, strong, cold, slight cold showers at times.  
 Same as Nos 0. and 1.  
 { E<sup>2</sup> winds, strong, squally, dull occasional slight showers of snow

### DISTRICTS.

### FORECASTS.

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

Same as Nos 0. and 1.

Same as No 5.

{ E<sup>2</sup> winds, fresh to strong; cold, dry.

### WARNINGS

None Issued at present

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



# YESTERDAY'S 2 P.M. REPORTS.

	THER: WIND								THER: WIND						
	BAR:	D.	W.	D.	F.	WEA.	SEA		BAR:	D.	W.	D.	F.	WEA.	SEA
Skudesnaes ...	30.57	34	24	SE	4	6	3	Holyhead ...	30.34	37	35	ENE	4	09	3
Sumburgh Head ...	30.58	39	37	SE	2	0	6	Valencia ...	30.34	38	36	ENE	3	06m	3
Stornoway ...	30.46	37	36	2	0	6	2	Scilly ...	30.26	39	37	NE	4	7	3
Aberdeen ...	30.51	38	34	ENE	3	09	6	Jersey ...	30.15	39	37	NE	3	07m	3
Shields ...	30.40	37	34	E	3	0	5	Dungeness ...	30.18	37	30	NE	5	C	4
Ardrossan ...	30.44	35	34	NE	3	0	2	London ...	30.21	28	28	NE	2	0mg	*
Mulin Head ...	30.44	39	36	ENE	3	62	1	Yarmouth ...	30.24	28	28	E	5	0	4
Mullaghmore ...	30.44	37	35	ENE	3	6	2	Rochefort ...	30.06	31	31	ENG	4	C	4
Belmullet ...	30.44	41	38	E	1	6	*								

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

*Weather fine in Ireland and the west of Scotland as well as over Scandinavia, Denmark, central Europe and the extreme southern parts of Russia and Italy. Dull elsewhere with fog at St Petersburg and Lyons, rain at Brindisi and La Caille, and a thunderstorm at Spas. A little snow falling in the southeast of England during day.*

*Temperature highest 54° at Malta, 53° at La Caille, and 51° at Brindisi and Algiers, above 45° at most of the Mediterranean stations, and also on the southwest coast of the Spanish Peninsula. Lowest -3° at Grocno, 0° at Warsaw, Kharkov, Breslau and Vienna, and +1° at Moscow, Odessa, Hermannstadt and Munich; below 10° in most parts of central Europe, below 20° over the Netherlands and central France, and below the freezing point over all the more inland parts of the United Kingdom. Thermometers over the eastern, midland and southeastern counties of England remaining below 32° all day, maximum at Berlin only 9°.*

*Wind E<sup>2</sup> or NE<sup>2</sup> over England, Ireland, France, Denmark, the Baltic and the greater part of central Europe, fresh to strong in force on the eastern and southern coasts of England. SE<sup>2</sup> in the north and east of Scotland, and also in the west of Norway; calm in Sweden; light from the SW<sup>2</sup> in the extreme north of Russia. Cyclonic circulation of strong winds reported over Italy, Tunis and the adjacent parts of the Mediterranean, with a gale from the E<sup>2</sup> at Trieste, and from the NW<sup>2</sup> at La Caille. Variable in Spain, SW<sup>2</sup> in Algeria.*

*Barometer highest 30.9 ins. and upwards over the south of Sweden and the Gulf of Bothnia, 30.6 ins. and upwards over the whole of Russia, the Baltic, Denmark and the greater part of Scandinavia. Lowest 29.8 ins. and less in a large depression lying over the Mediterranean to the south and east of Italy; 29.9 ins. and less in another system lying to the southwestward of the Iberian peninsula. No important change occurring during day.*

### EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

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

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

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

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



# DAILY WEATHER REPORT.

for *Wednesday, 31<sup>st</sup> December, 1890.*  
*Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.*

STATIONS.	YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
	BAROM.	TEMP.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Weather.	Sea. (0 to 3.)	SHADE TEMP.		Amount of Rainfall.	
			Reading at 3 <sup>30</sup> P. and Sea Level.	Dry.		Dir.	Force. (0 to 12.)	Reading at 3 <sup>30</sup> P. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.			Dir.	Force. (0 to 12.)		Max.
SCANDINAVIA.	Haparanda ...	30.04	26	SW	4	0	29.80	- .58	30	30	+ .09	SW	2	0	*	30	12	-
	Hernösand ...	30.35	28	S	2	0	30.16	- .45	?	?	?	NW	8	0	*	30	-8	-
	Stockholm ...	30.71	13	W	2	0	30.48	- .27	21	20	+ .5	W	2	6	*	27	12	-
	Wisby ...	30.71	28	NW	6	0	30.58	- .17	30	29	0	NW	4	0	*	27	16	-
	Bodö ...	30.12	41	SW	8	7	29.91	- .56	42	41	+ .8	SW	8	4	5	42	34	0.39
	Christiansund	30.70	40	SW	5	c	30.56	- .17	89	37	0	NW	6	c	5	?	36	0.08
	Skudesnaes ...	30.79	23	ESE	1	6	30.67	- .12	24	24	- .6	ESE	1	0	2	30	21	-
	Christiania Fjord (Færder)	30.79	19	NW	2	0	30.62	- .20	21	20	+ .4	NW	2	c	1	?	17	-
	Skagen (The Scaw)	30.76	24	SE	1	0	30.66	- .11	22	21	- .4	W	1	0	1	26	21	-
	Fanö ...	30.65	24	ESE	6	0	30.61	- .02	18	18	- .6	ESE	4	0	*	25	18	-
BRITISH ISLANDS.	Sumburgh Head	30.76	36	SE	2	c	30.63	- .10	36	36	- .1	SE	2	c	4	39	35	-
	Stornoway ...	30.64	37	SE	5	6	30.47	- .13	39	37	+ .2	SE	6	6c	5	40	38	-
	Wick ...	30.72	40	ESE	4	0	30.58	- .14	39	37	0	E	5	0	6	40	35	-
	Nairn ...	30.66	36	E	1	c	30.50	- .15	36	35	+ .1	ESE	2	c	2	37	34	-
	Aberdeen ...	30.68	36	ESE	5	ogyp	30.54	- .14	38	36	+ .1	E	5	ogj	7	39	36	0.01
	Leith ...	30.59	37	E	3	0	30.42	- .17	38	35	0	E	4	0	*	38	36	-
	Shields ...	30.50	36	ESE	5	c	30.36	- .17	37	34	0	E	7	0	4	38	34	-
	Spurn Head ...	30.31	33	ESE	8	0	30.29	- .06	31	30	- .2	E	6	0	2	36	27	-
	York ...	30.43	33	E	4	0	30.33	- .09	30	30	- .3	E	3	0	*	35	29	-
	Loughborough	30.35	27	NNE	3	0	30.28	- .06	23	22	- .6	ESE	3	0	*	29	21	0.01
GERMANY & HOLLAND.	Ardrossan ...	30.50	37	NE	2	c	30.34	- .20	37	35	+ .1	NE	3	0	2	37	35	-
	Malin Head ...	30.46	38	SE	6	c	30.25	- .20	39	36	+ .1	SE	7	ogh	4	40	36	-
	Mullaghmore ...	30.44	38	E	7	og	30.17	- .25	35	34	- .1	E	6	0	5	39	34	-
	Belmullet ...	30.41	36	ESE	4	6c	30.14	- .28	35	33	0	E	4	0	*	38	34	-
	Donaghadee ...	30.49	38	E	8	6c	30.25	- .21	38	36	0	E	8	c	7	40	35	0.01
	Liverpool (Bidston)	30.37	32	ESE	6	0	30.26	- .12	25	24	- .8	E	5	0	4	34	25	-
	Holyhead ...	30.36	35	E	6	cmgy	30.19	- .17	26	26	- .9	E	6	cm	6	36	26	-
	Parsonstown ...	30.33	35	NE	1	0	30.13	- .18	27	26	- .6	SE	1	0	*	37	27	-
	Valencia ...	30.26	37	E	5	0	29.99	- .27	34	32	- .1	ESE	5	om	4	38	31	-
	Roche's Point...	30.24	36	E	5	c	30.03	- .20	29	29	- .6	E	6	sp	5	38	29	0.25
FRANCE AND BELGIUM.	Pembroke (St. Ann's Hd.)	30.22	26	ESE	4	6	30.07	- .18	24	22	- .2	ESE	5	c	3	32	19	-
	Scilly ...	30.07	31	ESE	6	0	29.82	- .26	39	38	+ .5	ESE	6	0	5	39	30	0.01
	Prawle Point ...	30.11	26	NE	7	0	29.97	- .16	27	27	- .3	NE	7	om	6	30	25	-
	Jersey (St. Aubin's)	30.04	31	ESE	5	ogm	29.94	- .15	31	30	+ .1	E	5	om	4	39	22	0.03
	Hurst Castle ...	30.17	26	ESE	7	0	30.09	- .07	24	24	- .6	ESE	7	0	4	30	21	-
	Dungeness ...	30.16	24	E	7	0	30.11	- .05	28	27	+ .1	ESE	6	cps	4	28	12	0.01
	London ...	30.22	25	E	5	0.8	30.17	- .06	25	23	- .1	E	4	og	*	26	20	0.03
	Oxford ...	30.23	25	ESE	3	3	30.21	- .07	22	21	- .1	NE	4	ogyp	*	25	20	-
	Cambridge ...	30.20	25	NE	3	0	30.26	- .02	26	26	+ .2	E	2	0	*	26	20	-
	Yarmouth ...	30.26	26	E	8	cgu	30.26	- .04	29	29	+ .5	ESE	6	c	5	29	22	-
GERMANY & HOLLAND.	Cuxhaven ...	30.57	16	E	5	6	30.57	+ .02	13	11	+ .1	ESE	4	6	*	16	12	-
	Berlin ...	30.67	7	E	4	6	30.63	+ .04	3	3	- .1	ESE	4	6	*	9	1	-
	Wiesbaden ...	*	*	*	*	*	30.86	+ .19	20	19	+ .6	NE	2	6	*	25	14	-
	Munich ...	30.22	16	W	0	c	30.30	+ .24	5	5	- .1	E	4	6	*	21	3	-
	The Helder ...	30.39	12	E	4	6	30.40	- .01	12	11	+ .3	E	3	6	3	16	9	-
	Brussels (S.A.M.)	*	*	*	*	*	30.23	+ .03	12	12	+ .9	ESE	4	6	*	12	-11	-
	Cape Gris Nez	30.17	10	E	6	m	30.12	?	15	15	+ .4	E	4	m	4	18	7	-
	Paris ...	30.11	18	ESE	2	0	30.04	- .06	24	23	+ .12	NE	2	c	*	?	12	-
	Brest ...	29.94	30	E	3	6c	29.83	- .18	29	29	- .6	ESE	5	0	4	36	28	-
	Lorient ...	29.98	27	NE	6	c	29.75	- .21	27	26	- .3	ESE	6	S	4	32	23	?
FRANCE AND BELGIUM.	Rochefort ...	29.87	18	ESE	5	m	29.73	- .23	36	36	+ .12	ESE	4	0	?	?	18	-
	Belfort ...	?	16	W	1	0	?	?	20	?	+ .6	W	1	0	*	20	10	-
	Lyons ...	30.12	23	N	1	8	30.13	+ .01	25	25	+ .8	N	1	0	*	28	17	0.04
	Nice ...	30.19	36	E	3	T	30.23	+ .16	42	40	+ .3	E	4	0	4	41	36	0.65
	Perpignan ...	29.91	41	SW	2	0	29.97	+ .02	47	46	+ .8	S	1	c	*	53	29	-
	Biarritz ...	29.75	35	SE	3	c	29.75	- .11	54	48	+ .4	S	3	0	3	52	40	0.16
	Cornuna ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Lisbon ...	29.67	53	S	3	6c	29.62	- .05	49	49	- .2	ESE	4	0	?	45	48	0.39

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

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



# WEATHER CHARTS

for 8 a.m. on Wednesday, 31<sup>st</sup> December, 1890.

## BAROMETER, WIND AND SEA.

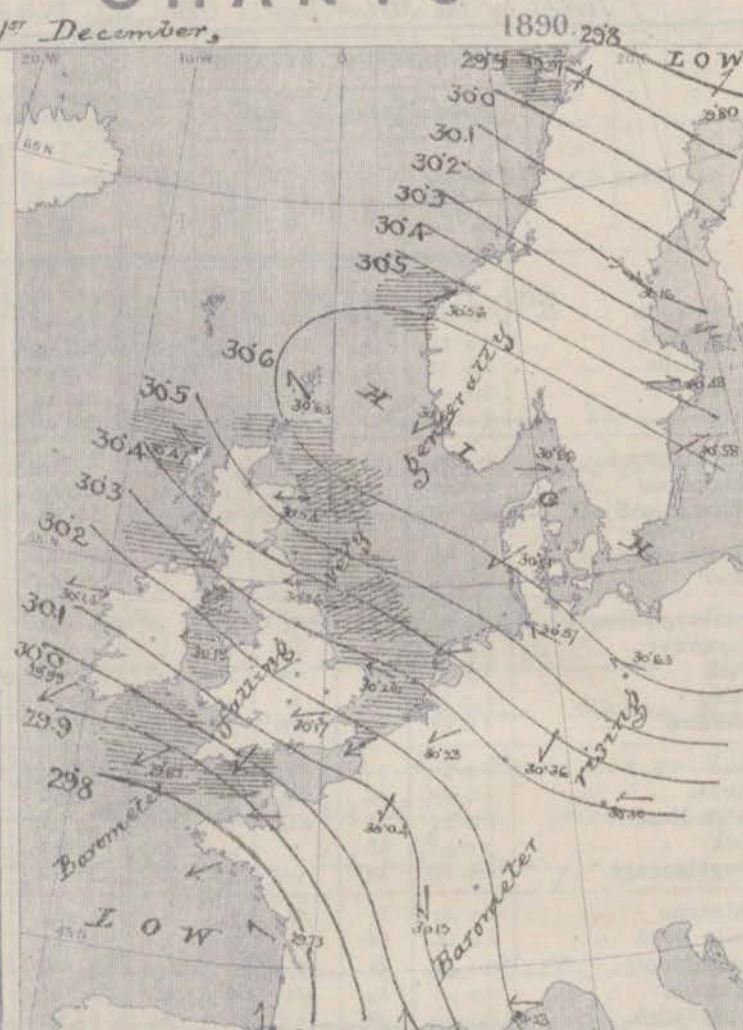
### EXPLANATION OF MAP

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

## MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of December.  
During the 15 Years: 1871-1885.

STATIONS.	MEAN READINGS.
Sumburgh Head .....	29.667
Stornoway .....	29.701
Wick .....	29.711
Nairn .....	29.739
Aberdeen .....	29.757
Leith .....	29.803
Shields .....	29.843
York .....	29.888
Loughborough .....	29.923
Ardrossan .....	29.819
Donaghadee .....	29.847
Holyhead .....	29.879
Liverpool .....	29.893
Parsonstown .....	29.909
Valencia .....	29.908
Rocha's Point .....	29.915
Pembroke .....	29.918
Silly .....	29.962
Jersey .....	29.985
Hurst Castle .....	29.959
Dover .....	29.957
LONDON .....	29.951
Oxford .....	29.954
Cambridge .....	29.938
Yarmouth .....	29.914



## 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.

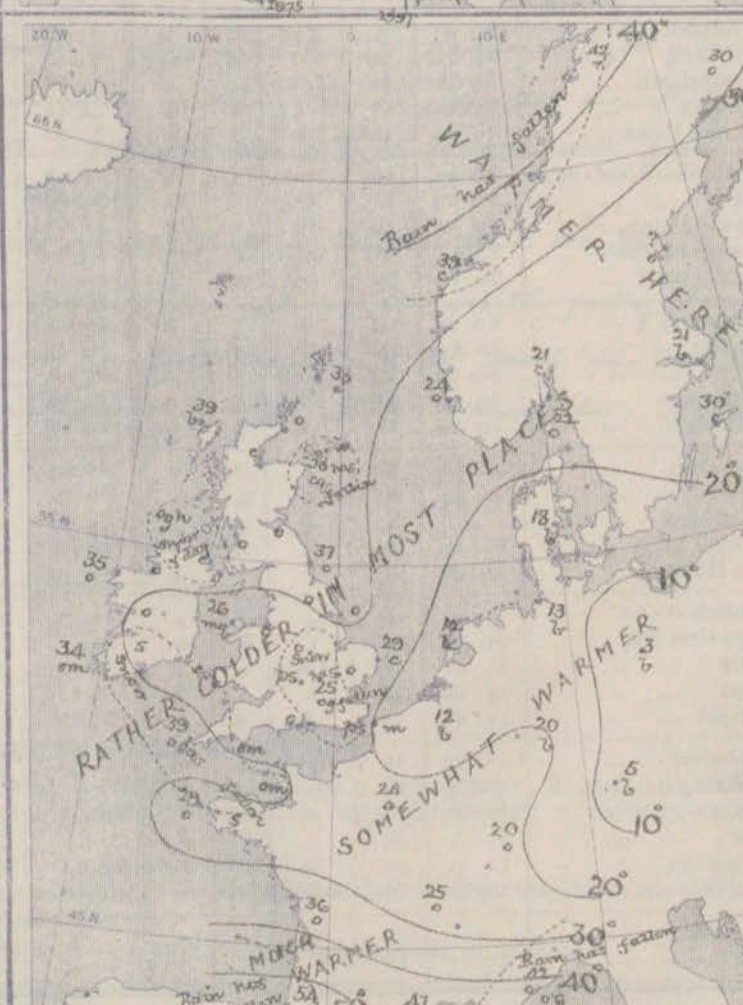
**RAINFALL**—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more are quoted in figures.

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

(For the month of December.)

STATIONS.	TEMPERATURE.				RAINFALL (Inches.)
	Daily Max.	Daily Min.	at 8 a.m. Dry.	Wet.	
Sumburgh Head.....	42.5	35.0	39.5	37.9	4.33
Stornoway .....	44.4	33.9	39.2	38.2	5.00
Wick .....	42.1	32.6	38.0	36.6	3.18
Nairn .....	41.7	32.8	37.0	35.5	2.08
Aberdeen .....	42.0	32.5	36.9	35.3	3.34
Leith .....	44.2	33.7	38.6	37.0	2.01
Shields .....	43.1	31.3	38.5	37.2	2.74
York .....	42.7	32.4	36.8	35.7	2.45
Loughborough .....	43.1	32.9	36.9	35.9	2.36
Ardrossan .....	44.6	36.0	40.1	38.7	4.04
Donaghadee.....	45.1	36.2	40.2	39.2	2.84
Holyhead.....	46.7	39.3	43.0	41.4	3.84
Liverpool .....	43.8	36.0	39.3	37.6	2.70
Parsonstown .....	44.8	33.2	37.0	36.6	3.02
Valencia .....	50.0	40.0	44.6	42.3	5.82
Rocha's Point .....	48.0	39.0	42.9	41.5	4.74
Pembroke.....	47.1	40.6	43.9	42.5	4.06
Silly .....	49.8	43.8	47.1	45.4	4.10
Jersey .....	47.7	40.1	43.4	41.8	3.87
Hurst Castle .....	46.1	36.9	40.0	40.2	2.84
Dover .....	44.7	36.8	40.3	39.1	3.20
LONDON .....	44.7	34.6	38.5	37.4	2.14
Oxford .....	43.6	34.3	37.7	36.6	2.13
Cambridge .....	43.5	32.3	36.9	35.1	1.99
Yarmouth .....	42.4	34.2	38.3	37.5	2.95

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





# GENERAL SITUATION AT 8 A.M.

## PRESSURE

Highest, 30.7 ins. to 30.4 ins. in an anticyclone lying over the North Sea and the south of Scandinavia.  
Lowest, 29.8 ins. and less over Lapland, and also over the Bay of Biscay; 29.6 ins. at Lisbon.  
Gradients somewhat steep - for E and SE winds over our islands, for NW winds over Norway and Sweden.  
Barometer falling except over Germany.

## TEMPERATURE

Highest, (1) 54° at Bernitz, 49° at Kibow, (2) 42° at Bodo and 39° at Christiania.  
Lowest, 3° at Berlin, 5° at Munich, 12° at Brussels and the Helder, 22° at Oxford, and 25° in London.  
During the night it went down to -11° at Brussels, +1° at Berlin, 7° at Cape Gris Nez, 12° at Wymingen, and 20° in London.

## WIND

E to SE over our islands and the Channel, strong in force generally, and blowing a gale at times in exposed places.  
Over the northern parts of Scandinavia it is strong to a gale from between SW. and NW. while over the Bay of Biscay it is very fresh from E and SE.

## WEATHER

Fine and bright over Germany and the Netherlands. Hail and unthawed elsewhere.  
A considerable amount of snow has fallen at Rotherham, and smaller quantities at our southern stations.

## SEA

High in the northeast, and very rough on our coasts generally.

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The severe cold weather recently prevailing begins to show signs of giving way.

# FORECASTS

For the 24 hours ending at NOON on 1<sup>st</sup> JANUARY 1890. 1.

## DISTRICTS.

## FORECASTS.

0	SCOTLAND NORTH	SE winds, increasing in strength; dull, some snow squalls.
1	SCOTLAND EAST	
2	ENGLAND N.E.	E and SE winds, strong to a gale; some snow squalls.
3	ENGLAND EAST	
4	MIDLAND COUNTIES	E winds, fresh; very cold, snow at times.
5	ENGLAND SOUTH	E gales and strong winds; snow squalls.

## DISTRICTS.

## FORECASTS.

6	SCOTLAND WEST	Same as 7, 8, and 1.
7	ENGLAND N.W.	E winds, strong; squally, cold showers.
8	ENGLAND S.W.	E and SE winds, strong to a gale; some cold showers.
9	IRELAND NORTH	SE winds, strong; squally, cold showers.
10	IRELAND SOUTH	

## WARNINGS

The NORTH CONE was hoisted last evening in districts 2, 3, 5 and part of 8, and the SOUTH CONE this morning in dist. 1 and part of 0.

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.		
Skudesnes ...	30.81	30	28	2	0	b	2	Holyhead ...	30.39	34	33	E	5	c	5
Sumburgh Head ...	30.76	38	35	SE	1	c	4	Valencia ...	30.25	37	35	NE	4	6cm	4
Stornoway ...	30.63	40	38	E	5	b	5	Scilly ...	30.05	34	34	ENE	4	0	4
Aberdeen ...	30.69	38	35	E	5	o g p	6	Jersey ...	30.07	31	28	E	5	c	4
Shields ...	30.54	36	33	ENE	6	o	7	Dungeness ...	30.13	24	24	ENE	7	0	5
Ardrossan ...	30.57	38	37	NE	3	0	2	London ...	30.25	26	26	ENE	5	oms	8
Malin Head ...	30.51	39	37	ESE	6	0	3	Yarmouth ...	30.30	27	27	E	6	cg	6
Mullaghmore ...	30.43	39	35	ENE	3	c	6	Rochefort ...	29.43	30	30	ENE	5	m	4
Belmullet ...	30.45	38	36	ESE	3	b	*								

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

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.



# 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.	BAROMETER.		SHADE TEMP.			WIND.		Weather.	Sea (0 to 3.)	SHADE TEMP.		Amount of Rainfall.
				Direc.	Force (0 to 12.)		Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Direc.	Force (0 to 12.)			Max.	Min.	
1	Corunna	*	*	*	*	*	30.15	- .14	32	34	0	NNE	1	b	4	48	36	-
2	Corunna	*	*	*	*	*	29.74	- .41	33	33	- 5	NE	1	c	4	46	34	-
3	Corunna	*	*	*	*	*	29.69	- .05	38	36	+ 5	E	3	0	6	48	32	-
5	Corunna	*	*	*	*	*	29.61	+ .09	42	42	-	NE	1	0	4	52	39	-
6	Corunna	*	*	*	*	*	29.75	+ .14	43	41	+ 1	NE	1	b	4	54	39	-
8	Corunna	*	*	*	*	*	29.65	+ .03	49	48	0	ESE	1	0	4	59	46	-
9	Corunna	*	*	*	*	*	29.94	+ .29	50	50	+ 1	ESE	1	r	3	59	45	-
10	Corunna	*	*	*	*	*	30.06	+ .12	45	45	- 5	WSW	1	0	4	55	41	-
11	Corunna	*	*	*	*	*	30.04	- .02	48	47	+ 3	SSE	4	r	4	54	43	-
12	Corunna	*	*	*	*	*	29.93	- .11	48	47	0	NW	1	0	5	54	45	0.91
13	The Helder	30.23	26	E	1	b	30.20	- .02	22	-	- 2	E	1	b	2	27	21	-
..	Corunna	*	*	*	*	*	29.99	+ .06	40	39	- 8	SE	1	b	5	52	37	0.08
14	Niesbaden	*	*	*	*	*	30.12	- .06	21	-	0	NE	2	b	*	30	19	-
15	Spurn Head	30.00	33	S	2	b	29.72	- .36	35	34	0	W	3	fa	3	38	28	0.04
..	Corunna	*	*	*	*	*	29.78	+ .08	?	?	?	NE	5	0	4	55	45	?
16	Corunna	*	*	*	*	*	29.47	- .01	46	43	?	NNE	1	0	4	50	43	-
17	Corunna	*	*	*	*	*	29.94	+ .17	48	46	+ 2	N	1	c	5	52	45	0.63
18	Corunna	*	*	*	*	*	29.93	- .01	49	48	+ 1	SSE	5	0	4	54	43	-
19	Malin Head	-	-	-	-	-	29.20	- .28	36	36	- 1	ENE	1	osp	2	38	38	0.39
..	Corunna	*	*	*	*	*	30.00	+ .04	48	45	- 1	SW	5	r	5	55	45	0.32
22	Corunna	*	*	*	*	*	30.26	-	40	39	-	NE	2	b	5	52	36	-
24	Corunna	*	*	*	*	*	30.00	- .06	48	46	0	NW	2	r	5	55	43	0.28
26	Corunna	*	*	*	*	*	30.21	+ .10	46	42	+ 4	NNE	5	b	6	50	39	-
27	Brussels	*	*	*	*	*	30.31	- .09	26	26	+ 3	ENE	3	0	*	24	21	0.04
..	Lyons	30.26	25	N	1	0	30.23	- .04	23	21	0	NNE	1	bc	*	28	22	-
..	Corunna	*	*	*	*	*	30.06	- .15	45	41	- 1	NNE	6	0	4	48	37	-
29	Corunna	*	*	*	*	*	29.94	- .00	44	42	+ 11	E	1	0	3	50	32	-
30	Corunna	*	*	*	*	*	29.74	- .20	47	45	+ 3	E	3	0	4	48	41	0.55
..	Lisbon	29.78	51	SE	2	b	29.67	- .21	51	50	+ 4	S	3	r	?	52	?	0.64
31	Corunna	*	*	*	*	*	29.52	- .22	50	49	+ 3	SE	3	c	3	50	45	0.24



## 2. CORRECTIONS.

[illegible]