

METEOROLOGICAL OFFICE

✓
LONDON.

DAILY WEATHER REPORTS.

1ST JULY—31ST DECEMBER.

1887.



July to December 1887.

Map Showing Stations



Food: Dungeness Crab, Little Rock Crab

DAILY WEATHER REPORT.

for Thursday 1st December.

1887.

Issued by the Meteorological Office, 116, Victoria Street, London, R. H. SCOTT, Secretary.

STATIONS.	† YESTERDAY EVENING.						8 A.M. TO DAY.										PAST 24 HOURS.		
	Barometer at 3 p.m. and Sea Level.	Therm. in Shade.	WIND.			Weather.	BAROMETER.		SHADE TEMP.			WIND.			Sea. (0 to 9.)	Weather.	SHADE TEMP.		Amount of Rainfall.
			Dir.	Force (0 to 12.)	Force (0 to 12.)		Reading at 8 a.m. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Dir.	Force (0 to 12.)	Force (0 to 12.)			Max.	Min.	
SCANDINAVIA.																			
Haparanda ...	29.72	32	W	0	0	C	29.34	-1.41	28	28	+2.3	W	6	0	*	*	32	-11	0.12
Hernösand ...	29.82	37	W	2	0	C	29.21	-1.65	29	28	+3.1	W	8	0	*	*	32	-2	—
Stockholm ...	29.92	21	W	0	0	C	29.80	+1.04	30	29	+7	W	2	0	*	*	32	18	—
Wishby ...	29.82	32	E	2	6	C	29.87	+1.28	32	31	-2	SEW	4	0	*	*	37	30	—
Bodö ...	29.26	27	ENE	4	0	C	28.79	-1.79	26	23	+5	ENE	6	0	4	*	37	25	—
Christiansund ...	29.38	35	SW	4	0	C	28.81	-1.65	35	34	+4	SWW	8	66	5	*	36	28	0.20
Skudesnes ...	29.60	43	SE	8	7	C	29.43	-1.17	47	46	+9	SWW	8	7	6	*	32	37	—
Christiania Fjord (Furder)	29.78	33	SE	5	6	C	29.46	-1.28	43	42	+7	SWW	8	0	6	*	32	32	—
Skagen (The Seaw)	29.81	36	SW	3	0	C	29.66	0.0	39	39	+6	SWW	4	0	2	*	39	32	—
Faßö ...	29.85	32	W	1	0	C	29.88	+1.23	43	42	+7	SW	4	0	*	*	46	30	—
BRITISH ISLANDS.																			
Sumburgh Head	29.44	40	NW	2	0	C	29.26	-1.17	44	41	+6	SWW	8	0	7	*	44	38	0.30
Stornoway ...	29.57	46	SW	5	7	C	29.64	+1.19	49	49	+8	W	8	7	6	*	50	40	0.10
Wick ...	29.57	40	W	1	0	C	29.58	+1.05	48	47	+10	WNW	7	6	5	*	48	36	0.03
Nairn ...	29.62	43	WNW	1	0	C	29.64	+1.10	52	48	+15	W	5	6	2	*	52	37	0.01
Aberdeen ...	29.66	40	WNW	1	0	C	29.68	+1.06	49	48	+16	W	3	0	0	*	50	31	0.01
Leith ...	29.72	45	W	3	0	C	29.82	+1.13	50	49	+14	W	5	0	*	*	50	35	—
Shields ...	29.78	44	SW	3	0	om	29.90	+1.19	48	46	+13	WNW	6	0	2	*	50	35	0.05
Spurn Head ...	29.91	40	SW	3	6	C	30.03	+1.30	46	45	+7	SW	4	0	3	*	46	37	—
York ...	29.89	41	SW	1	0	C	30.04	+1.26	50	46	+18	W	2	0	*	*	50	31	0.02
Loughborough	29.98	38	W	2	0	C	30.12	+1.23	47	46	+12	W	3	0	0	*	48	34	—
GERMANY.																			
Ardrossan ...	29.77	48	WNW	3	0	C	29.93	+1.22	51	49	+8	W	6	0	5	*	51	42	0.03
Malin Head ...	29.89	48	W	5	0	om	30.00	+1.30	48	47	+7	WNW	5	0	5	*	49	41	0.01
Mullaghmore ...	29.92	47	WNW	5	0	om	30.12	+1.35	50	48	+8	W	5	0	4	*	50	41	0.04
Belmullet ...	29.95	50	W	3	0	om	30.19	+1.39	50	48	+8	W	4	0	*	*	50	47	0.02
Donaghadee ...	29.90	46	WNW	4	0	C	30.07	+1.28	48	46	+14	WNW	3	0	1	*	50	34	—
FRANCE & NETHERLANDS.																			
Barrow-in-Furness	29.84	45	SW	3	0	C	30.05	+1.28	48	46	+13	W	5	0	*	*	48	35	0.04
Liverpool (Bidston)	29.95	42	WNW	3	0	C	30.11	+1.30	48	45	+7	W	6	0	4	*	49	40	—
Holyhead ...	29.96	45	SW	3	0	C/p	30.14	+1.31	50	47	+9	W	5	0	4	*	50	41	0.01
Parsonstown ...	30.00	46	W	0	0	C	30.24	+1.36	47	46	+12	WNW	1	0	*	*	49	34	0.02
Valencia ...	30.10	51	W	3	0	om	30.22	+1.38	50	48	+2	NW	2	0	2	*	52	34	0.04
SPAIN.																			
Roche's Point...	30.24	49	WNW	3	6	C	30.28	+1.36	49	47	+9	WNW	2	0	3	*	50	40	—
Pembroke ...	30.00	49	SW	3	7	C	30.24	+1.36	50	49	+7	WNW	2	0	3	*	50	43	0.02
Scilly ...	30.08	49	W	4	0	C	30.28	+1.36	51	50	+5	WNW	4	0	4	*	51	45	0.01
Prawle Point ...	30.11	39	NW	2	6	C	30.29	+1.39	49	48	+12	W	4	0	3	*	49	35	0.08
Jersey ...	30.11	44	NW	2	6	C	30.34	+1.44	48	45	+6	W	3	0	4	*	49	34	0.03
ITALY.																			
Hurst Castle ...	30.06	38	NW	2	6	C	30.25	+1.38	47	47	+12	W	3	0	1	*	49	34	0.01
Dungannon ...	29.98	37	NW	2	6	C	30.22	+1.42	46	46	+13	W	4	0	2	*	46	33	—
London ...	30.05	36	NW	2	6	C	30.21	+1.38	43	42	+10	WNW	2	0	*	*	44	32	—
Oxford ...	30.10	34	W	1	6	C	30.21	+1.36	45	44	+13	SW	3	0	3	*	45	32	0.01
Cambridge ...	30.00	36	NW	1	6	C	30.16	+1.37	42	42	+7	SWW	1	0	*	*	45	32	—
NETHERLANDS.																			
Yarmouth ...	29.94	36	NW	2	6	C	30.10	+1.37	41	40	+3	W	3	0	2	*	41	33	0.01
Cuxhaven ...	29.88	38	WNW	2	0	C	30.08	+1.41	36	36	-4	SW	3	0	*	*	41	36	0.16
Berlin ...	29.94	44	WNW	2	0	C	30.17	+1.46	35	34	-7	W	1	0	*	*	45	34	—
Wiesbaden ...	*	*	*	*	*	*	30.20	+1.46	37	37	-4	NE	1	0	*	*	48	34	—
Munich ...	29.97	32	SW	1	0	C	30.29	+1.44	34	34	+4	W	4	0	*	*	39	30	0.28
GERMANY.																			
The Helder ...	29.94	44	NW	1	6	C	30.08	+1.36	44	43	+2	SW	4	0	3	*	45	43	—
Brussels ...	*	*	*	*	*	*	30.29	+1.46	36	35	-1	WNW	4	0	*	*	43	34	0.04
Cape Gris Nez...	30.01	42	NW	5	0	C	30.26	+1.45	48	46	+6	W	7	0	5	*	32	23	—
Paris ...	30.05	38	E	1	6	C	30.35	+1.46	45	45	-13	NE	1	0	*	*	43	25	—
Brest ...	30.17	46	N	4	0	C	30.33	+1.35	48	44	+3	NNW	3	0	2	*	52	41	—
FRANCE & NETHERLANDS.																			
Lorient ...	30.12	45	N	3	6	C	30.39	+1.44	42	41	-1	W	0	6	2	*	50	37	—
Rochefort ...	30.12	47	NNW	5	6	C	30.39	+1.38	37	37	-10	NE	4	0	2	*	50	32	—
Belfort ...	30.34	40	W	1	7	C	30.35	+1.43	32	31	-7	N	1	0	*	*	40	29	0.20
Lyons ...	30.04	35	W	1	7	C	30.20	+1.39	36	34	-3	N	7	0	*	*	39	24	0.87
Nice ...	29.91	47	E	2	7	C	30.05	+1.08	46	42	0	E	3	0	2	*	50	43	0.24
ITALY.																			
Perpignan ...	30.02	48	NW	3	0	C	30.20	+1.31	42	37	-7	NW	1	0	*	*	52	38	—
Biarritz ...	30.09	48	NNE	5	7	C	30.32	+1.22	38	37	-8	E	3	0	2	*	48	36	0.67
SPAIN.																			
Corunna ...	*	*	*	*	*	*	30.40	+1.28	44	44	0	NE	1	0	4	*	52	41	0.13
Lisbon ...	30.14	49	N	7	6	C	30.19	+1.09	45	39	-2	NNE	7	0	8	*	54	43	—

For Explanation of Columns, see p. 4. † Received too late for insertion in Charts

WEATHER

CHARTS

for 8 a.m. on

Thursday 1st December

1887.

BAROMETER, WIND & SEA.

(Explanation of Map)

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

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

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

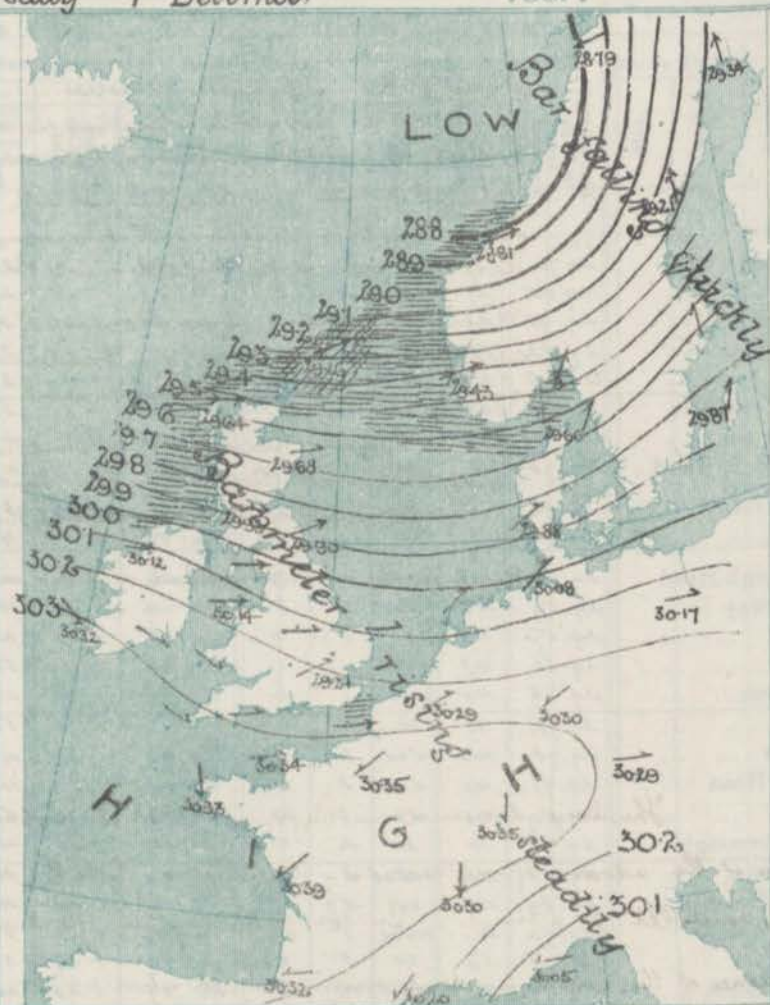
Sea Disturbance — where considerable is shown thus

■ = Rough. ■ = High.

MEAN HEIGHT of the BAROMETER

at 8 a.m. for the month of December.
During the 10 Years 1871—1880.

STATIONS.	MEAN READINGS.
	in.
Samburgh Head	29.680
Stornoway	29.701
Wick	29.713
Nairn	29.741
Aberdeen	29.750
Leith	29.800
Shields	29.836
York	29.877
Ardrossan	29.910
Donaghadee	29.932
Holyhead	29.958
Liverpool	29.982
Valencia	29.979
Roche's Point	29.989
Pembroke	29.997
Scilly	29.943
Hurst Castle	29.938
Dover	29.942
LONDON	29.984
Oxford	29.987
Cambridge	29.996
Yarmouth	29.902



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.

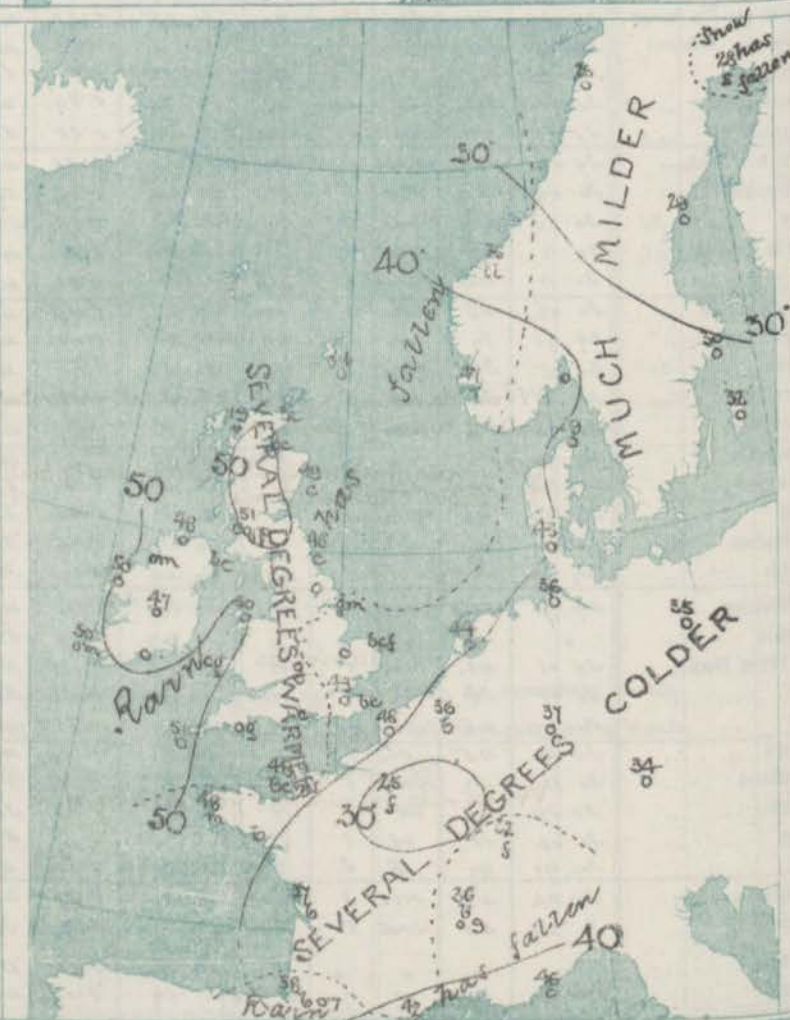
Rainfall — A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE. AND RAINFALL.

for the month of December.

STATIONS	TEMPERATURE				RAINFALL (Inches)
	Daily Max.	Daily Min.	At 8 a.m.	Wind.	
Samburgh Head	42.0	34.5	39.0	37.6	4.38
Stornoway	44.8	38.5	38.0	37.8	5.68
Wick	42.0	32.1	37.8	36.4	3.15
Nairn	41.5	32.8	36.9	35.4	2.08
Aberdeen	41.8	32.9	36.9	35.0	3.24
Leith	44.3	33.6	38.4	37.0	2.01
Shields	42.8	34.3	39.2	36.9	2.74
York	42.5	31.9	38.2	35.3	2.46
Ardrossan	47.0	30.1	40.1	38.8	4.04
Donaghadee	46.7	36.1	40.1	39.1	2.84
Holyhead	46.8	36.6	42.9	41.3	3.84
Liverpool	49.6	35.7	39.1	37.4	2.70
Valencia	50.0	40.0	44.7	41.8	5.82
Roche's Point	47.7	39.3	42.9	41.4	4.74
Pembroke	47.1	40.4	43.7	42.6	4.06
Scilly	40.8	48.9	47.2	45.3	4.10
Hurst Castle	45.5	36.5	40.6	39.9	2.84
Dover	44.2	36.5	40.0	38.8	3.20
LONDON	44.5	33.9	38.1	37.1	2.14
Oxford	43.3	33.6	37.8	36.6	2.13
Cambridge	43.3	31.8	36.3	35.6	1.99
Yarmouth	42.2	33.8	37.9	37.2	2.06

Note — The Temperature means are for the 10 years 1871—80, the Rainfall means are mainly those for the 26 years 1868—85.



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30.3 ins: and upwards, in an anticyclone lying over the Bay of Biscay, France, Western Germany, and the extreme southwest of our Islands.
Lowest, 28.8 ins: and less, in a large and deep depression having its centre off the northwest of Norway.
Gradients steep over Scandinavia and our extreme northern coasts. Barometer rising at all but the Scandinavian stations.

TEMPERATURE

Highest, 52° at Aain, 51° at Anderson and Sella, and 50° at Aith, Mustafarm, Kilmullet, Holyhead, Kilmear, and Kilmorck.
Lowest, 25° at Paris, 26° at Bodø, 28° at Haparanda, 29° at Haparanda, 30° at Stockholm and 32° at Nisby and Belfort.
Sharp frost occurred over England during the early part of the night; in London the thermometer on the grass fell to 23°.

WIND

W^{ly} in our Islands; strong at many of the northern stations, with gales in the Shetlands and Hebrides.
Strong to a gale from SW. or S. in Scandinavia; strong E^{ly} at Bodø.
Light or moderate from between N. and E. in France.

WEATHER

Fine in Belgium, France and Spain, and fair on the East coast of Great Britain.
Cloudy or overcast elsewhere, with a thunderstorm at Christianlund, rain at Skudenass and Stornoway, and passing showers at Loughbor and Anderson.
Showers fell yesterday in many parts of the Kingdom.

SEA

Rough off the north of Scotland and also on the Norwegian coast, but moderate to smooth elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The large depression in the far north will probably travel eastwards across Scandinavia. There are at present no signs of the advance of any secondary disturbances, but the weather on our extreme northern coasts is likely to remain rough and unsettled for a time. In the more southern parts of the Kingdom conditions will probably remain under the influence of the large anticyclonic system noticed above.

FORECASTS

for the 24 hours ending at NOON on 7th DEC^r

1887.

DISTRICTS.

FORECASTS.

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

W^{ly} winds, strong to a gale at first but moderating; later; squally, some rain.
W^{ly} winds, fresh or strong; fair generally, but probably some showers.
----- D^o ----- D^o ----- D^o -----
Same as N^o 5
Same as N^o 5
W^{ly} winds, moderate; fair generally

DISTRICTS.

FORECASTS.

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

Same as N^o 1
Same as N^o 1.
W^{ly} and NW^{ly} winds, moderate; fair generally
Same as N^o 1
Same as N^o 8
NONE ISSUED.

WARNINGS

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

YESTERDAY'S 2 P.M. REPORTS.

	Bar.	Dry.	Wet.	Wind.	Wes.	Sea.		Bar.	Dry.	Wet.	Wind.	Wes.	Sea.
Skudesnaes ...	29.63	33	36	SE 8	7.5	6	Holyhead ...	29.90	46	43	SW 3	c	2
Sumburgh Head ...	29.33	40	39	S 2	0	3	Valencia ...	30.02	52	50	WNW 3	c	3
Stornoway ...	29.56	45	45	SW 3	7	3	Scilly ...	30.02	48	45	NW 2	c	4
Aberdeen ...	29.53	42	39	WSW 2	6	0	Dungeness ...	29.82	44	41	NW 3	6	2
Shields ...	29.76	42	39	SW 3	c	2	London ...	29.92	44	41	WNW 2	6	*
Ardrossan ...	29.72	46	45	WSW 4	c	3	Yarmouth ...	29.82	40	39	NW 3	6	3
Malin Head ...	29.76	48	47	W 4	c	4	Jersey ...	30.01	49	44	N 3	6	3
Mullaghmore ...	29.85	49	48	W 4	c	3	Rocheport ...	30.05	49	46	WNW 5	6	2
Belmullet ...	29.89	49	47	NW 3	f	*							

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

Yesterday morning's reports showed that pressure varied from 30.3 in: and more over Southern Russia and from 30.0 in: and more over the Bay of Biscay, to 29.4 in: and less, in a depression lying off our extreme northern coast, to 29.3 in: in another, smaller one, lying over Gotthland, and to about 29.8 in: in a third, which lay over the Gulf of Lyons. Thus, while the winds over the British Isles were W² and SW² ^{and} those in Norway, SE¹ and E², those reported in France were SW¹ and NW¹. The weather was fair as a whole, though it had been showery during the night in many places, but the appearance of the sky in our islands was not very settled. Temperature was still very low in the north and was falling over Spain, but rising over Central Europe. It ranged from about 60° over the southern part of the Mediterranean, and from nearly 50° on our southwest coast to much below the freezing point over Northern Europe and to slightly below that value in Switzerland and North Germany. The highest individual values were 61° at Malta, 58° at Rhindia, 54° at Palma and Naples, 51° at San Fernando and Ferina, 50° at Bilbao, and 48° at Valencia; the lowest were -2° at Archangel and Helsingfors, +1° at Uleaborg, 2° at Kiepsio, 5° at Haparanda, 21° at Rode, 22° at Hangö, and 23° at Stockholm, 24° at Alingsfors, 27° at Reme, and 31° at Kharkov.

Later in the day the sky became clear over England and at night a very sharp ground frost occurred for a time, while in the extreme north of Scotland a new depression caused a strong W³ gale for a brief interval.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

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

* AN ASTERISK is inserted in all places for which information is not usually received.
† The evening observations are taken at 8 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8. p.m. In Sweden and Denmark, the observations are taken at 8 p.m. (Christiania time).

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

DAILY WEATHER REPORT.

for Friday December 2nd 1887.

Issued by the Meteorological Office, 116, Victoria Street, London, R. H. SCOTT, Secretary.

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STATIONS.	† YESTERDAY EVENING.					8 A.M. TO DAY.										LAST 24 HOURS.		
	Barometer at 32° F. and Sea Level.	Temp. in Shade.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Weather.	Sun. (0 to 9.)	SHADE TEMP.		Amount of Rainfall.	
			Dir.	Force. (0 to 12.)		Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Dir.	Force. (0 to 12.)			Max.	Min.		
SCANDINAVIA.	Inch.	°				Inch.	Inch.	°							°	°	Inch.	
Haparanda ..	28.56	27	S	8	S	28.47	- .57	27	25	- 1	2	0	*	28	9	0.32		
Hernösand ...	28.75	34	W	4	W	28.51	- .70	37	32	+ 8	NW	9	0	*	37	16	0.04	
Stockholm ...	29.15	42	W	8	W	29.37	- .43	35	30	+ 5	N	6	0	*	46	19	0.04	
Wisby ...	29.41	48	W	8	W	29.52	- .85	41	36	+ 9	WNW	9	0	*	48	32	0.08	
Bodö ...	28.29	31	WNW	5	W	28.76	- .03	36	32	+ 10	NW	4	0	2	36	23	-	
Christiansund...	28.93	37	WSW	9	S	29.43	+ .62	35	32	0	WSW	9	5	8	37	30	0.63	
Skudesnaes ...	29.63	40	WNW	9	T	29.78	+ .35	42	41	- 5	SW	4	7	5	?	39	-	
Christiania Fjord (Færder)	29.36	44	WSW	7	W	29.67	+ .21	41	36	- 2	WNW	3	6	4	46	41	-	
Skagen (The Scaw)	29.54	44	NW	8	W	29.78	+ .12	42	37	+ 3	WNW	6	0	5	46	?	0.04	
Faßö ...	29.94	45	N	6	W	30.08	+ .20	45	44	+ 2	N	6	0	*	46	43	0.04	
BRITISH ISLANDS.																		
Sumburgh Head	29.57	42	NW	8	W	29.70	+ .44	45	45	+ 1	N	1	7	6	45	44	0.24	
Stornoway ...	29.85	48	W	6	W	29.89	+ .25	50	50	+ 1	N	6	7	5	50	45	0.10	
Wick ...	29.78	45	WNW	7	W	29.88	+ .33	50	49	+ 2	WNW	5	0	3	51	43	-	
Nairn ...	29.87	50	W	5	W	29.95	+ .31	50	48	- 2	N	4	0	2	53	45	-	
Aberdeen ...	29.90	52	W	4	W	30.01	+ .33	47	44	- 2	WNW	1	0	1	54	45	-	
Leith ...	30.03	50	W	4	W	30.13	+ .31	49	47	- 1	N	5	0	*	53	48	-	
Shields ...	30.08	50	SW	5	W	30.23	+ .33	49	46	+ 1	WSW	5	0	2	52	49	-	
Spurn Head ...	30.18	48	WSW	3	W	30.33	+ .30	46	44	0	SW	4	0	3	49	43	-	
York ...	30.19	49	WNW	3	W	30.34	+ .30	48	46	- 2	N	3	0	*	51	47	-	
Loughborough	30.22	49	W	2	W	30.41	+ .29	46	43	- 1	N	3	0	*	52	45	-	
GERMANY.																		
Ardrossan ...	30.12	51	W	5	W	30.21	+ .18	49	49	- 2	N	3	0	2	52	49	-	
Malin Head ...	30.15	49	W	6	W	30.18	+ .18	48	47	0	WSW	5	0	5	49	47	0.03	
Mullaghmore ...	30.26	49	WSW	5	W	30.29	+ .17	48	47	- 2	SW	5	0	4	50	46	0.01	
Belmullet ...	30.30	50	W	3	W	30.32	+ .13	49	48	- 1	WSW	4	0	*	50	48	0.02	
Donaghadee ...	30.25	48	WNW	3	W	30.30	+ .23	46	45	- 2	SW	3	0	1	51	45	-	
FRANCE & NETHERLANDS.																		
Barrow-in-Farness	30.22	48	SW	4	W	30.42	+ .37	47	46	- 1	WSW	4	0	*	48	46	0.01	
Liverpool (Bidston)	30.27	48	W	6	W	30.40	+ .29	46	44	- 2	N	4	0	4	50	45	-	
Holyhead ...	30.30	50	WSW	3	W	30.40	+ .26	46	46	- 4	SW	1	0	2	51	46	-	
Parsonstown ...	30.35	48	WSW	1	W	30.36	+ .12	45	44	- 2	SW	0	0	*	50	44	-	
Valencia ...	30.44	49	WNW	1	W	30.46	+ .14	49	47	- 1	WSW	2	0	2	51	48	0.02	
Roche's Point...	30.41	49	WNW	2	W	30.47	+ .19	47	45	- 2	N	2	0	3	50	46	-	
Pembroke ...	30.38	50	WNW	2	W	30.47	+ .23	50	49	0	N	3	0	3	51	50	-	
Scilly ...	30.39	51	SW	4	W	30.50	+ .22	46	45	- 5	SW	1	0	4	52	44	-	
Prawle Point ...	30.42	47	WNW	2	W	30.53	+ .24	46	44	- 3	NW	2	0	2	50	44	-	
Jersey ...	30.43	50	WNW	3	W	30.55	+ .21	48	45	0	WNW	2	0	2	50	46	0.08	
ITALY.																		
Hurst Castle ...	30.37	47	W	3	W	30.50	+ .25	45	45	- 2	WNW	2	0	1	48	44	-	
Dungeness ...	30.32	48	W	4	W	30.46	+ .24	46	45	0	WNW	3	0	3	49	42	-	
London ...	30.38	48	WNW	2	W	30.48	+ .27	45	43	+ 2	WNW	2	0	*	51	43	-	
Oxford ...	30.38	44	WSW	2	W	30.49	+ .28	43	41	- 2	WSW	1	0	*	50	43	-	
Cambridge ...	30.30	47	N	1	W	30.44	+ .28	45	43	+ 3	SW	1	0	*	52	40	-	
SPAIN.																		
Yarmouth ...	30.23	45	W	2	W	30.39	+ .29	45	44	+ 4	WSW	3	0	2	49	39	-	
Cuxhaven ...	30.05	42	SW	5	T	30.25	+ .17	44	43	+ 8	N	5	0	*	44	?	0.10	
Berlin ...	30.20	40	WSW	3	W	30.30	+ .13	45	44	+ 10	N	4	0	*	45	39	-	
Wiesbaden ...	*	*	*	*	*	30.56	+ .26	35	34	- 2	SW	1	0	*	45	32	-	
Munich ...	30.48	27	NW	1	W	30.58	+ .29	22	22	- 12	SW	1	0	*	36	21	-	
NETHERLANDS.																		
The Helder ...	30.21	46	WSW	2	W	30.36	+ .28	46	45	+ 2	WSW	1	0	3	46	?	-	
Brussels ...	*	*	*	*	*	30.50	+ .21	43	43	+ 7	SW	1	0	*	43	?	-	
Cape Gris Nez...	30.28	48	W	7	W	30.42	+ .22	48	47	0	N	1	0	1	50	46	-	
Paris ...	30.48	36	SSE	3	W	30.58	+ .23	32	32	+ 7	SW	3	0	*	45	?	-	
Brest ...	30.46	51	NW	4	W	30.52	+ .19	48	45	0	N	0	0	3	52	41	-	
FRANCE.																		
Lorient ...	30.48	49	N	0	W	30.53	+ .14	46	45	+ 4	N	1	0	2	50	39	-	
Rochefort ...	30.53	38	NNE	3	W	30.58	+ .19	30	30	- 7	NNE	4	0	2	41	28	-	
Belfort ...	30.42	36	N	1	W	30.57	+ .19	32	31	0	N	1	0	*	?	28	-	
Lyons ...	30.47	39	N	3	W	30.60	+ .30	32	30	- 4	N	1	0	*	41	30	-	
Nice ...	30.21	50	NNE	1	W	30.39	+ .34	51	42	+ 5	NNE	4	0	3	35	45	-	
PORTUGAL.																		
Perpignan ...	30.35	44	NW	4	W	30.43	+ .23	44	38	+ 2	WNW	1	0	*	52	41	-	
Biarritz ...	30.47	39	SE	3	W	30.52	+ .20	35	34	- 3	N	3	0	2	46	32	-	
Corunna ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
Lisbon ...	30.23	48	NNE	7	W	30.21	+ .02	45	37	0	NNE	7	0	2	54	43	-	

For Explanation of Columns, see p. 1. † Received too late for insertion in charts.

WEATHER CHARTS

for 8 a.m. on Friday, 2nd December, 1887.

BAROMETER, WIND & SEA.

(Explanation of Map)

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

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

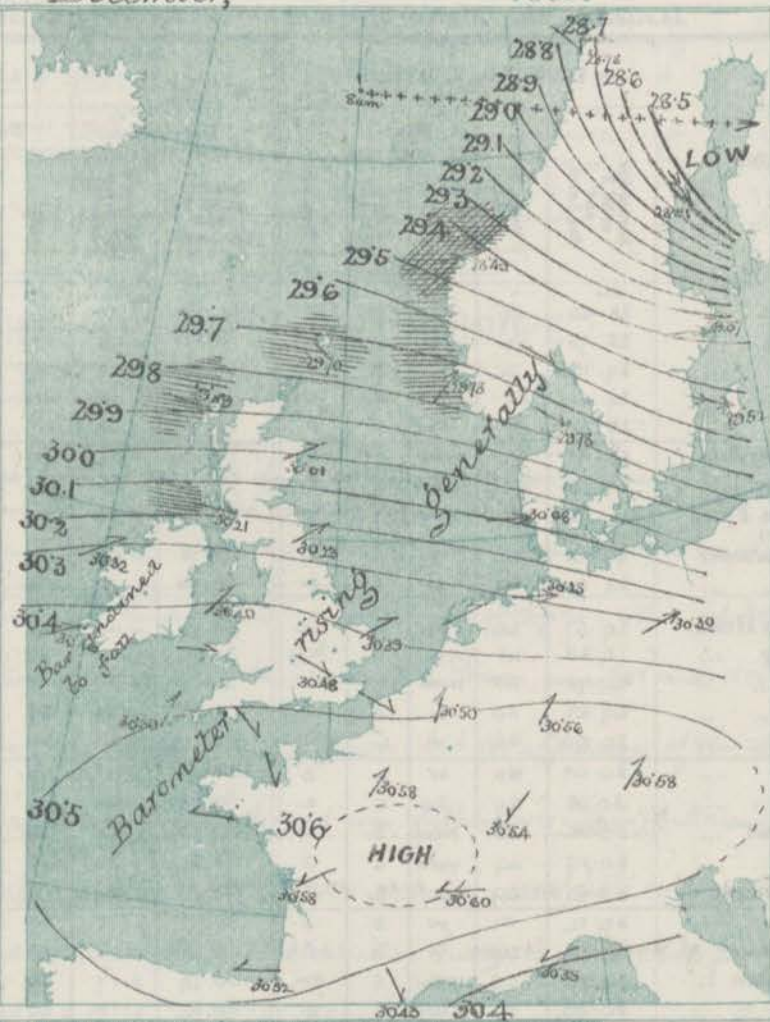
→ = forces above 10; → = forces 8 to 10;
→ = forces 5 to 7; → = forces 1 to 4;
○ = dead calm.

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

MEAN HEIGHT of the BAROMETER

at 8 a.m. for the month of December
During the 10 Years 1871—1880.

STATIONS.	MEAN READINGS.
	in.
Sumburgh Head	29.680
Stornoway	29.701
Wick	29.713
Nairn	29.741
Aberdeen	29.750
Leith	29.800
Shields	29.836
York	29.877
Ardrossan	29.810
Donaghadee	29.832
Holyhead	29.858
Liverpool	29.882
Valencia	29.879
Roche's Point	29.889
Pembroke	29.897
Scilly	29.943
Hurst Castle	29.938
Dover	29.942
LONDON	29.934
Oxford	29.937
Cambridge	29.926
Yarmouth	29.903



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.

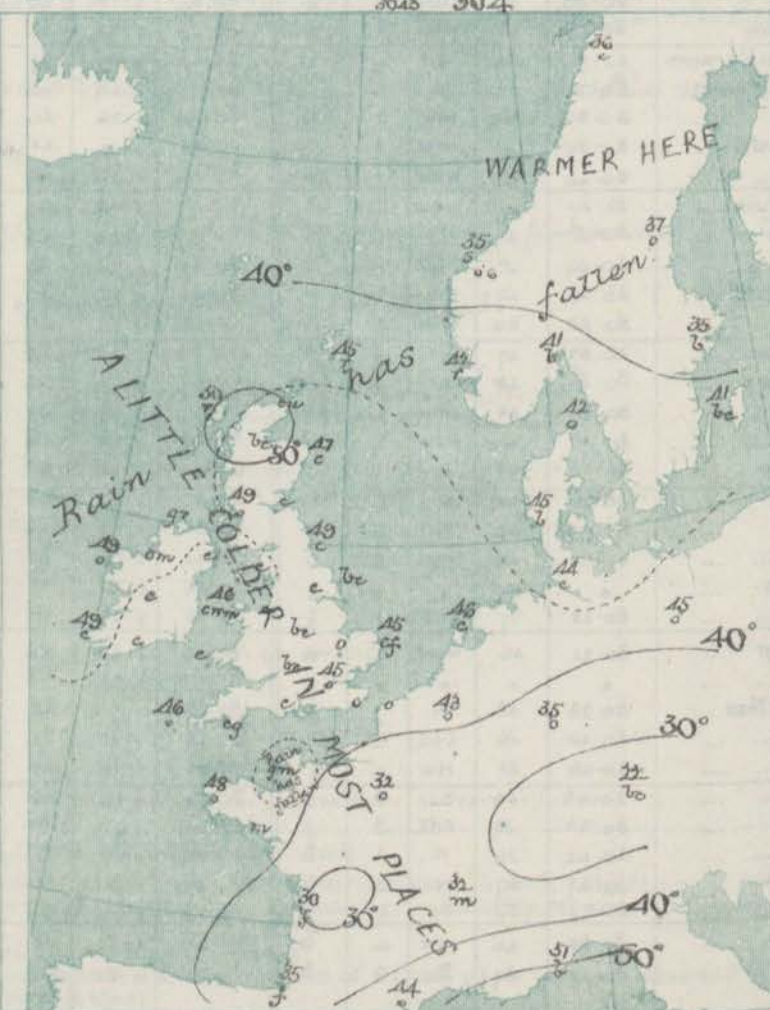
Rainfall — A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

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	42.0	34.5	39.0	37.6	4.33
Stornoway	44.8	33.5	38.9	37.8	5.06
Wick	42.0	32.1	37.8	36.4	3.18
Nairn	41.5	32.8	36.9	35.4	2.08
Aberdeen	41.8	32.9	36.9	35.3	3.34
Leith	44.3	33.6	38.4	37.0	2.01
Shields	42.8	34.3	39.2	38.9	2.74
York	42.5	31.9	36.2	35.4	2.45
Ardrossan	47.0	36.1	40.1	38.3	4.04
Donaghadee	46.7	36.1	40.1	39.1	2.84
Holyhead	40.8	30.6	42.0	41.3	3.84
Liverpool	43.6	35.7	39.1	37.4	2.70
Valencia	50.0	40.0	44.7	41.8	5.82
Roche's Point	47.7	39.3	42.9	41.4	4.74
Pembroke	47.1	40.4	43.7	42.6	4.00
Scilly	49.8	43.9	47.2	45.3	4.10
Hurst Castle	45.5	36.5	40.0	39.9	2.84
Dover	44.2	36.5	40.0	38.8	3.20
LONDON	44.5	33.9	38.1	37.1	2.14
Oxford	43.3	33.6	37.3	36.6	2.13
Cambridge	43.3	31.8	36.3	35.6	1.99
Yarmouth	42.2	33.8	37.9	37.2	2.05

NOTE — The Temperature means are for the 10 years 1871—80, the Rainfall means are mainly those for the 10 years 1866—85.



GENERAL SITUATION AT 8 A.M.

PRESSURE	<p>Highest, 30.60 ins. at Lyons, 30.50 ins. and upwards over the Bay of Biscay, France, Belgium and South Germany.</p> <p>Lowest, 28.5 ins. and less, in a deep depression the centre of which is apparently travelling across the Gulf of Bothnia.</p> <p>Gradients moderate in our Islands, very steep over Sweden and the north of Norway; barometer falling slightly in west of Ireland but rising elsewhere.</p>
TEMPERATURE	<p>Highest, 50° at Lumburgh Head, Norway, Wick, Kinn, Pembroke and Liss, and 45° at Lark, Shields, Balmalcolm and Valencia.</p> <p>Lowest, 22° at Munich, 32° at Paris, Belfort and Lyons, and 35° at Stockholm, Christiansund, Helsingfors, and Rinnarby.</p>
WIND	<p>W^{ly} and SW^{ly} in our Islands; light or moderate in force in the east and south, but fresh or strong in the extreme northwest.</p> <p>Strong to gale from W. or NW. over Scandinavia, light from E. in the west and south of France.</p> <p>A strong to whole gale from the W^{ly} was experienced yesterday in Norway and also in the Shetlands.</p>
WEATHER	<p>Fine in the southern parts of Sweden and Germany and fair over Great Britain.</p> <p>Dull elsewhere, with snow at Christiansund, rain at Lumburgh H^d and Malin H^d, and fog or mist in the west of France.</p> <p>Slight rain fell yesterday at many of our western and extreme northern stations.</p>
SEA	<p>Very high at Christiansund, rough at Lumburgh H^d, and rather rough in the extreme north and northwest generally.</p>

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The barometer is now beginning to fall in the extreme west of our Islands, while the wind there is inclined to back. It seems probable therefore that fresh disturbances will shortly approach from the W^{ly}, but at present there is no sign of anything serious.

FORECASTS

For the 24 hours ending at NOON on 3rd December. 1887.

DISTRICTS.	FORECASTS.	DISTRICTS.	FORECASTS.
0 { SCOTLAND NORTH	SW ^{ly} and W ^{ly} winds, increasing in force; unsettled, some rain.	6 { SCOTLAND WEST	Same as N°0
1 { SCOTLAND EAST	SW ^{ly} and W ^{ly} winds, fresh; fair to unsettled and some rain.	7 { ENGLAND N. W.	Same as N°1
2 { ENGLAND N. E.	-----D°-----D°-----D°-----	8 { ENGLAND S. W.	SW ^{ly} and W ^{ly} winds, moderate; fair generally.
3 { ENGLAND EAST	Same as N°5	9 { IRELAND NORTH	Same as N°0
4 { MIDLAND COUNTIES	Same as N°5	10 { IRELAND SOUTH	SW ^{ly} winds, freshening; fair to unsettled and some rain.
5 { ENGLAND SOUTH	W ^{ly} winds, 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.	Dep.	Wet.	Wind.	Wen.	Sea.		Bar.	Dry.	Wet.	Wind.	Wen.	Sea.
Skudeenæs ...	29.48	45	42	W 8	0	6	Holyhead ...	30.25	50	48	W 4	0	3
Sumburgh Head ...	29.44	40	38	W 9	c t s p	8	Valencia ...	30.40	51	49	W 2	0 m	2
Stornoway ...	29.79	44	48	W 7	c p	6	Scilly ...	30.38	52	49	W 3	0	4
Aberdeen ...	29.81	53	52	W 4	b c	1	Dungeness ...	30.27	49	48	W 4	0	3
Shields ...	30.03	50	48	SW 5	c	2	London ...	30.27	51	49	W 3	b c m	*
Ardrossan ...	30.02	52	50	W 8	c	6	Yarmouth ...	30.16	49	47	V 3	b c m	3
Malin Head ...	30.12	49	48	W 4	0	5	Jersey ...	30.40	50	49	W 3	0	3
Mullaghmore ...	30.22	49	48	W 5	c m p	4	Rocheport ...	30.48	38	37	E 1/2 S	f	2
Belmullet ...	30.26	50	48	W 3	0	*							

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

Yesterday morning's reports showed a further increase of pressure over Western Europe, but a rapid decrease over Scandinavia and readings varied from 30.3 ins: and more over France, the Bay of Biscay, the extreme southwest of Ireland and the north of Spain, and from between 30.1 ins: and 30.3 ins: over the whole of Central and Southern Europe to somewhat below 28.8 ins: over the north coast of Norway, and to rather below 29.2 ins: over Western Algeria. The gradients were very steep in the north only. Thus, while W³ and S¹ winds prevailed over the more northern countries, and blew a gale in the extreme northwest, with equally, showery, mild weather, the wind in the south was variable and light — but chiefly N⁴ — but the weather more showery than might have been expected under such conditions. Temperature which had risen suddenly over the British Isles and Scandinavia, but fallen over France, ranged from several degrees below zero (F) over Northern Russia, and from a few degrees below the freezing point over France to 50° and more in several of the southern parts of the British Isles and to 60° in the south of the Mediterranean. The lowest individual values reported were minus 19° (F) at Archangel, +13° at Kuopio, 13° at Helsinki and St. Petersburg, 25° at Kharkov and also at Paris, 26° at Bonn, 28° at Haparanda, and also at Nantes, and 29° at Le Mans. The highest were 60° at Malta, Brindisi and Palma, 54° at Fez, 51° at Palermo and the Balearic Islands, and 50° at Belmullet, Holyhead, Corunna and at Livorno.

Later in the day the gale in the north lulled, but damp W³ breezes continued over the United Kingdom, with high temperature and much cloud.

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 3rd December

1887.

Issued by the Meteorological Office, 116, Victoria Street, London, R. H. SCOTT, Secretary.

STATIONS.	+ YESTERDAY EVENING.						8 A.M. TO DAY.										PAST 24 HOURS.		
	Barometer at 32° F. and Sea Level.	Temp. in Shade.	WIND.		Weather.	Reading at 32° F. and Sea Level.	BAROMETER.		SHADE TEMP.			WIND.		Weather.	Sea (0 to 9.)	Shade Temp.	Max.	Min.	Amount of Rainfall.
			Dir.	Force (0 to 12.)			Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Dir.	Force (0 to 12.)						
SCANDINAVIA.																			
Haparanda ..	28.99	22	NW	6	0	29.04	29.04	+ .60	31	11	- 10	W	4	3	*	32	?	?	
Hernösand ...	29.35	32	NW	8	0	29.09	29.09	+ .58	30	30	- 7	W	0	5	*	30	?	?	0.04
Stockholm ...	29.63	39	WNW	4	0	29.31	29.31	- .06	46	42	+ 11	W	6	0	*	34	34	34	0.34
Wishby ...	29.73	44	WNW	4	0	29.52	29.52	- .00	45	43	+ 4	WNW	6	0	*	46	28	28	
Bodö ...	29.16	29	NNE	2	6	28.97	28.97	+ .21	27	24	- 9	NNE	4	5	2	36	27	27	
Christiansund...	29.28	35	SE	4	5	28.89	28.89	+ .54	44	42	+ 9	WNW	8	7	6	44	32	32	1.14
Skudesnaes ...	29.76	43	WSW	8	0	29.49	29.49	- .29	48	46	+ 6	SSW	8	7	6	48	?	?	
Christiania Fjord (Fjord)	29.53	45	SW	8	6	29.35	29.35	- .18	45	44	+ 4	SSW	8	7	6	45	?	?	
Skagen (The Sound)	29.74	45	W	7	0	29.01	29.01	- .17	46	45	+ 4	W	7	0	5	46	41	41	
Fanö ...	30.09	44	WNW	6	0	29.95	29.95	- .13	45	44	0	W	6	0	*	46	43	43	
BRITISH ISLANDS.																			
Sumburgh Head	29.53	49	W	7	7	29.14	29.14	- .56	50	50	+ 5	W	8	7	8	50	45	45	0.20
Stornoway ...	29.73	51	W	7	7	29.38	29.38	- .51	51	51	+ 1	W	8	7	6	51	49	49	0.12
Wick ...	29.73	52	W	6	0	29.36	29.36	- .52	53	51	+ 3	W	8	0	6	54	48	48	
Nairn ...	29.78	52	WNW	4	0	29.44	29.44	- .51	53	50	+ 3	WNW	4	0	8	54	50	50	
Aberdeen ...	29.89	49	SW	5	0	29.80	29.80	- .41	49	47	+ 2	SW	5	0	3	51	45	45	
Leith ...	30.04	50	W	5	0	29.78	29.78	- .35	50	47	+ 1	WSW	5	0	*	51	49	49	
Shields ...	30.14	49	SW	4	0	29.91	29.91	- .32	50	47	+ 1	WSW	5	0	2	51	47	47	
Spurn Head ...	30.27	46	WNW	4	0	30.06	30.06	- .27	44	43	- 2	SW	5	0	3	46	42	42	
York ...	30.25	48	W	6	0	30.06	30.06	- .28	45	43	- 3	W	3	0	*	50	43	43	
Loughborough	30.35	45	SSW	2	0	30.18	30.18	- .23	42	42	- 4	SW	3	0	*	53	41	41	
ARDROSSAN.																			
Malin Head ...	30.13	49	SSW	3	7	29.82	29.82	- .89	50	50	+ 1	WSW	7	0	6	50	49	49	
Mullaghmore ...	30.05	49	WSW	6	0	29.76	29.76	- .42	49	48	+ 1	SW	6	0	6	49	37	37	
Mullaghmore ...	30.17	50	SW	6	0	29.49	29.49	- .40	50	48	+ 2	SW	6	0	5	51	47	47	
Belmullet ...	30.17	50	SW	6	0	29.87	29.87	- .45	50	49	+ 1	WSW	6	0	*	50	49	49	0.09
Donaghadee ...	30.19	49	SW	8	0	29.99	29.99	- .31	49	47	+ 3	SW	6	0	4	49	45	45	
Barrow-in-Furness	30.28	47	SW	3	0	30.06	30.06	- .36	47	46	0	SW	5	0	4	48	46	46	0.34
Liverpool (Biddon)	30.33	44	WSW	2	0	30.09	30.09	- .31	48	45	+ 2	SW	3	0	3	49	44	44	
Holyhead ...	30.34	49	SW	4	0	30.11	30.11	- .29	48	47	+ 2	SW	6	0	5	50	46	46	
Parsonstown ...	30.32	48	W	0	7	30.05	30.05	- .31	43	42	- 2	W	0	0	*	49	42	42	
Valencia ...	30.36	50	SSW	5	0	30.13	30.13	- .33	50	49	+ 1	SSW	5	0	5	51	49	49	0.01
Roche's Point...	30.39	49	WSW	3	0	30.14	30.14	- .33	48	47	+ 1	WSW	4	0	4	50	45	45	0.02
Pembroke ...	30.41	47	WSW	3	0	30.21	30.21	- .26	47	47	- 3	WSW	4	0	4	50	46	46	0.03
Scilly ...	30.46	46	SW	2	0	30.28	30.28	- .22	46	45	0	SW	4	0	4	53	43	43	0.04
Prawle Point ...	30.48	47	WSW	2	0	30.31	30.31	- .22	47	44	+ 1	SW	4	0	3	48	43	43	
Jersey ...	30.50	48	WNW	1	0	30.34	30.34	- .21	47	44	- 1	SE	1	0	1	50	45	45	
HURST CASTLE.																			
Hurst Castle ...	30.47	47	WNW	2	0	30.31	30.31	- .19	47	45	+ 2	W	2	0	1	48	44	44	
Dungeness ...	30.44	47	WNW	4	0	30.28	30.28	- .18	48	46	+ 2	W	4	0	3	48	46	46	
London ...	30.44	47	WSW	3	0	30.28	30.28	- .20	44	42	- 1	WSW	4	0	*	52	44	44	
Oxford ...	30.42	45	SW	8	0	30.26	30.26	- .23	43	42	0	SW	8	0	*	52	43	43	
Cambridge ...	30.40	40	SW	5	0	30.22	30.22	- .22	43	42	- 2	SW	2	0	*	52	38	38	
Yarmouth ...	30.36	44	SW	2	0	30.18	30.18	- .21	42	41	- 3	WSW	4	0	2	49	39	39	
Cuxhaven ...	30.30	42	WSW	4	0	30.17	30.17	- .08	44	43	0	WSW	6	0	*	45	41	41	
Berlin ...	30.25	47	W	4	0	30.26	30.26	- .04	44	41	- 1	WSW	3	0	*	48	44	44	
Wiesbaden ...	*	*	*	*	*	30.42	30.42	- .14	38	37	+ 3	W	0	0	*	39	?	?	
Munich ...	30.54	23	NE	1	0	30.43	30.43	- .15	22	22	0	NE	4	0	*	32	21	21	
FRANCE & NETHERLANDS.																			
The Helder ...	30.33	45	SW	4	0	30.19	30.19	- .17	45	45	- 1	SW	5	0	3	48	45	45	
Brussels ...	*	*	*	*	*	30.33	30.33	- .15	43	41	0	SSW	4	0	*	45	42	42	
Cape Gris Nez...	30.45	47	W	5	0	30.30	30.30	- .18	48	46	0	WSW	7	0	*	50	46	46	
Paris ...	30.52	38	S	1	0	30.41	30.41	- .17	34	34	+ 2	W	1	0	*	38	?	?	
Brest ...	30.48	48	W	0	0	30.35	30.35	- .17	41	41	- 7	NNE	4	0	4	52	37	37	
Lorient ...	30.50	46	SSW	1	0	30.35	30.35	- .18	44	42	- 2	NNE	3	0	2	48	43	43	
Rochefort ...	30.54	39	NNE	7	0	30.35	30.35	- .23	32	32	+ 2	NNE	5	0	2	45	27	27	
Belfort ...	30.49	36	NE	1	0	?	?	?	31	31	- 1	NE	1	0	*	40	26	26	
Lyons ...	30.56	32	NNE	1	0	30.41	30.41	- .19	30	29	- 2	WSW	1	0	*	36	30	30	
Nice ...	30.36	52	N	5	0	30.27	30.27	- .12	59	46	+ 8	E	7	0	5	59	?	?	
Perpignan ...	30.36	44	NW	1	0	30.19	30.19	- .24	44	44	0	SW	3	0	*	48	43	43	0.95
Biarritz ...	30.41	36	NNE	4	0	30.25	30.25	- .27	34	32	- 1	ENE	4	0	2	41	32	32	
Corunna ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
Lisbon ...	30.14	52	NE	4	0	30.07	30.07	- .14	46	43	+ 1	N	1	0	2	55	45	45	

For Explanation of Columns, see p. 4.

WEATHER CHARTS

for 8 a.m. on *Saturday, 3rd December,*

1887.

BAROMETER, WIND & SEA.

(Explanation of Map)

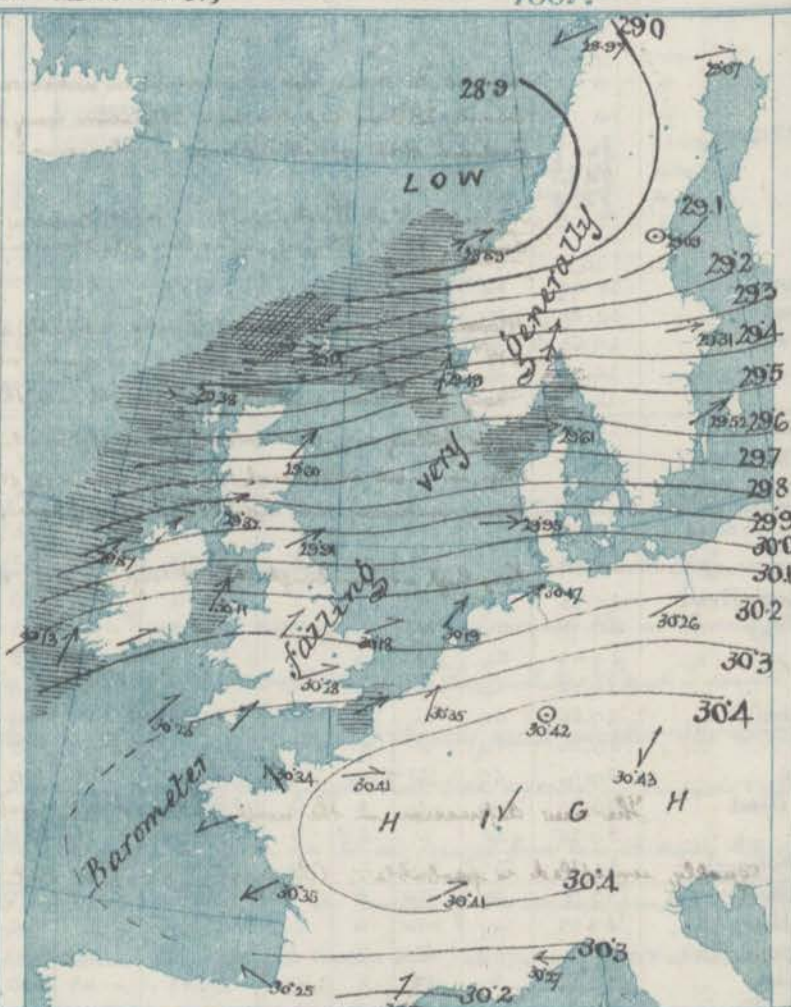
Barometer — Isobars are drawn for each tenth of an inch. Changes since previous morning are stated in words.
Wind — Arrows show the prevalent winds. They fly with the wind and their barbs and feathers refer to force, thus —
 * — forces above 10; — forces 8 to 10;
 — forces 5 to 7; — forces 1 to 4;
 ○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

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

MEAN HEIGHT of the BAROMETER

at 8 a.m. for the month of December.
 During the 10 Years 1871—1880.

STATIONS.	MEAN READINGS.
	IN.
Stamburgh Head	29.680
Stornoway	29.701
Wick	29.713
Nairn	29.741
Aberdeen	29.750
Leith	29.800
Shields	29.836
York	29.877
Ardrossan	29.810
Donaghadee	29.832
Holyhead	29.858
Liverpool	29.882
Valencia	29.879
Roche's Point	29.880
Pembroke	29.897
Scilly	29.948
Hurst Castle	29.938
Dover	29.942
LONDON	29.934
Oxford	29.937
Cambridge	29.926
Yarmouth	29.902



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

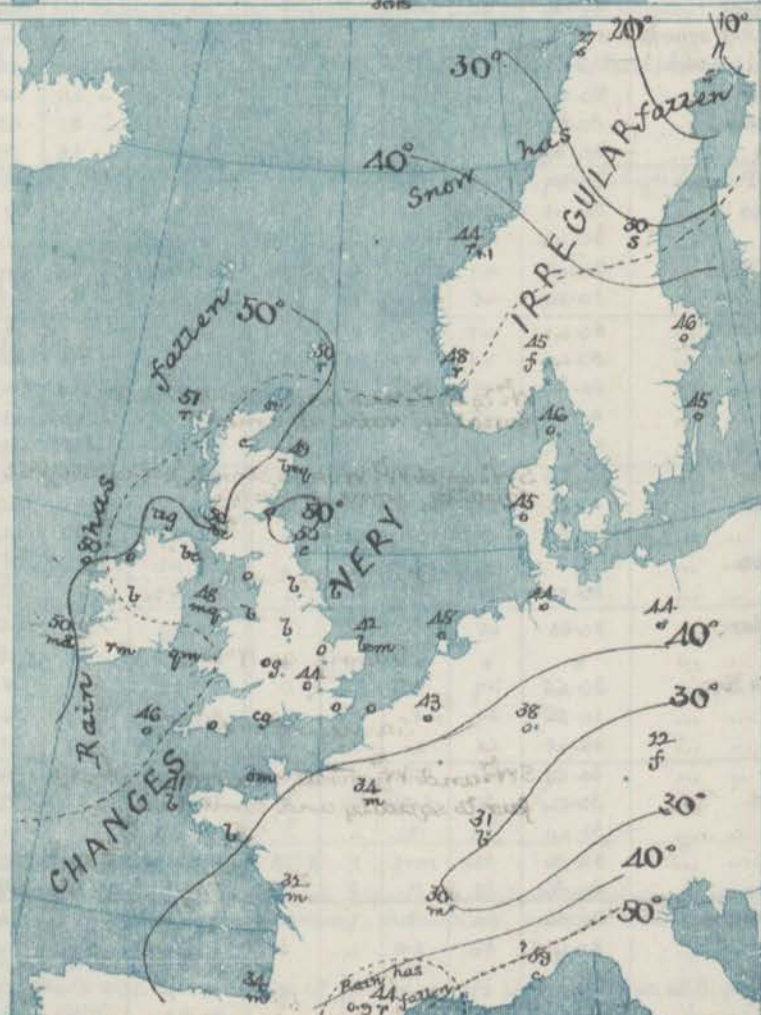
Temperature — Isotherms are drawn for each 10° changes since previous morning are stated in words.
Weather — is shown by Letters of the Beaufort Scale.
Rainfall — A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted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

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

for the month of December.

STATIONS	TEMPERATURE				RAINFALL (Inches)
	Daily Max.	Daily Min.	Avg. & M.	Wet.	
Stamburgh Head	42.0	34.5	39.0	37.6	4.33
Stornoway	44.8	38.5	38.0	37.8	5.66
Wick	42.0	32.1	37.8	36.4	3.18
Nairn	41.5	32.8	36.9	35.4	2.08
Aberdeen	41.8	32.9	36.9	35.3	3.34
Leith	44.3	33.6	38.4	37.0	2.01
Shields	42.8	34.3	39.2	36.9	2.74
York	42.5	31.9	36.2	35.4	2.45
Ardrossan	47.0	36.1	40.1	38.3	4.04
Donaghadee	46.7	36.1	40.1	39.1	2.84
Holyhead	46.8	36.6	42.9	41.3	3.84
Liverpool	43.6	35.7	39.1	37.4	2.70
Valencia	50.0	40.0	44.7	41.8	5.82
Roche's Point	47.7	39.3	42.9	41.4	4.74
Pembroke	47.1	40.4	43.7	42.6	4.06
Scilly	40.8	43.9	47.2	45.3	4.10
Hurst Castle	45.5	36.5	40.6	39.9	2.84
Dover	44.2	36.5	40.0	38.8	3.20
LONDON	44.5	38.9	38.1	37.1	2.14
Oxford	43.3	33.6	37.3	36.6	2.13
Cambridge	43.3	31.8	36.3	35.6	1.99
Yarmouth	42.2	33.8	37.9	37.2	2.96

NOTE — The Temperature means are for the 10 years 1871—80, the Rainfall means are mainly those for the 10 years 1866—85



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30.4 in: and upwards in an anticyclone lying over South Germany and the East of France.
Lowest, 28.9 in: and less, in a depression lying off the northwest of Norway.
Gradients steep over all our more northern coasts. Barometer falling generally, - most in the west and north.

TEMPERATURE

Highest, 53° at Wick and Narvik, 51° at Stromsø, and 50° at Lumburg H. South Shields, Mullaghmore, Balmuccia and Valencia.
Lowest, 22° at Munich, 27° at Rost, 30° at Helsingør and 31° at Alford and 32° at Rostock.

WIND

Moderate E. in the west of France; variable in the East of that country.
SW. or W. elsewhere; moderate on our south coasts but strong to gale in the north.
Strong gales were experienced last night over the northern part of Scotland and Iceland.

WEATHER

Snow falling over the northern parts of Scandinavia and rain in the west of Norway, the N. of Scotland and S. of Ireland.
Fair in most other localities, but mist or fog reported at many of the French and German stations.
Some yesterday rain has fallen at our extreme western and northern stations. Lunar halo was seen last night at Wick.

SEA

Very high at Lumburg H. and rough or rather so on all our more northern coasts, but slight in the south and east.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The new depression in the north seems likely to be followed by other disturbances, and a gradual extension of squally unsettled is probable. At present, however, our southern coasts are not seriously threatened.

FORECASTS

for the 24 hours ending at NOON on 4th December 1887.

DISTRICTS.	FORECASTS.	DISTRICTS.	FORECASTS.
0 SCOTLAND NORTH	W. to SW. gales and strong winds; squally, rain at times.	6 SCOTLAND WEST	SW. winds, strong to a gale; squally, some rain.
1 SCOTLAND EAST	SW. and W. winds, strong, perhaps a gale; squally, some showers.	7 ENGLAND N. W.	D° - - - - D° - - - - D° - - - -
2 ENGLAND N. E.	D° - - - - D° - - - - D° - - - -	8 ENGLAND S. W.	SW. winds, increasing in force; squally, some rain.
3 ENGLAND EAST	Same as N° 5.	9 IRELAND NORTH	Same as N° 6.
4 MIDLAND COUNTIES	Same as N° 5.	10 IRELAND SOUTH	Same as N° 8.
5 ENGLAND SOUTH	SW. and W. winds, moderate to strong; fair to squally and some rain.	WARNINGS	
		The south cone was hoisted yesterday in districts 0 to 2, 6, 7, 9 and part of 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.	Wet.	Wind.	Wes.	Sea.		Bar.	Dry.	Wet.	Wind.	Wes.	Sea.
Skudesnæs ...	29.78	46	46	WSW 8	TS	6	Holyhead ...	30.39	49	46	SW 3	0	2
Samburgh Head ...	29.62	48	48	W 6	d	4	Valencia ...	30.41	51	50	SEW 4	0	4
Stormway ...	29.43	51	51	W 6	Tg	6	Scilly ...	30.49	49	48	WSW 1	c	4
Aberdeen ...	29.97	49	46	WSW 4	bc	1	Dungeness ...	30.45	48	46	WSW 3	e	2
Shields ...	30.20	50	46	WSW 4	0	2	London ...	30.44	52	49	WSW 2	bm	*
Ardrossan ...	30.18	49	49	WSW 3	0	2	Yarmouth ...	30.36	49	47	WSW 2	b	2
Malin Head ...	30.13	49	48	WSW 5	c	5	Jersey ...	30.53	50	47	W 0	0	0
Mullaghmore ...	30.24	50	48	SW 6	0	5	Rochefort ...	30.55	43	41	ENE 5	m	2
Belmullet ...	30.25	49	49	SW 4	0m u	*							

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

The reports for yesterday morning showed that pressure remained highest over Western, Central, and South-eastern Europe and lowest in the far north, in which latter region there was a large and deep depression advancing eastwards; readings varied in value from between 30.5 ins: and 30.6 ins: over France and the Bay of Biscay, and from between 30.3 ins: and 30.5 ins: over South-eastern Europe to as low as 29.5 ins: and less over Lapland, and to 29.3 ins: and less over Western Algeria. W¹ and SW¹ winds were prevailing over all the more northern countries, and attained the force of a strong gale over Scandinavia and the Baltic. They were accompanied by showery weather and brought with them a rapid rise of temperature to all those regions the change in the 24 hours amounting to 29° at Archangel. Over France and South Germany light anticyclonic breeze were prevalent with cold dry weather, while in the Mediterranean and Spain the wind was E¹ and N¹. There was apparently a cyclonic circulation of wind over Algeria and the weather there was dull and wet. Temperature varied from several degrees below the freezing point in Northern Europe, and from a few degrees below the same point over France and Central Russia to about 50° in many parts of the British Isles and to rather more than 60° over the southern half of the Mediterranean. The lowest individual values were 9° at Archangel, 29° at Moscow, and 30° at Rome and at Clermont; over the whole of Scandinavia the thermometer had risen to above the freezing point. The highest values were 61° at Cagliari and Malta, 59° at Brindisi, 57° at Palma (and also at Lincol, Madeira) 56° at Sangunaise, 55° at Barcelona, and 50° at Stormway, Wick, Kairi and Pembroke. Later on fresh depressions began to advance over Northern Europe from the Atlantic, and the W¹ wind again rose to gale in the north of our Islands. In the south of England the day was mild and bright.

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 4th December. 1887.
Issued by the Meteorological Office, 116, Victoria Street, London, R. H. SCOTT, Secretary.

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STATIONS.	+ YESTERDAY EVENING.					9 A.M. TO DAY.										PAST 24 HOURS.		
	Barometer at 32° F. and Sea Level.	Temp. in Shade.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Weather.	Sea. (0 to 9.)	SHADE TEMP.		Amount of Rainfall.	
			Dir.	Force. (0 to 12.)		Reading at 32° F. and Sea Level.	Difference from 9 a.m. yesterday.	Dry.	Wet.	Difference from 9 a.m. yesterday.	Dir.	Force (0 to 12.)			Max.	Min.		
SCANDINAVIA.																		
Haparanda ..	29.98	2	Z	0	0	29.00	- .07	9	?	- 2	Z	0	0	*	23	0	-	
Hernösand ...	29.01	31	Z	0	0	29.15	+ .06	27	25	- 3	SW	4	6	*	36	?	0.12	
Stockholm ...	29.19	46	SW	6	6	29.38	+ .07	38	36	- 8	Z	0	0	*	50	36	0.04	
Wishby ...	29.42	43	W	6	C	29.49	- .03	46	44	+ 1	WSW	6	0	*	48	41	-	
Bodo ...	28.52	25	ENE	2	C	29.10	+ .13	27	25	0	WNW	6	6	4	28	18	-	
Christiansund...	29.11	38	W	9	S	29.21	+ .32	35	33	- 9	WSW	6	S	6	?	3	0.02	
Skudesnaes ...	29.46	43	W	5	r	29.51	+ .02	41	39	- 7	WNW	7	r	5	?	?	-	
Christiania Fjord (Furder)	29.27	41	SW	8	6	29.40	+ .05	42	40	- 3	WSW	6	C	5	46	?	-	
Skagen (The Seaw)	29.47	47	W	8	0	29.52	- .09	44	41	- 2	WNW	3	0	3	48	43	0.04	
Faro ...	29.79	44	WSW	6	C	29.70	- .25	44	43	- 1	WSW	4	0	*	45	?	-	
BRITISH ISLANDS.																		
Sumburgh Head	29.37	42	WNW	4	0	29.43	+ .29	39	37	- 11	NW	4	C	6	51	34	0.16	
Stornoway ...	29.65	40	W	5	0	29.67	+ .29	35	35	- 16	N	4	C	4	51	33	0.02	
Wick ...	29.57	42	W	3	0	29.62	+ .26	33	32	- 20	NW	3	C	1	54	3	0.10	
Nairn ...	29.61	46	WSW	2	0	29.66	+ .22	37	35	- 16	SW	1	6	1	55	26	0.05	
Aberdeen...	29.58	45	N	3	r	29.69	+ .09	38	36	- 11	W	1	0	1	54	37	0.21	
Leith ...	29.61	42	W	5	C	29.74	- .04	38	37	- 12	W	1	omv	*	52	37	0.22	
Shields ...	29.76	50	WSW	7	0	29.71	- .20	41	40	- 9	NE	1	r	2	52	40	0.05	
Spurn Head ...	29.88	46	SW	6	bc	29.75	- .31	42	40	- 2	SW	3	bc	2	48	41	-	
York ...																		
Loughborough	30.00	44	SW	3	C	29.81	- .37	41	40	- 1	SW	2	C	*	48	41	-	
GERMANY.																		
Ardrossan ...	29.69	50	SW	4	0	29.77	- .05	39	37	- 11	Z	0	0	0	50	38	0.13	
Malin Head ...	29.69	45	NW	4	or	29.78	+ .02	39	39	- 10	NW	4	of	4	57	38	0.35	
Mullaghmore ...	29.73	50	SSW	6	omv	29.83	- .06	41	39	- 9	NW	2	0	4	52	38	0.28	
Belmullet ...	29.76	46	S	4	r	29.89	+ .02	40	38	- 10	NNW	3	C	*	50	39	0.34	
Donaghadee ...	29.78	51	SW	6	C	29.80	- .19	39	39	- 10	NE	4	r	3	50	39	0.23	
FRANCE & NETHERLANDS.																		
Barrow-in-Furness	29.80	48	SSW	5	0	29.69	- .37	42	42	- 5	NW	4	od	*	48	41	0.03	
Liverpool (Bidston)	29.92	47	SSW	2	6	29.72	- .37	48	45	0	SW	4	0	3	54	45	-	
Holyhead ...	29.95	48	SSW	6	rmq	29.73	- .38	49	48	+ 1	SW	5	rmq	5	49	47	0.08	
Parsonstown ...	29.89	49	Z	0	0	29.80	- .19	37	36	- 6	NNW	1	r	*	52	37	0.13	
Valencia ...	29.93	51	S	5	odg	29.88	- .25	42	40	+ 8	NNE	3	0	4	51	41	0.14	
Roche's Point...	29.99	49	WSW	4	d	29.87	- .33	42	40	- 6	N	6	cd	4	5	41	0.03	
Pembroke ...	30.04	48	SSW	4	0	29.80	- .41	48	48	+ 1	ESE	4	dmv	4	48	46	0.01	
Scilly ...	30.08	48	SW	4	0	29.86	- .42	48	48	+ 2	WSW	5	opd	5	48	45	0.02	
Prawle Point ...	30.11	46	WSW	3	0	29.90	- .41	47	45	0	WSW	4	og	3	49	43	-	
Jersey ...	30.16	39	NW	1	bm	29.97	- .37	43	42	- 4	SW	3	omv	3	57	37	-	
Hurst Castle ...	30.12	46	W	3	cg	29.96	- .35	46	45	- 1	WSW	4	cd	1	49	45	-	
Dungeness ...	30.09	47	W	4	C	29.88	- .40	47	45	- 1	WSW	4	0	3	49	46	-	
London ...	30.09	45	WSW	4	0	29.88	- .40	44	42	0	WSW	3	0	*	52	43	-	
Oxford ...	30.05	42	SSW	4	0	29.86	- .40	43	41	0	SSW	3	og	*	44	41	-	
Cambridge ...	30.05	43	SW	3	0	29.85	- .37	42	41	- 1	SW	2	0	*	45	39	-	
Yarmouth ...	30.07	42	WSW	3	bcw	29.84	- .34	41	40	- 1	WSW	4	omv	3	43	39	-	
Cuxhaven ...	30.03	41	WSW	6	0	29.88	- .29	41	41	- 3	WSW	4	0	*	44	41	-	
Berlin ...	30.08	38	SW	2	6	29.93	- .33	32	31	- 4	SW	2	6	*	46	32	-	
Wiesbaden ...	*	*	*	*	*													
Munich ...	30.21	23	SW	2	f	30.02	- .41	21	21	- 1	NE	4	bc	*	28	19	-	
ITALY.																		
The Helder ...	30.00	45	SW	5	C	29.83	- .36	45	43	0	SW	4	0	3	46	45	-	
Brussels ...	*	*	*	*	*	29.95	- .40	36	36	- 7	WSW	4	omv	*	45	36	-	
Cape Gris Nez...	30.13	46	SW	5	0	29.94	- .36	43	43	- 5	SW	7	0	5	50	43	-	
Paris ...	30.21	37	N	1	0	29.97	- .44	32	32	- 2	SW	3	0	*	39	32	-	
Brest ...	30.14	43	Z	0	0	29.98	- .37	47	44	+ 6	SE	4	0	4	50	39	-	
Lorient ...	30.16	41	E	3	m	30.09	- .26	36	36	- 8	NE	1	0	2	48	34	-	
Rochefort ...	30.17	36	ENE	7	6	?	?	37	35	+ 5	NE	4	0	2	43	30	-	
Belfort ...																		
Lyons ...																		
Nice ...	30.25	30	E	1	0	30.05	- .36	32	31	+ 2	WNW	1	0	*	32	28	-	
Perpignan ...	29.94	37	E	5	r	29.99	- .28	50	45	- 9	NE	4	0	4	57	48	0.59	
Biarritz ...	29.99	47	NW	3	r	29.82	- .37	56	53	+ 9	ESE	4	r	*	?	44	6.90	
Corunna ...	30.10	38	NW	3	m	29.99	- .26	44	42	+ 10	WSW	3	r	2	?	34	-	
Lisbon ...	*	*	*	*	*	30.01	- .18	40	37	- 7	ENE	1	6	4	54	32	1.80	
	30.00	50	N	1	bc	30.06	- .01	50	47	+ 4	W	3	bc	2	57	48	-	

For Explanation of Columns, see p. 4.

WEATHER

for 8 a.m. on

CHARTS

Sunday 4th December 1887.

BAROMETER, WIND & SEA.

(Explanation of Map)

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

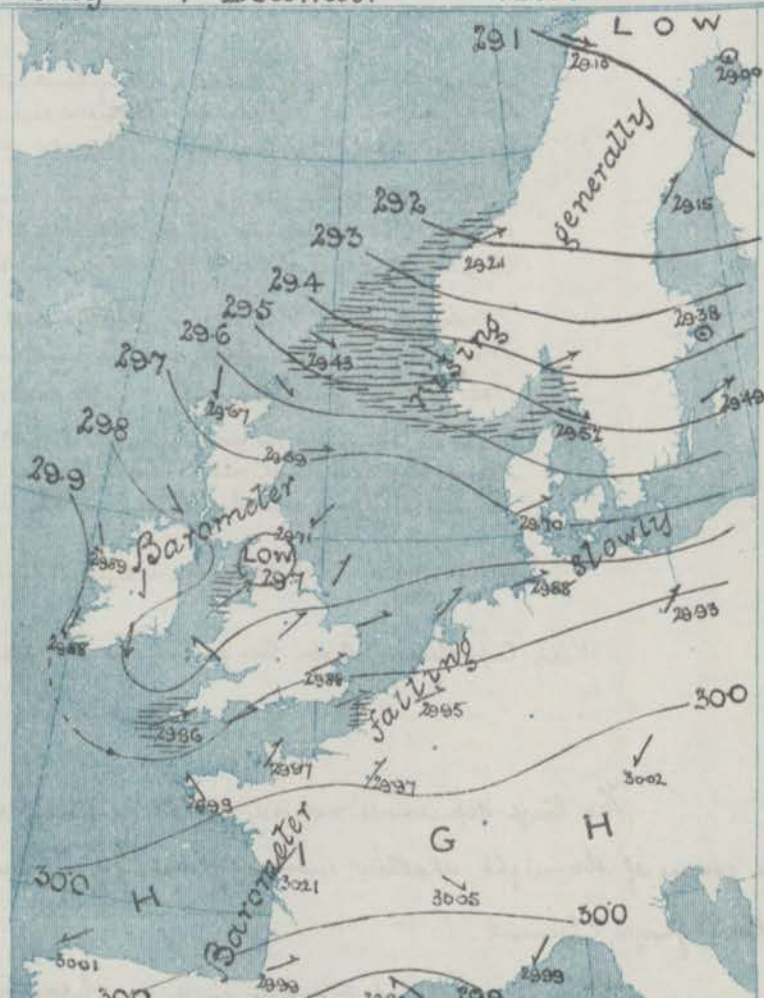
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→ = forces 5 to 7, → = forces 1 to 4,
○ = dead calm.

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

MEAN HEIGHT of the BAROMETER

at 8 a.m. for the month of December
During the 10 Years 1871—1880.

STATIONS.	MEAN READINGS.
	in.
Sumburgh Head	29.680
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TEMPERATURE, & WEATHER at 8 A.M., with RAINFALL in PAST 24 HOURS.

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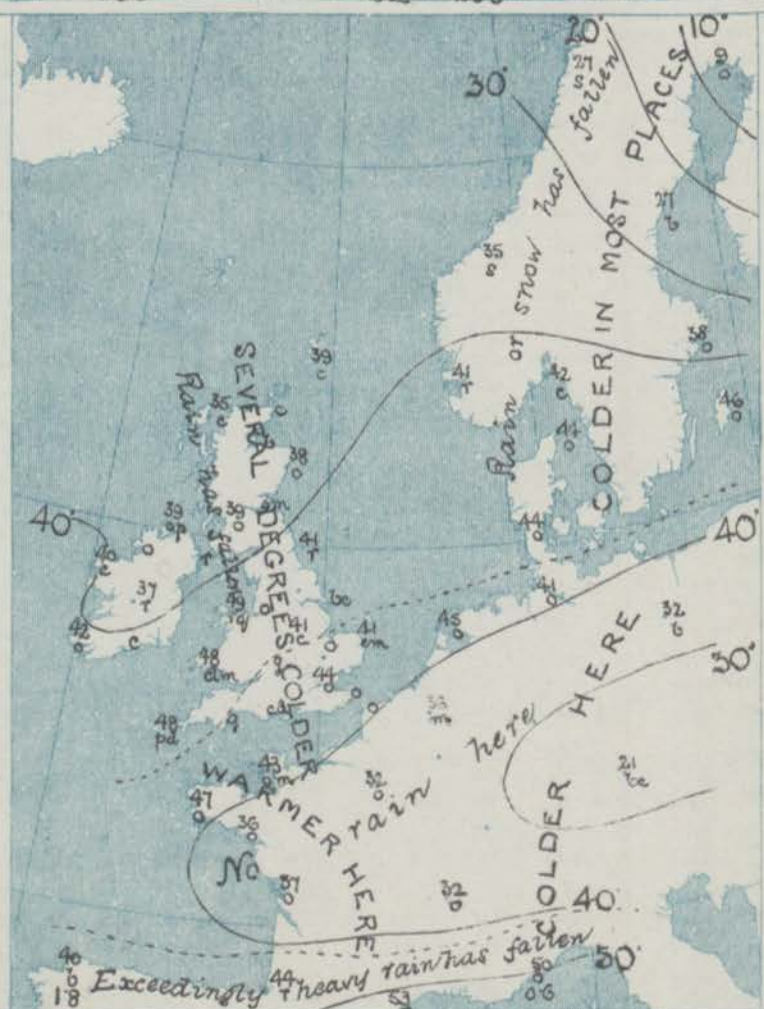
Rainfall—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE. AND RAINFALL.

for the month of December.

STATIONS.	TEMPERATURE				RAINFALL (Inches)
	Daily Max.	Daily Min.	Ath & N.	W.M.	
Sumburgh Head	42.0	34.5	39.0	37.6	4.33
Stornoway	44.8	33.5	38.9	37.8	5.66
Wick	42.0	32.1	37.8	36.4	3.18
Nairn	41.5	32.8	36.9	35.4	2.08
Aberdeen	41.8	32.9	36.9	35.3	3.34
Leith	44.3	33.8	38.4	37.0	2.01
Shields	42.8	34.3	39.2	36.9	2.74
York	42.5	31.9	36.2	35.4	2.45
Ardrossan	47.0	36.1	40.1	38.3	4.04
Donaghadee	46.7	36.1	40.1	39.1	2.84
Holyhead	46.8	39.6	42.9	41.3	3.84
Liverpool	43.6	35.7	39.1	37.4	2.70
Valencia	50.0	40.0	44.7	41.8	5.82
Roche's Point	47.7	39.3	42.9	41.4	4.74
Pembroke	47.1	40.4	43.7	42.6	4.06
Scilly	49.8	43.9	47.2	45.3	4.10
Hurst Castle	45.5	36.5	40.6	39.9	2.84
Dover	44.2	38.5	40.0	38.8	3.20
LONDON	44.5	38.9	38.7	37.1	2.14
Oxford	43.3	35.6	37.3	36.6	2.13
Cambridge	43.3	31.5	36.3	35.6	1.99
Yarmouth	42.2	33.8	37.9	37.2	2.95

Note—The Temperature means are for the 10 years 1871—80, the Rainfall means are mainly these for the 20 years 1866—85



GENERAL SITUATION AT 8 A.M.

PRESSURE	Highest, 30.0 ins: and upwards in a long band extending from Portugal and the north of Spain across France to Switzerland & Germany. Lowest, 29.0 ins: at Haparanda. Shallow depressions are lying respectively over the north of England and the mouth of the St. George Channel. Gradients slight but irregular. Barometer rising in Scandinavia and the north of our Islands, but falling elsewhere.
TEMPERATURE	Highest, 53° at Haparanda, 50° at Ales and Lulea, 49° at Holyhead, and 48° at Ben Loe and Lally. Lowest, 3° at Haparanda, 21° at Munich, 27° at Bodö and Helsingfors, and 32° at Berlin, Paris and Lyons. A considerable fall has taken place in the west and north of our Islands.
WIND	Moderate from N. or N.W. in Ireland and the north of Scotland; strong from W. in Norway. Moderate S.W. over England and the northern parts of France and Germany. N.E. or E. in South Germany and the west and south of France.
WEATHER	Sun in Germany, the extreme north of Scotland and the east of England. Cloudy elsewhere with rain at many of our western stations as well as in the south of France. Snow is falling at Ben Loe & Helsingfors. Excessively heavy rain has fallen in the south of France, the largest amount being 6.9 ins: at Haparanda.*
SEA	Rough off the west of Norway as well as at Lumburg P., Holyhead and Lally, but moderate to smooth elsewhere.

* At Cap Bear 3.6 ins: has fallen and at Fath 1.5 ins.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The large depression noticed off the northwest of Norway yesterday has travelled away to the eastward, but in the course of the night shallow subsidiary disturbances have appeared respectively over the north of England and at the mouth of the St. George Channel.

These are inclined to move in a southeasterly direction.

FORECASTS

For the 24 hours ending at NOON on 5th December 1887.

DISTRICTS.

- 10 SCOTLAND NORTH
- 11 SCOTLAND EAST
- 12 ENGLAND N.E.
- 13 ENGLAND EAST
- 14 MIDLAND COUNTIES
- 15 ENGLAND SOUTH

FORECASTS.

NONE ISSUED

DISTRICTS.

- 16 SCOTLAND WEST
- 17 ENGLAND N.W.
- 18 ENGLAND S.W.
- 19 IRELAND NORTH
- 20 IRELAND SOUTH

WARNINGS

FORECASTS.

NONE ISSUED.

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

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

YESTERDAY'S 2 P.M. REPORTS.

	Bar.	Dry.	Wet.	Wind.	Wes.	Sec.		Bar.	Dry.	Wet.	Wind.	Wes.	Sec.	
Skudesnaes ...	29.40	49	46	WSW	8	of	6	Holyhead ...	29.99	49	47	SSW	6 omg	5
Sumburgh Head ...	29.31	43	43	NW	5	r	7	Valencia ...	29.99	51	51	SW	5 r m	5
Stornoway ...	29.52	43	43	W	6	r u	5	Scilly ...	30.10	48	46	SSW	4 o	4
Aberdeen ...	29.54	52	49	SSW	5	bc	3	Dungeness ...	30.15	48	46	W	5 c	3
Shields ...	29.78	52	48	WSW	7	b	2	London ...	30.15	49	46	WSW	4 o	3
Androsan ...	29.75	50	48	SW	4	r	4	Yarmouth ...	30.27	48	47	WSW	4 c m	3
Malin Head ...	29.66	50	50	SW	7	o	6	Jersey ...	30.25	50	46	SSW	3 b m	3
Mullaghmore ...	29.78	52	50	SW	7	o	6	Rochefort ...	30.31	43	41	ENE	5 b	2
Belmullet ...	29.77	50	50	SW	6	om	2							

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

The reports for Saturday morning showed pressure to be as high as 30.3 ins. and more, over Southern, Central and Western Europe and that while it decreased in a northerly direction to rather below 29.0 ins. in some depressions which lay over the extreme north of Europe it decreased in a southerly direction also to about 29.3 ins. in a shallow depression which lay over Algeria. Over the northern countries W² and SW winds prevailed very generally, blowing a strong gale in the more exposed regions and a moderate to fresh breeze elsewhere; the sky was cloudy the weather showery and over the British Isles, North Sea, Baltic and North Germany the temperature was high for the time of year, and the weather somewhat showery in places. Over Southern Europe the wind was NE, and blew more strongly, in the south of France than the gradients thus seemed to warrant, while the weather in Algeria and on the shores of the Gulf of Lyons was becoming very rainy and thunderstorms were reported in many other places. Temperature varied from several degrees below the freezing point over Lapland and Northern Europe generally and from a few degrees below the same point over Switzerland, Central and South Germany to between 40° and 50° over the western and northwestern parts of the British Isles as well as over the northern shores of the Mediterranean and to upwards of 60° over Eastern Algeria and the southern part of Italy and Malta. The lowest individual readings were 11° at Haparanda, 16° at Archangel, 17° at Uleaborg, 21° at Kiofis and Munich, 24° at Hermannstadt, 27° at Bodo, Budapesth, Limoges, Clermont and Beaune, and 30° at Lyons and Hermonand; the highest were 65° at Tunis, La Calle and Malta, 64° at Palermo, 63° at Ifor, 61° at Cagliari, 59° at Brindisi (and also at Funchal Madeira), 58° at Niev, 57° at Goineth, and 55° at Valencia, Belmullet, Mullaghmore and Androsan.

Later in the day the depressions in the north began passing away to the eastward, the wind in the northwest began to veer with a decided fall of temperature, while showery weather became much more general over the northern countries than it had been. In the far south there are some indications that the Algerian depression was spreading northwards, causing a continuation of heavy rain in the south of France and at the eastern foot of the Pyrenees.

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 5th December

1887.

Issued by the Meteorological Office, 116, Victoria Street, London, R. H. SCOTT, Secretary.

Issued by the Meteorological Office, 116, Victoria Street, London, R. H. SCOTT, Secretary.																		
STATIONS.	† YESTERDAY EVENING.						8 A.M. TO DAY.									PAST 24 HOURS.		
	Barometer at 32° F. and Sea Level.	Temp. in Shade.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Sea. (0 to 9.)	SHADE TEMP.		Amount of Rainfall.		
			Dir.	Force. (0 to 12.)		Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Dir.	Force. (0 to 12.)		Weather.	Max.		Min.	
SCANDINAVIA.																		
Haparanda ...	29.28	9	NW	2	bc	29.52	+ 52	3	3	- 6	W	2	b	*	?	1	In.	
Hernösand ...	29.52	15	W	0	b	29.67	+ 52	34	3	- 23	W	0	bc	*	34	?	-	
Stockholm ...	29.52	38	W	2	0	29.69	+ 31	28	26	- 10	W	0	b	*	48	?	-	
Wisby ...	29.55	43	W	2	c	29.65	+ 16	40	38	- 6	WNW	4	bc	*	48	?	-	
Bodö ...	29.44	29	N	2	b	29.35	+ 25	21	18	- 6	ESE	4	b	2	29	21	-	
Christiansund...	29.36	35	ENE	3	0	29.34	+ 13	33	32	- 2	S	6	S	5	?	30	-	
Skudesnaes ...	29.61	38	WNW	4	c	29.57	+ 06	42	40	+ 1	SW	8	r	6	41	37	-	
Christiania Fjord (Færder)	29.54	41	W	4	c	29.64	+ 24	39	35	- 3	SW	5	b	2	43	36	-	
Skagen (The Scaw)	29.60	39	NW	3	c	29.72	+ 20	36	34	- 8	NW	1	b	0	45	36	-	
Faenø ...	29.69	39	N	2	T	29.83	+ 13	35	35	- 9	W	1	b	*	45	34	0.08	
Sumburgh Head	29.53	37	WNW	4	bc	29.49	+ 06	36	33	- 3	WNW	1	c	3	39	33	0.22	
Stornoway ...	29.65	36	NW	4	bc	29.50	- 17	39	39	+ 4	W	6	0	5	40	34	0.45	
Wick ...	29.64	35	NW	1	bc	29.52	- 10	37	36	+ 4	SW	3	0	1	40	31	0.07	
Nairn ...	29.71	36	SW	1	b	29.59	- 07	37	35	0	SW	1	0	1	41	34	0.05	
Aberdeen...	29.76	34	W	1	b	29.65	- 04	37	35	- 1	W	1	b	1	40	32	-	
Leith ...	29.82	37	W	1	b	29.73	- 01	42	40	+ 4	W	4	0	*	42	35	-	
Shields ...	29.83	35	W	2	b	29.80	+ 09	36	35	- 5	SSW	2	m	2	41	32	0.23	
Spurn Head ...	29.81	42	NNE	5	T	29.92	+ 17	36	35	- 6	SW	3	bm	3	46	34	0.08	
York ...	29.85	37	NW	1	T	29.93	+ 17	31	30	- 1	S	1	b	*	46	28	0.02	
Loughborough	29.83	40	NW	1	T	29.98	+ 17	25	24	- 16	E	1	f	*	51	25	0.06	
BRITISH ISLANDS.																		
Ardrossan ...	29.83	42	W	3	bc	29.75	- 02	44	43	+ 5	SSW	3	0	3	44	37	0.02	
Malin Head ...	29.85	42	WNW	3	b	29.71	- 07	43	43	+ 4	SW	4	bcyp	4	45	39	0.22	
Mullaghmore ...	29.92	42	WNW	4	b	29.81	- 02	44	43	+ 3	W	5	c	4	45	38	0.02	
Belinullet ...	29.94	41	W	3	bc	29.83	- 06	47	43	+ 7	W	5	c	*	47	39	0.05	
Donaghadee ...	29.91	35	SW	2	b	29.82	+ 02	39	38	0	SW	4	bc	2	41	32	0.04	
Barrow-in-Furness	29.85	38	N	2	bc	29.89	+ 20	44	41	+ 2	SW	4	c	*	44	34	0.04	
Liverpool (Bidston)	29.88	38	N	1	bc	29.94	+ 22	36	34	- 12	SW	2	b	3	48	35	0.07	
Holyhead ...	29.89	43	NW	4	c	29.94	+ 21	43	41	- 6	SW	4	c	4	49	39	0.16	
Parsonstown ...	29.98	34	W	0	b	29.89	+ 03	37	36	0	SSW	2	c	*	40	30	0.01	
Valencia ...	30.03	40	N	1	bc	30.00	+ 12	46	44	+ 4	W	2	p	2	48	37	0.13	
Roche's Point...	29.98	40	N	3	b	29.99	+ 18	42	40	0	W	3	c	3	43	33	0.15	
Pembroke ...	29.89	42	NNE	3	bc	30.03	+ 23	44	42	- 4	W	2	bc	1	49	40	0.06	
Scilly ...	29.84	48	N	5	T	30.07	+ 21	45	41	- 3	WNW	4	bc	4	51	43	0.19	
Prawle Point ...	29.86	48	WSW	4	0	30.04	+ 14	35	35	- 12	N	2	b	2	50	38	0.14	
Jersey ...	29.93	48	W	3	0	30.01	+ 04	45	44	+ 2	N	3	ogm	3	49	43	0.10	
Hurst Castle ...	29.84	48	SW	3	0	29.99	+ 03	40	40	- 6	NNE	3	bc	1	49	38	0.15	
Dungeness ...	29.83	47	WSW	3	0	29.90	+ 02	42	41	- 5	NNE	4	r	2	47	41	0.18	
London ...	29.83	47	W	2	c	29.97	+ 09	38	37	- 6	NNE	2	bm	*	47	38	0.18	
Oxford ...	29.86	42	SW	2	r	30.01	+ 15	33	32	- 10	NW	1	0	*	46	33	0.13	
Cambridge ...	29.85	43	W	2	0	29.98	+ 13	32	32	- 10	N	1	bc	*	46	31	0.11	
Yarmouth ...	29.77	43	SW	3	0	29.93	+ 09	38	37	- 3	NW	3	bcf	3	44	36	0.15	
Cuxhaven ...	29.77	41	NW	3	r	29.85	- 03	40	39	- 1	NNE	2	c	*	41	39	0.08	
Berlin ...	29.82	34	WNW	2	0	29.86	- 07	36	36	+ 4	W	1	0	*	41	?	-	
Wiesbaden ...	*	*	*	*	*	29.95	*	34	33	*	SW	1	0	*	36	32	-	
Munich ...	29.93	28	NE	1	0	29.95	- 07	38	38	+ 17	SW	3	r	*	39	21	0.24	
FRANCE & NETHERLANDS.																		
The Helder ...	29.77	44	SW	1	0	29.89	+ 06	42	41	- 3	NE	1	0	1	45	41	0.12	
Brussels ...	*	*	*	*	*	29.88	- 07	38	38	+ 2	SSW	3	T	*	38	36	0.04	
Cape Gris Nez...	29.93	44	SW	7	0	29.92	- 02	44	44	+ 1	NNE	8	0	6	46	?	0.24	
Paris ...	29.98	35	W	3	0	29.99	+ 02	36	35	+ 4	SSW	4	0	*	36	?	-	
Brest ...	29.93	48	W	4	bc	30.05	+ 07	40	37	- 7	N	3	0	4	52	37	0.08	
Lorient ...	30.04	48	WSW	1	0	30.05	- 04	47	46	+ 11	WNW	3	0	2	48	?	-	
Rochefort ...	30.04	42	N	4	0	30.12	?	?	44	?	SSW	5	0	2	45	34	-	
Belfort ...	30.03	40	NW	1	0	29.98	*	37	37	*	NW	1	0	*	42	32	-	
Lyons ...	30.01	36	N	1	0	30.07	+ 02	33	32	+ 1	W	1	r	*	39	31	-	
Nice ...	29.95	37	E	1	r	29.92	- 07	47	46	- 3	E	1	c	4	55	45	0.12	
Perpignan ...	29.93	50	N	*	0	30.04	+ 22	?	47	?	NW	4	c	*	54	48	0.20	
Biarritz ...	30.01	52	WNW	4	0	30.14	+ 15	49	46	+ 5	SSW	3	0f	3	52	?	0.85	
PENIN. SULA.																		
Corunna ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	-	
Lisbon ...	30.17	53	W	1	0	30.25	+ 19	51	49	+ 1	NW	1	0	2	57	50	-	



For Explanation of Columns, see p. 4.

1887.

(Explanation of Map)

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

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

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

at 8 a.m., for the month of December
During the 10 Years 1871—1880.

A hand-drawn weather map of the North Atlantic and Europe. The map shows isobars (lines of equal pressure) and weather systems. Key features include:

- Pressure Systems:** A low-pressure system is labeled "LOW" in the upper right, and a high-pressure system is labeled "HIGH" in the lower left. The word "Barometer" is written twice, once near each system.
- Isobars:** Labeled with values such as 29.35, 29.5, 29.6, 29.7, 29.8, 29.9, 30.0, 30.07, 30.08, 30.12, and 30.14.
- Handwritten Notes:** "falling again" is written near the low-pressure system, "rising" is written near the high-pressure system, and "stomty" (likely "stormy") is written near the 29.9 isobar.
- Arrows:** Arrows indicate wind direction and speed, with some labeled with numbers like 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70, 75, 80, 85, 90, 95, 100, 105, 110, 115, 120, 125, 130, 135, 140, 145, 150, 155, 160, 165, 170, 175, 180, 185, 190, 195, 200, 205, 210, 215, 220, 225, 230, 235, 240, 245, 250, 255, 260, 265, 270, 275, 280, 285, 290, 295, 300, 305, 310, 315, 320, 325, 330, 335, 340, 345, 350, 355, 360, 365, 370, 375, 380, 385, 390, 395, 400, 405, 410, 415, 420, 425, 430, 435, 440, 445, 450, 455, 460, 465, 470, 475, 480, 485, 490, 495, 500, 505, 510, 515, 520, 525, 530, 535, 540, 545, 550, 555, 560, 565, 570, 575, 580, 585, 590, 595, 600, 605, 610, 615, 620, 625, 630, 635, 640, 645, 650, 655, 660, 665, 670, 675, 680, 685, 690, 695, 700, 705, 710, 715, 720, 725, 730, 735, 740, 745, 750, 755, 760, 765, 770, 775, 780, 785, 790, 795, 800, 805, 810, 815, 820, 825, 830, 835, 840, 845, 850, 855, 860, 865, 870, 875, 880, 885, 890, 895, 900, 905, 910, 915, 920, 925, 930, 935, 940, 945, 950, 955, 960, 965, 970, 975, 980, 985, 990, 995, 1000, 1005, 1010, 1015, 1020, 1025, 1030, 1035, 1040, 1045, 1050, 1055, 1060, 1065, 1070, 1075, 1080, 1085, 1090, 1095, 1100, 1105, 1110, 1115, 1120, 1125, 1130, 1135, 1140, 1145, 1150, 1155, 1160, 1165, 1170, 1175, 1180, 1185, 1190, 1195, 1200, 1205, 1210, 1215, 1220, 1225, 1230, 1235, 1240, 1245, 1250, 1255, 1260, 1265, 1270, 1275, 1280, 1285, 1290, 1295, 1300, 1305, 1310, 1315, 1320, 1325, 1330, 1335, 1340, 1345, 1350, 1355, 1360, 1365, 1370, 1375, 1380, 1385, 1390, 1395, 1400, 1405, 1410, 1415, 1420, 1425, 1430, 1435, 1440, 1445, 1450, 1455, 1460, 1465, 1470, 1475, 1480, 1485, 1490, 1495, 1500, 1505, 1510, 1515, 1520, 1525, 1530, 1535, 1540, 1545, 1550, 1555, 1560, 1565, 1570, 1575, 1580, 1585, 1590, 1595, 1600, 1605, 1610, 1615, 1620, 1625, 1630, 1635, 1640, 1645, 1650, 1655, 1660, 1665, 1670, 1675, 1680, 1685, 1690, 1695, 1700, 1705, 1710, 1715, 1720, 1725, 1730, 1735, 1740, 1745, 1750, 1755, 1760, 1765, 1770, 1775, 1780, 1785, 1790, 1795, 1800, 1805, 1810, 1815, 1820, 1825, 1830, 1835, 1840, 1845, 1850, 1855, 1860, 1865, 1870, 1875, 1880, 1885, 1890, 1895, 1900, 1905, 1910, 1915, 1920, 1925, 1930, 1935, 1940, 1945, 1950, 1955, 1960, 1965, 1970, 1975, 1980, 1985, 1990, 1995, 2000, 2005, 2010, 2015, 2020, 2025, 2030, 2035, 2040, 2045, 2050, 2055, 2060, 2065, 2070, 2075, 2080, 2085, 2090, 2095, 2100, 2105, 2110, 2115, 2120, 2125, 2130, 2135, 2140, 2145, 2150, 2155, 2160, 2165, 2170, 2175, 2180, 2185, 2190, 2195, 2200, 2205, 2210, 2215, 2220, 2225, 2230, 2235, 2240, 2245, 2250, 2255, 2260, 2265, 2270, 2275, 2280, 2285, 2290, 2295, 2300, 2305, 2310, 2315, 2320, 2325, 2330, 2335, 2340, 2345, 2350, 2355, 2360, 2365, 2370, 2375, 2380, 2385, 2390, 2395, 2400, 2405, 2410, 2415, 2420, 2425, 2430, 2435, 2440, 2445, 2450, 2455, 2460, 2465, 2470, 2475, 2480, 2485, 2490, 2495, 2500, 2505, 2510, 2515, 2520, 2525, 2530, 2535, 2540, 2545, 2550, 2555, 2560, 2565, 2570, 2575, 2580, 2585, 2590, 2595, 2600, 2605, 2610, 2615, 2620, 2625, 2630, 2635, 2640, 2645, 2650, 2655, 2660, 2665, 2670, 2675, 2680, 2685, 2690, 2695, 2700, 2705, 2710, 2715, 2720, 2725, 2730, 2735, 2740, 2745, 2750, 2755, 2760, 2765, 2770, 2775, 2780, 2785, 2790, 2795, 2800, 2805, 2810, 2815, 2820, 2825, 2830, 2835, 2840, 2845, 2850, 2855, 2860, 2865, 2870, 2875, 2880, 2885, 2890, 2895, 2900, 2905, 2910, 2915, 2920, 2925, 2930, 2935, 2940, 2945, 2950, 2955, 2960, 2965, 2970, 2975, 2980, 2985, 2990, 2995, 3000, 3005, 3010, 3015, 3020, 3025, 3030, 3035, 3040, 3045, 3050, 3055, 3060, 3065, 3070, 3075, 3080, 3085, 3090, 3095, 3100, 3105, 3110, 3115, 3120, 3125, 3130, 3135, 3140, 3145, 3150, 3155, 3160, 3165, 3170, 3175, 3180, 3185, 3190, 3195, 3200, 3205, 3210, 3215, 3220, 3225, 3230, 3235, 3240, 3245, 325

for the month of December

[illegible]

NOTE—The Temperature means are for the 30 years 1871–80, the Rainfall means are mainly those for the 20 years 1866–85.

GENERAL SITUATION AT 8 A.M.

PRESSURE	Highest, 30.2 in. over Portugal. Lowest, 29.4 in. and less, in a large area lying off the northwest of Norway. Gradients moderate over our north and north-west coasts, slight elsewhere. Barometer falling in Ireland, Scotland and Norway, but rising elsewhere.
TEMPERATURE	Highest, 51° at Lisbon, 49° at Biarritz, 47° at Helmslet, Lovinet and Kiev and 46° at Valencia. Lowest, 3° at Haparanda, 4° at Hernösand, 21° at Rode, 25° at Loughborough, 28° at Stockholm and 31° at York. Frost occurred over Scotland and the central parts of Ireland and England last night.
WIND	Light or moderate from the N ^W over the south of England and north of France. S ^W or W ^W elsewhere, light or moderate in force generally, but fresh or strong on our extreme northwest coasts.
WEATHER	Dull in Belgium, France and Germany, with rain at Brussels, Munich and Lyons. Fair or fine in most other localities, but showers reported in the west of Ireland and rain or snow in the west of Norway. Rain or sleet fell yesterday in many parts of the United Kingdom.
SEA	Rough off the west of Norway as well as at C Frie Niz, and rather rough at Stromøys, but moderate to smooth elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The small shallow depressions noticed over our Islands yesterday have travelled away to the Continent, but a larger disturbance is appearing again in the far north.

Freshening S^W and W^W winds and unsettled weather are therefore probable on our more northern coasts, but in the south conditions are likely to remain fair for a time.

FORECASTS

for the 24 hours ending at NOON on 6TH December 1887.

DISTRICTS.	FORECASTS.	DISTRICTS.	FORECASTS.
0 { SCOTLAND NORTH	S ^W and W ^W winds, freshening; changeable, some showers.	6 { SCOTLAND WEST	Same as N° 0.
1 { SCOTLAND EAST	-----D°-----D°-----D°-----	7 { ENGLAND N. W.	Same as N° 0.
2 { ENGLAND N. E.	S ^W winds, moderate; fair to showery.	8 { ENGLAND S. W.	N ^W to W ^W winds, moderate; fair generally.
3 { ENGLAND EAST	Same as N° 5	9 { IRELAND NORTH	Same as N° 0
4 { MIDLAND COUNTIES	Same as N° 5	10 { IRELAND SOUTH	W ^W to S ^W winds freshening; fair to showery.
5 { ENGLAND SOUTH	N ^W to W ^W winds, light or moderate; fair generally, frosty at night.	WARNINGS	NONE ISSUED.

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

YESTERDAY'S 2 P.M. REPORTS.

	Bar.	Dry.	Wet.	Wind.	Wen.	Sea.		Bar.	Dry.	Wet.	Wind.	Wen.	Sea.
Skudesnæs ...	29.86	41	37	WNW 4	0	5	Holyhead ...	29.84	43	41	W 5	0	4
Sumburgh Head ...							Valencia ...						
Stornoway ...	29.67	40	39	N 4	2	3	Scilly ...						
Aberdeen ...							Dungeness ...	29.82	47	45	W 4	0	3
Shields ...							London ...						
Ardrossan ...							Yarmouth ...						
Malin Head ...	29.83	42	42	NW 4	0	4	Jersey ...	29.91	48	46	W 3	0	3
Mullaghmore ...							Rochefort ...	30.00	42	40	NNE 5	0	2
Belmullet ...	29.92	44	39	NW 3	0	0							

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

The reports for yesterday showed that pressure remained highest (29.9 ins to 30.1 ins) over the western, central and southeastern parts of the Continent, and lowest (about 29 ins) over the North of Lapland and the shores of the White Sea. Local disturbances were formed, also, over the British Isles and the Gulf of Lyons. Westerly (SW to NW winds) still prevailed over all the more northern countries and blew hard at some of the more northern stations, accompanied by cloudy weather and showers of rain in many places, while over southern Europe the wind was variable from between E and N, and though light generally with fine weather, blew strongly in the South of France, with densely overcast skies and unusually heavy rains. The rainfall reported in the Bulletin International (Paris) yesterday morning was 6.9 ins. at Perpignan, 3.6 ins. at Lez (Bearn), 1.8 ins. at Lescun, 1.5 ins. at Lette, 0.8 ins. at Barcelona. Temperature was inclined to decrease, especially in the northern and northwestern parts of the British Isles, and the West of Norway, where the fall varied from 10° to 20°, and readings varied from many degrees below the freezing point over northern and a few degrees below over Central Europe, to between 33° and 40° over the North of our Islands, between 50° and 60° over the northern part of the Mediterranean, and to upwards of 60° over the southern parts. The lowest individual values were 9° at Haparanda, 10° at Ullsberg, 11° at Copenhagen, 14° at Archangel, 23° at Kuopio, 27° at Besancon, and in several parts of Scandinavia and 29° at Cassel; the highest were 65° at Malta, 64° at Palermo, 57° at Brindisi, Naples, La Spezia and Algiers, 56° at Cagliari and 54° at Oporto, [at Tunis the reading was 61°]. Later in the day the fall of temperature in the North of the British Isles spread southwards, preceded by rain, and the wind veered to the NW and N as the local depressions moved southwards.

SUMMARY OF CHANGES IN THE WEATHER OVER THE BRITISH ISLANDS AND THEIR NEIGHBOURHOOD FROM THE 27th OF NOVEMBER TO THE 3rd OF DECEMBER 1887.

The weather of the past week has remained very changeable and unsettled, especially at the more northern parts of Kingdom, where the wind has occasionally blown with the force of a gale. Temperature has been high for the time of year, the maximum readings being generally above 50°. Barometrical readings have been a rule highest over Spain the Bay of Biscay and France, and lowest in the far North, so that the prevailing winds have been W. Several depressions have appeared in the neighbourhood of our Islands. The first, a series of two disturbances subsidiary to a large depression over Scandinavia, appeared off the Scotch coast on the morning of the 27th and occasioned W gales over the northern parts of Ireland and England, with rain in nearly all districts. The second, a shallow disturbance, advanced to our northwest coast on the 28th and subsequently moved eastwards. During its progress a third small and shallow system advanced in an east-northeast direction along the English Channel and afterwards moved away to the Baltic, its progress being attended by heavy rain at many of the southern stations. The fourth, a large and deep disturbance, in the centre of which readings were below 28.3 ins., advanced from the West to the Norwegian coast on the night of the 31st and afterwards travelled eastwards, across the North of Scandinavia. Its passage was marked by strong W gales, and rainy weather in the far North, but in the South the wind was moderate and the weather fair. The fifth depression also large and deep appeared off the northwest of Norway on the morning of the 3rd of December, and produced further W gales over Scandinavia and the North of Scotland. At the close of the week this disturbance was passing away in an easterly direction but some secondary depressions which were appearing in the West threatened to bring about an extension of unsettled weather. The high temperatures which prevailed during the greater part of the week were succeeded on the evening of the 3rd by a considerable fall in our West and North districts and during the ensuing night frost occurred in the North of Scotland.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

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

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

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

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

DAILY WEATHER REPORT.

for Tuesday 6th December

1887.

Issued by the Meteorological Office, 116, Victoria Street, London, R. H. SCOTT, Secretary.

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STATIONS.	+ YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
	Barometer at 32° F. and Sea Level.	Temp. in Shade.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Weather.	Sea. (0 to 9.)	SHADE TEMP.		Amount of Rainfall.	
			Dir.	Force. (0 to 12.)		Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Dir.	Force. (0 to 12.)			Max.	Min.		
SCANDINAVIA.																		
Haparanda ..	29.38	22	W	2	0	29.58	+0.06	5	5	+2	W	4	0	*	28	28	0.39	
Hernösand ...	29.49	21	W	0	0	29.78	+1.11	9	9	+5	W	0	0	*	30	30	0.04	
Stockholm ...	29.69	35	SW	2	0	29.82	+1.13	35	33	+7	SSE	2	0	*	39	27	0.04	
Wisby ...	29.83	36	SW	4	0	29.84	+1.19	37	36	-3	WSW	2	0	*	41	32	-	
Bodö ...	29.31	43	E	2	0	29.58	+1.23	31	27	-10	W	4	0	2	?	18	-	
Christiansund...	29.45	34	SW	4	0	29.41	+0.07	36	33	+3	SSE	3	0	44	36	30	0.28	
Skudesnaes ...	29.55	43	SSE	6	0	29.49	-0.08	45	44	+3	SSE	8	0	5	?	39	-	
Christiania Fjord (Færder)	29.60	41	SSW	5	0	29.63	-0.01	41	41	+2	SSW	3	0	44	43	39	-	
Skagen (The Scaw)	29.70	?	WSW	5	0	29.70	-0.02	41	40	+5	SW	3	0	3	41	36	-	
Faßö ...	29.85	39	SW	2	0	29.78	-0.05	39	39	+4	S	4	0	*	41	?	-	
BRITISH ISLANDS.																		
Sumburgh Head	29.34	43	W	4	0	29.03	-1.46	44	43	+8	SSE	5	0	5	45	35	0.06	
Stornoway ...	29.38	43	W	4	0	28.66	-1.84	46	46	+7	SW	9	0	6	46	38	0.15	
Wick ...	29.44	41	W	1	0	28.87	-1.65	45	44	+8	S	6	0	44	46	35	-	
Nairn ...	29.49	41	SW	1	0	28.89	-1.70	45	42	+8	SSE	2	0	2	45	37	0.18	
Aberdeen...	29.56	40	SW	3	0	29.08	-1.57	45	43	+8	S	8	0	44	45	26	-	
Leith ...	29.64	45	W	3	0	29.10	-1.63	44	41	+2	SSW	3	0	4	46	41	0.04	
Shields ...	29.74	44	WSW	3	0	29.32	-1.48	43	41	+7	S	7	0	2	44	31	-	
Spurn Head ...	29.86	39	SE	5	0	29.50	-1.42	39	38	+3	S	6	0	44	40	34	-	
York ...	29.86	41	W	1	0	29.39	-1.54	42	39	+11	S	4	0	*	42	30	0.01	
Loughborough	29.93	39	WSW	3	0	29.51	-1.47	41	39	+16	S	4	0	44	41	25	-	
ARDROSSAN.																		
Ardrossan ...	29.66	47	SW	5	0	29.02	-1.78	46	46	+2	S	8	0	6	50	43	0.20	
Malin Head ...	29.62	42	WSW	5	0	28.91	-1.80	42	42	-1	SW	5	0	44	47	39	0.86	
Mullaghmore ...	29.68	45	SW	5	0	29.05	-1.76	41	40	-3	WSW	7	0	6	47	39	0.47	
Belmullet ...	29.66	48	W	6	0	29.14	-1.69	41	39	-6	WSW	8	0	*	49	40	0.46	
Donaghadee ...	29.73	44	SW	3	0	29.06	-1.76	41	41	+2	SSW	6	0	44	46	38	0.18	
GERMANY.																		
Barrow-in-Furness	29.80	45	SW	4	0	29.25	-1.64	43	41	-1	SE	7	0	44	46	42	0.32	
Liverpool (Bidston)	29.86	43	SW	2	0	29.30	-1.64	41	39	+5	S	5	0	44	45	36	-	
Holyhead ...	29.86	46	SW	4	0	29.18	-1.76	44	43	+1	S	9	0	44	48	43	0.41	
Parsonstown ...	29.82	44	WSW	2	0	29.19	-1.70	37	36	0	WSW	1	0	44	45	36	0.41	
Valencia ...	29.83	49	SSW	5	0	29.38	-1.62	42	39	-4	WSW	5	0	44	50	39	0.71	
FRANCE & NETHERLANDS.																		
Roche's Point...	29.88	47	WSW	3	0	29.29	-1.70	40	38	-2	WSW	5	0	44	48	39	0.55	
Pembroke ...	29.92	47	SW	5	0	29.27	-1.76	46	46	+2	SSW	7	0	6	48	44	0.18	
Scilly ...	30.02	47	SW	4	0	29.48	-1.59	46	45	+1	W	6	0	6	48	41	0.10	
Prawle Point ...	30.05	48	WSW	2	0	29.52	-1.52	47	46	+12	S	7	0	6	49	38	-	
Jersey ...	30.08	38	WSW	2	0	29.69	-1.32	44	41	-1	SSW	6	0	5	47	33	-	
HURST CASTLE.																		
Hurst Castle ...	30.03	42	WSW	3	0	29.60	-1.39	45	44	+5	SSW	6	0	3	49	36	-	
Dungeness ...	29.99	37	W	2	0	29.70	-1.20	44	41	+2	SW	5	0	44	45	35	-	
London ...	30.01	36	W	1	0	29.65	-1.32	40	37	+2	S	3	0	*	43	33	-	
Oxford ...	29.97	37	WSW	1	0	29.56	-1.43	41	39	+8	SSE	3	0	*	43	31	-	
Cambridge ...	29.98	34	SW	1	0	29.59	-1.39	39	37	+7	SSE	1	0	*	45	31	-	
Yarmouth ...	29.96	36	WSW	2	0	29.69	-1.24	40	38	+2	SSW	3	0	3	42	33	0.01	
Cuxhaven ...	29.92	36	SE	1	0	29.82	-1.03	30	30	-10	S	2	0	*	?	29	-	
Berlin ...	29.95	39	W	1	0	29.97	+1.11	37	36	+1	SSW	1	0	*	39	36	0.12	
Wiesbaden ...	*	*	*	*	*	29.94	-0.01	37	36	+3	W	0	0	*	37	?	0.12	
Munich ...	30.02	34	W	2	0	30.01	+0.06	34	33	-4	E	2	0	*	41	32	0.28	
FRANCE & NETHERLANDS.																		
The Helder ...	29.95	38	SW	1	0	29.78	-1.11	35	34	-7	S	3	0	2	43	34	-	
Brussels ...	*	*	*	*	*	29.85	-0.03	35	35	-3	S	1	0	*	41	34	0.16	
Cape Gris Nez...	29.99	41	WSW	4	0	29.76	-1.16	40	39	-4	SSW	7	0	5	46	36	-	
Paris ...	30.03	42	SW	1	0	29.90	-0.09	39	39	+3	SSW	3	0	*	42	?	0.04	
Brest ...	30.15	42	NE	4	0	29.66	-1.39	48	46	+8	SSW	4	0	6	32	39	-	
Lorient ...	30.12	45	W	3	0	29.70	-1.35	48	48	+1	SSW	8	0	5	48	34	0.12	
Rochefort ...	30.12	42	WSW	5	0	29.96	-1.16	46	45	?	SW	4	0	2	52	37	0.12	
Belfort ...	30.04	37	WSW	1	0	29.96	-0.02	38	37	+1	WSW	1	0	*	39	37	-	
Lyons ...	30.12	40	W	1	0	30.03	-0.04	37	37	+4	S	1	0	*	45	?	-	
Nice ...	29.94	31	WSW	3	0	29.96	+0.04	44	42	-3	E	1	0	1	52	43	-	
Perpignan ...	30.10	50	W	4	0	30.06	+0.02	45	42	?	WSW	3	0	*	53	43	-	
Biarritz ...	30.16	51	WSW	4	0	30.03	-1.11	48	44	-1	S	4	0	2	52	45	0.04	
PENIN. ISL.																		
Corunna ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	-	
Lisbon ...	30.25	54	W	0	0	30.21	-0.04	54	53	+3	WSW	3	0	2	57	52	0.08	

For Explanation of Columns, see p. 4.

WEATHER CHARTS

for 8 a.m. on Tuesday, 6th December

1887.

BAROMETER, WIND & SEA.

(Explanation of Map)

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

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

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

→ = forces 5 to 7; → = forces 1 to 4;

○ = dead calm.

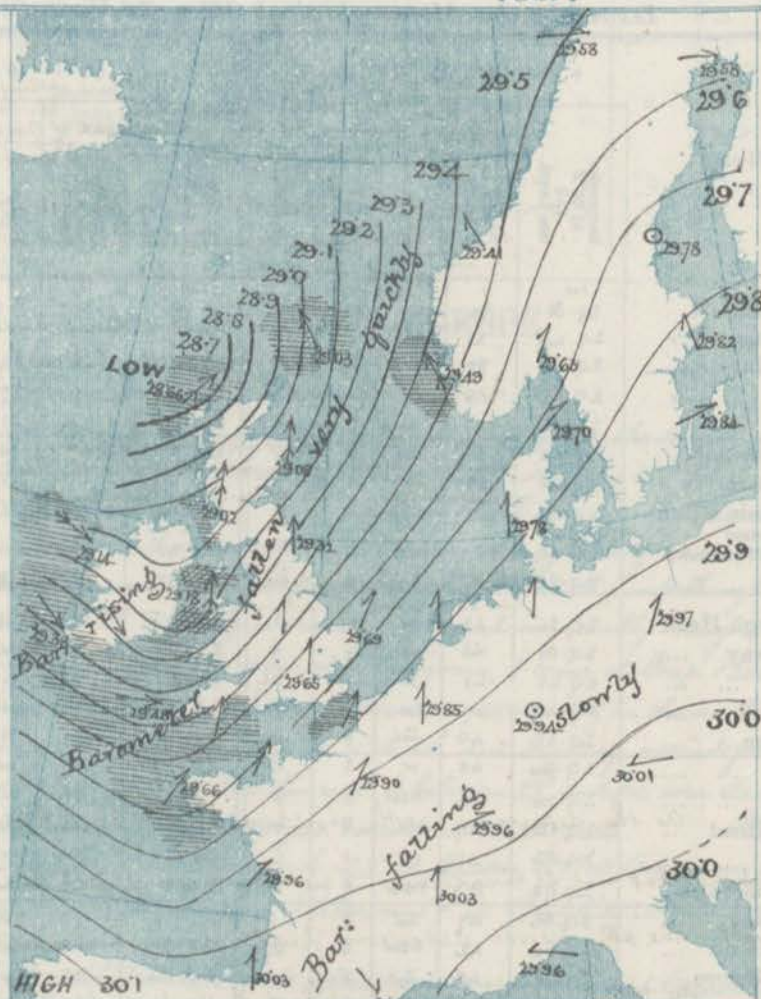
Sea Disturbance — where considerable is shown thus

■ = Rough. ■ = High.

MEAN HEIGHT of the BAROMETER

at 8 a.m. for the month of December
During the 10 Years 1871—1880.

STATIONS.	MEAN READINGS.
Sumburgh Head	29.680
Stornoway	29.701
Wick	29.713
Nairn	29.741
Aberdeen	29.750
Leith	29.800
Shields	29.826
York	29.877
Ardrossan	29.810
Donaghadee	29.832
Holyhead	29.853
Liverpool	29.882
Valencia	29.870
Roche's Point	29.880
Pembroke	29.807
Scilly	29.943
Hurst Castle	29.933
Dover	29.942
LONDON	29.934
Oxford	29.937
Cambridge	29.926
Yarmouth	29.902



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.

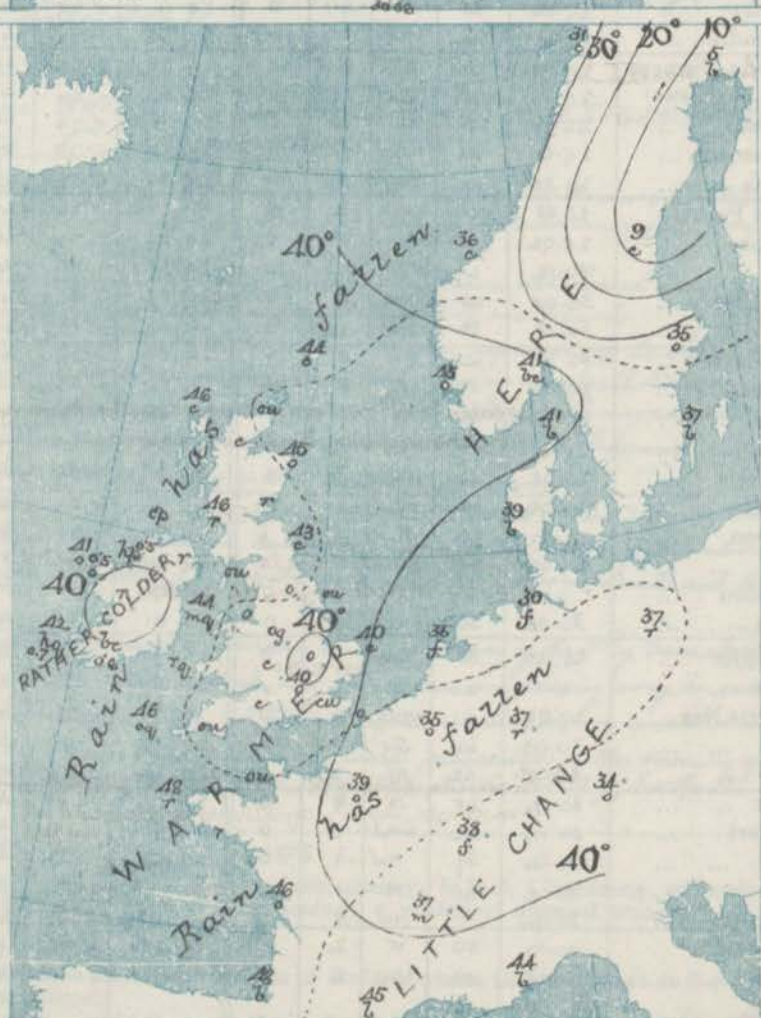
Rainfall — A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

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	42.0	34.5	39.0	37.6	4.33
Stornoway	44.8	38.5	38.0	37.8	5.65
Wick	42.0	32.1	37.8	36.4	3.18
Nairn	41.5	32.8	36.0	35.4	2.08
Aberdeen	41.8	32.0	36.9	35.3	3.34
Leith	44.3	33.6	38.4	37.0	2.01
Shields	42.8	34.3	39.2	38.0	2.74
York	42.5	31.9	36.2	35.4	2.45
Ardrossan	47.0	30.1	40.1	38.3	4.04
Donaghadee	46.7	25.1	40.1	39.1	3.84
Holyhead	46.8	30.6	42.9	41.3	3.84
Liverpool	43.6	35.7	39.1	37.4	2.70
Valencia	50.0	40.0	44.7	41.8	5.82
Roche's Point	47.7	39.3	42.9	41.4	4.71
Pembroke	47.1	40.4	43.7	42.6	4.06
Scilly	49.8	43.0	47.2	45.3	4.10
Hurst Castle	45.5	36.5	40.5	39.9	2.84
Dover	44.2	36.5	40.0	38.8	3.20
LONDON	44.5	33.9	38.1	37.1	2.14
Oxford	43.5	33.6	37.3	36.6	2.13
Cambridge	43.3	31.8	36.3	35.6	1.99
Yarmouth	42.2	33.8	37.9	37.2	2.95

NOTE — The Temperature means are for the 10 years 1871—80, the Rainfall means are mainly those for the 10 years 1866—85



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30.2 mm. and more over the SW. parts of the Spanish Peninsula; 30.0 mm. and more over the SW. of France and S. Germany; 29.8 mm. and more in S.W. of Sweden.
Lowest, 28.7 mm. and less, in a depression near the Hebrides; 29.2 mm. to 29.3 mm. in St. George's Channel.
Gradients steep over all the northern part of Great Britain, moderate in the south and east.
Barometer falling very fast except in Ireland, where a recovery has commenced.

TEMPERATURE

Highest, 54° at Dublin, 48° to 46° in the west of France, 46° in the west and 45° in the east of Scotland.
Lowest, 5° at Haparanda, 9° at Helsingfors, 31° at Rostock; 34° at Munich, 35° at Bremen and the Helder, 37° at Berlin, Wiesbaden and Lyons as well as at Paris.
It rose rapidly over the United Kingdom during yesterday or the night, but is already falling fast again in the far west.

WIND

S. over Great Britain and the North Sea - moderate in the east and south-east, but blowing a moderate to strong gale in the W. and NW.
In Ireland the wind has veered to NW., but still blows hard in some places.
In France the wind is moderate from SW., in Denmark from S. and in Norway from SE.

WEATHER

Foggy on the eastern shores of the North Sea, cloudy, but threatening at our eastern stations.
Very changeable, squally and unsettled in the west and north, with rain in several places, which is changing to hail in the far west.
Thunderstorms have occurred at Southampton yesterday, and at Rochester during the night. Snow-halo was seen in London at Midday.

SEA

High in St. George's Channel - rough on our SW. W. and NW. coast generally. Moderate (but apparently rising) in the NE. and E.
Smooth on the Dutch coast and in southern part of Bay of Biscay.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

- (1.) As the depression in the north and its V-shaped secondary move northwards the gale will probably reach our eastern stations, but not be very severe. Later on the wind will probably shift quickly to the W. or NW. in a sharp shower, and towards night the sky become clearer over Great Britain with a rapid fall of temperature and possibly a frost on the grass.
- (2.) The NW. wind is not likely to last for long, and in Ireland a backing to the SW. again is likely to take place before 24 hours have passed.

FORECASTS

for the 24 hours ending at NOON on 7th December 1887.

DISTRICTS.	FORECASTS.	DISTRICTS.	FORECASTS.
0 SCOTLAND NORTH	S. gales to W. moderate breezes; squally, showery, very changeable, becoming colder.	6 SCOTLAND WEST	Wind shifting to NW. and moderating; squally, colder.
1 SCOTLAND EAST	D°-----D°-----D°-----	7 ENGLAND N. W.	D°-----D°-----D°-----
2 ENGLAND N. E.	S. to W. or NW. winds, strong to moderate; showery, very changeable, colder.	8 ENGLAND S. W.	D°-----D°-----D°-----
3 ENGLAND EAST	Same as No 5	9 IRELAND NORTH	NW. gales, backing and backing again; very changeable and unsettled.
4 MIDLAND COUNTIES	Same as No 2	10 IRELAND SOUTH	D°-----D°-----D°-----
5 ENGLAND SOUTH	S. winds, strong to a gale, then W. or NW. strong to moderate, showery, squally, unsettled, cold at night.	WARNINGS	

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

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

YESTERDAY'S 2 P.M. REPORTS.

	Bar.	Ther.	Wet.	Wind.	Wes.	Sea.		Bar.	Ther.	Wet.	Wind.	Wes.	Sea.
Skudesnaes ...	29.80	39	36	NW 2	0	4	Holyhead ...	29.90	46	44	SW 5	c	1
Samburgh Head ...	29.40	37	37	SEW 2	1	3	Valencia ...	29.93	50	47	SW 4	cw	4
Stornoway ...	29.47	44	43	N 4	0	4	Scilly ...	30.07	47	45	N 3	c	4
Aberdeen ...	29.60	40	39	SW 4	c	1	Dungeness ...	29.98	44	41	N 3	c	2
Shields ...	29.76	44	42	WSW 3	c	2	London ...	30.01	43	38	WNW 2	b	*
Ardrossan ...	29.70	41	45	SW 4	c	3	Yarmouth ...	29.96	41	38	W 3	b	2
Malin Head ...	29.66	46	46	WSW 5	c	4	Jersey ...	30.08	46	42	N 3	bc	3
Mullaghmore ...	29.76	47	45	SW 5	cw	4	Rochefort ...	30.12	49	49	WNW 4	r	2
Belmullet ...	29.77	49	47	WSW 5	0	*							

GENERAL REMARKS ON THE WEATHER OVER EUROPE

DURING THE PAST 24 HOURS.

The reports for yesterday morning showed that pressure was highest (30.1 ins and upwards) over the Iberian Peninsula, Morocco and the Bay of Biscay, and lowest (29.1 ins and less) over the White Sea. Low readings, 29.4 ins and less, were however, reported in a depression lying off the northwest of Norway, while relatively low readings, 29.9 ins. and less, were found in a shallow disturbance lying over the Gulf of Genoa. The wind was moderate or fresh from the W and SW over northwest Europe, but N in the Gulf of Finland, as well as in Spain. Over the South of France it was chiefly NW, while over Central Europe it was light and variable. Rain was falling in the Netherlands, and many parts of France, as well as on the East shores of the Baltic, and snow at Christiansand, but elsewhere the weather, although cloudy in places, was mostly fair. In the course of the past 24 hours heavy rain had again fallen over the South of France, the largest amounts being 1.78 ins. at Cetto, 0.7 ins. at Toulon, and 0.6 ins. in the Island of Languisnaire (Corsica). Temperature had risen a little in the West and North of our Islands as well as over Austria and the northern parts of France, but fallen elsewhere - quickly over England and Scandinavia; readings ranged from 50° and upwards over Italy, Algeria, and the Spanish coast stations to 5° or less over Finland and the North of Sweden. Areas of frost were however shown over the Central parts of Germany, Austria and Spain. The highest individual readings were 59° at Brindisi and Malta, 55° at Languisnaire, Algiers and Palma and 54° at Sfax, Lesina, Casgliari and Palermo, the lowest were 3° at Haparanda, 4° at Hernösand, 5° at Ulleaborg, 8° at Kuopio, 21° at Bodø and Helsingfors and 24° at Hangö and St. Petersburg.

In the course of the day a brisk fall of the barometer with backing winds, set in on our extreme West coasts; and at night a deep depression advanced to the West of Scotland, occasioning strong SW gales in 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).

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

DAILY WEATHER REPORT.

for Wednesday 7th December 1887.

Issued by the Meteorological Office, 116, Victoria Street, London, R. H. SCOTT, Secretary.

Issued by the Meteorological Office, 116, Victoria Street, London, W. H. SCOTT, Secretary.

STATIONS.	+ YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
	Barometer at 32° P. and Sea Level.	Temp. in Shade.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Sea. (0 to 9.)	SHADE TEMP.		Amount of Rainfall.		
			Dir.	Force. (0 to 12.)		Reading at 8 th P. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Dir.	Force. (0 to 12.)		Weather.	Max.		Min.	
SCANDINAVIA.																		
Haparanda ..	29.95	-15	2	0	b	29.63	+ .05	4	4	- 1	SE	2	0	*	23	-15	—	
Hernösand ...	29.85	22	2	0	s	29.71	- .07	34	63	+ 25	S	6	0	*	?	9	0.04	
Stockholm ...	29.88	36	2	0	c	29.85	+ .03	36	32	+ 1	SE	4	0	*	39	32	—	
Wisby ...	29.91	33	SE	4	bc	29.86	+ .02	35	33	- 2	SSE	6	0	*	41	32	—	
Bodö ...	29.55	28	ENE	4	bc	29.47	- .11	37	33	+ 6	E	4	0	2	37	?	—	
Christiansund...	29.25	40	SE	6	0	29.06	- .35	40	37	+ 4	ESE	8	0	3	41	36	—	
Skudesnaes ...																		
Christiania Fjord (Færdar)	29.60	40	SSE	8	0	29.25	- .28	40	39	- 1	SSE	8	7	7	43	37	0.32	
Skagen (The Seaw)	29.50	39	S	6	a	29.37	- .33	39	39	- 2	S	7	0	5	41	37	0.12	
Faenø ...	29.44	37	S	6	0	29.36	- .42	40	38	+ 1	SEW	2	0	*	41	34	0.12	
BRITISH ISLANDS.																		
Sumburgh Head	28.80	29	SW	1	0	28.89	- .44	36	36	- 8	W	3	0	4	46	34	0.26	
Stornoway ...	28.81	35	NW	5	SW	29.08	+ .42	35	35	- 11	N	6	0	5	46	32	0.32	
Wick ...	28.83	37	SW	3	0	29.09	+ .22	34	34	- 11	NW	3	0	2	45	30	0.14	
Nairn ...	28.88	37	SW	1	bc	29.11	+ .22	32	31	- 13	SW	1	0	1	45	31	0.11	
Aberdeen...	28.90	37	WSW	2	0	29.17	+ .09	32	30	- 13	SW	3	0	2	45	31	0.41	
Leith ...	29.02	37	SW	5	C	29.26	+ .16	34	33	- 10	W	1	bc	*	44	32	0.20	
Shields ...	29.07	38	SSW	6	op	29.36	+ .04	34	32	- 9	WSW	3	bc	2	43	32	0.01	
Spurn Head ...	29.19	39	SW	6	b	29.45	- .05	36	34	- 3	WSW	5	bc	3	41	33	0.05	
York ...	29.16	39	SSE	4	eq	29.47	+ .08	32	31	- 10	W	1	bc	*	43	31	0.11	
Loughborough	29.20	38	WSW	3	b	29.56	+ .05	32	31	- 9	W	3	bc	*	44	32	0.10	
Ardrossan ...	29.08	42	WSW	4	chp	29.33	+ .31	36	35	- 10	NNW	4	c	3	51	34	0.35	
Malin Head ...	29.14	38	NW	6	bhp	29.44	+ .53	37	37	- 5	NNW	8	eqh	7	43	37	0.16	
Mullaghmore ...	29.29	36	NNW	7	chp	29.53	+ .48	40	37	- 1	NW	8	eqh	7	43	33	0.32	
Belmullet ...	29.34	37	NNW	7	chp	29.65	+ .51	40	37	- 1	NW	8	bc	*	42	33	0.49	
Donaghadee ...	29.26	44	NNW	6	bc	29.47	+ .41	33	32	- 8	NW	4	0	2	41	31	0.07	
Barrow-in-Furness	29.19	38	NNW	6	c	29.44	+ .19	38	36	- 5	W	6	crsp	*	43	28	0.32	
Liverpool (Bidston)	29.26	38	W	7	0	29.50	+ .20	36	34	- 5	W	7	chp	6	42	34	0.26	
Holyhead ...	29.28	39	NNW	7	bc	29.55	+ .37	37	36	- 7	W	7	amphe	6	44	35	0.29	
Parsonstown ...	29.144	32	NNW	2	0	29.70	+ .51	38	32	- 4	W	0	0	*	41	30	0.09	
Valencia ...	29.59	40	NNW	6	bc	29.82	+ .44	44	40	+ 2	NW	7	eq	6	44	37	0.23	
Roche's Point...	29.51	36	NNW	5	crp	29.76	+ .47	38	37	- 2	W	4	bcsp	4	45	34	0.18	
Pembroke ...	29.43	42	W	6	bc	29.68	+ .41	42	41	- 4	NNW	6	bc	6	46	38	0.11	
Scilly ...	29.55	44	NNW	8	chp	29.85	+ .37	45	43	- 1	NW	8	eq	6	48	37	0.14	
Prawle Point ...	29.52	37	NNW	5	bc	29.81	+ .29	36	35	- 11	W	4	b	4	48	32	0.08	
Jersey ...	29.58	44	W	5	chp	29.82	+ .15	42	38	- 2	NNW	5	bmph	5	49	39	0.14	
Hurst Castle ...	29.45	42	W	6	bc	29.71	+ .11	38	37	- 7	NNW	6	b	4	47	34	0.16	
Dungeness ...	29.38	44	WSW	6	chp	29.63	- .07	36	34	- 8	NNW	5	c	4	47	33	0.09	
London ...	29.40	40	W	3	bc	29.66	+ .01	38	32	- 7	W	2	b	*	44	32	0.02	
Oxford ...	29.44	37	WSW	3	C	29.66	+ .10	32	31	- 9	WSW	3	b	*	42	32	0.16	
Cambridge ...	29.33	38	S	3	b	29.60	+ .01	33	31	- 6	SW	1	b	*	42	31	0.04	
Yarmouth ...	29.29	41	WSW	4	C	29.53	- .16	38	32	- 7	W	4	bc	3	42	31	0.03	
Cuxhaven ...	29.67	37	SE	3	f	29.46	- .36	39	39	+ 9	WSW	2	f	*	44	?	0.04	
Berlin ...	29.78	37	SE	2	0	29.57	- .40	36	35	- 1	SE	3	r	*	39	36	—	
Wiesbaden ...	*	*	*	*	*	29.66	- .28	39	37	+ 2	SW	3	b	*	43	37	0.12	
Munich ...	29.83	34	SW	4	0	29.76	- .25	36	35	+ 2	W	6	r	*	39	32	0.16	
GERMANY.																		
The Helder ...	29.33	41	SW	5	r	29.49	- .29	40	37	+ 5	W	3	c	3	43	34	0.12	
Brussels ...	*	*	*	*	*	29.65	- .20	43	41	+ 8	SW	4	c	*	44	35	0.12	
Cape Gris Nez...	29.39	45	SW	7	r	29.60	- .13	39	39	- 1	NNW	3	bc	6	46	39	0.20	
Paris ...	29.58	47	NW	5	r	29.81	- .09	33	32	- 6	SW	3	b	*	43	33	0.20	
Brest ...	29.67	43	NNW	7	0	29.93	+ .27	44	41	- 4	NNW	3	0	7	52	39	0.16	
Lorient ...	29.73	45	SW	8	bc	29.99	+ .29	42	41	- 6	NW	5	bc	5	60	36	0.20	
Rocheport ...	29.88	50	W	7	0	30.04	+ .08	48	44	+ 2	W	7	bc	3	50	41	0.28	
Belfort ...	29.83	43	WSW	1	C	29.87	- .09	37	36	- 1	NNW	4	0	*	44	33	0.28	
Lyons ...	29.87	44	SSW	3	0	30.01	- .02	39	35	+ 2	S	3	bc	*	49	?	0.12	
Nice ...	29.91	49	WSW	3	0	29.73	- .23	46	41	+ 2	WSW	3	bc	4	54	43	—	
Perpignan ...	29.96	44	W	0	b	30.06	.00	48	44	+ 3	NNW	5	0	*	56	41	—	
Biarritz ...	29.98	55	W	8	r	30.12	+ .09	50	46	+ 2	NNW	8	r	5	59	45	0.43	
FRANCE & NETHERLANDS.																		
Corunna ...	*	*	*	*	*	30.21	+ .10	50	48	- 4	N	5	b	2	59	48	0.08	
Lisbon ...	30.24	53	N	5	b	30.21	+ .10	50	48	- 4	N	5	b	2	59	48	0.08	

For Explanation of Columns, see p. 4.

WEATHER CHARTS

for 8 a.m. on

WEDNESDAY 7th DECEMBER

1887.

BAROMETER, WIND & SEA.

(Explanation of Map)

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

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

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

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

○ = dead calm.

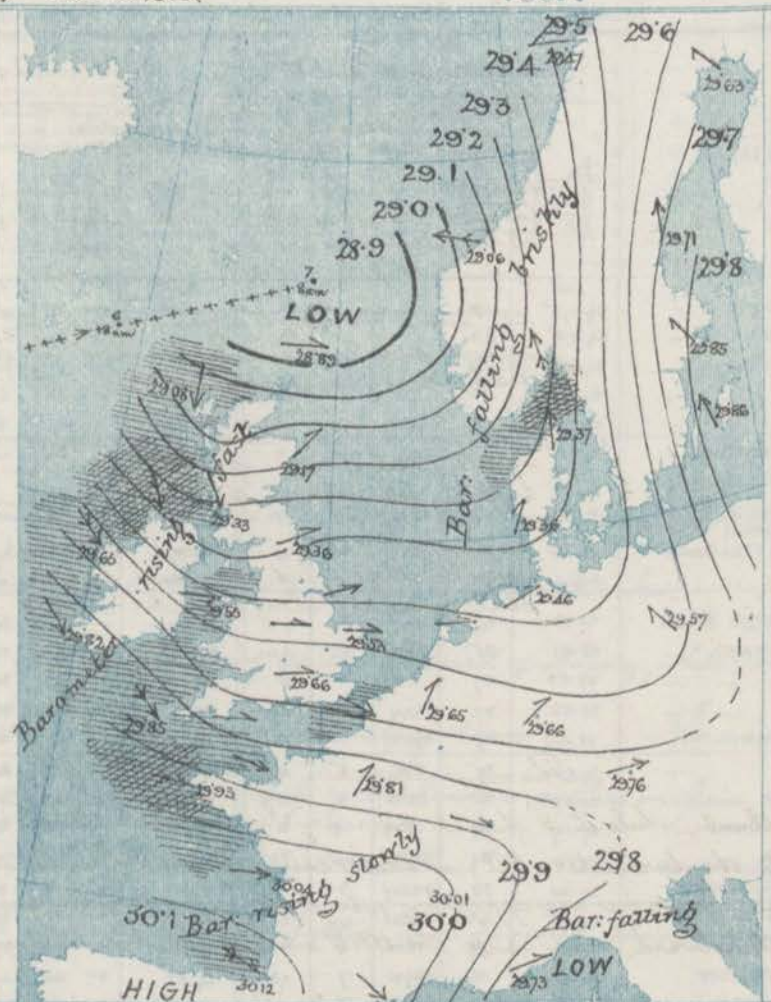
Sea Disturbance — where considerable is shown thus

■ = Rough. ■ = High.

MEAN HEIGHT of the BAROMETER

at 8 a.m. for the month of December
During the 10 Years 1871—1880.

STATIONS.	MEAN READINGS.
	in.
Sumburgh Head	29.680
Stornoway	29.701
Wick	29.713
Nairn	29.741
Aberdeen	29.750
Leith	29.800
Shields	29.836
York	29.877
Ardrossan	29.810
Donaghadee	29.832
Holyhead	29.858
Liverpool	29.882
Valencia	29.879
Roche's Point	29.880
Pembroke	29.897
Scilly	29.943
Hurst Castle	29.938
Dover	29.942
LONDON	29.934
Oxford	29.937
Cambridge	29.926
Yarmouth	29.902



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.

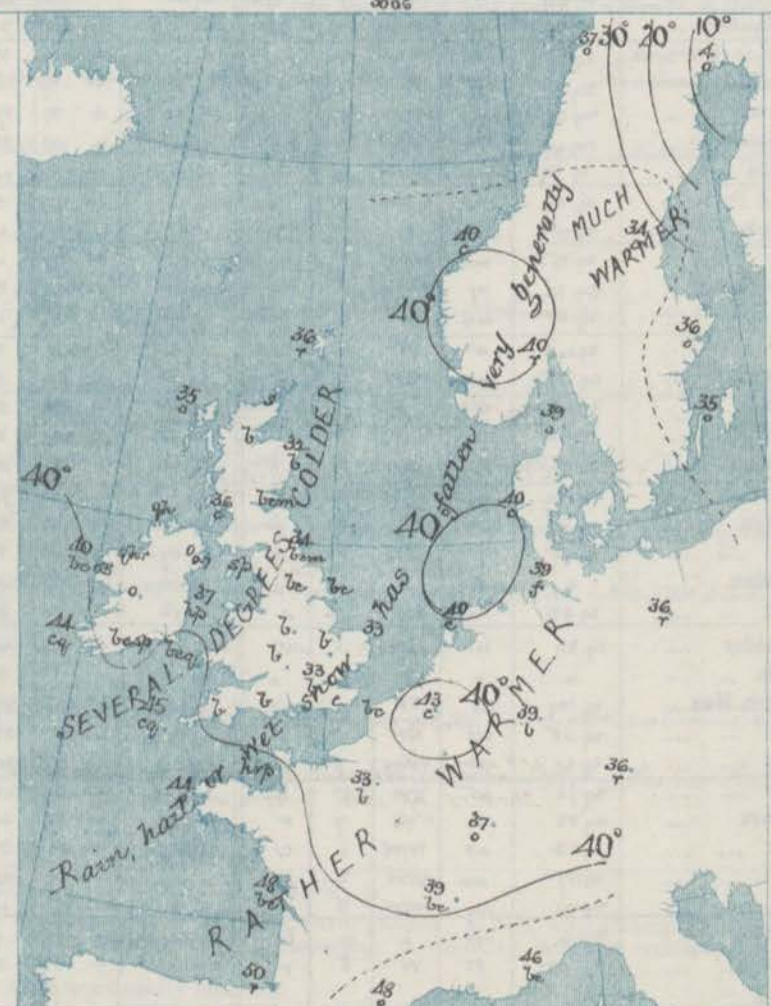
Rainfall A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

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	42.0	34.5	39.0	37.6	4.33
Stornoway	44.8	33.5	38.9	37.8	5.00
Wick	42.0	32.1	37.8	36.4	3.18
Nairn	41.5	32.8	36.9	35.4	2.08
Aberdeen	41.8	32.9	36.9	35.3	3.34
Leith	44.3	33.8	38.4	37.0	2.01
Shields	42.8	34.3	39.2	36.9	2.71
York	42.5	31.9	36.2	35.4	2.45
Ardrossan	47.0	36.1	40.1	38.3	4.04
Donaghadee	46.7	36.1	40.1	39.1	2.84
Holyhead	46.8	39.6	42.9	41.3	3.84
Liverpool	43.6	35.7	39.1	37.4	2.70
Valencia	50.0	40.0	44.7	41.8	5.82
Roche's Point	47.7	39.3	42.9	41.4	4.74
Pembroke	47.1	40.4	43.7	42.6	4.06
Scilly	49.8	43.9	47.2	45.3	1.10
Hurst Castle	45.5	36.5	40.6	39.9	2.84
Dover	44.2	36.5	40.0	38.8	3.20
LONDON	44.5	33.9	38.1	37.1	2.14
Oxford	43.3	33.6	37.3	36.6	2.13
Cambridge	43.3	31.8	36.3	35.6	1.99
Yarmouth	42.2	33.8	37.9	37.2	2.05

NOTE — The Temperature means are for the 10 years 1871—80, the Rainfall means are mainly those for the 10 years 1866—85



GENERAL SITUATION AT 8 A.M.

PRESSURE	Highest from 30.0 ins. to 30.3 ins. over the Spanish Peninsula, and southern parts of the Bay of Biscay, 29.8 ins. and more, both on our extreme southwest coasts and over the Baltic. Lowest 28.9 ins. and less in a depression near the Shetlands, and 29.0 ins. to 29.4 ins. in a "hollow" lying over the North Sea. Gradients moderate, and somewhat irregular in our Islands. Barometer rising fast in West and North, slowly in South; falling to Eastward of North Sea.
TEMPERATURE	Highest 50° at Lisbon and Biarritz, 45° at Scilly, 44° at Valencia, and Brest and 40° in West and South of Norway. Lowest 4° at Kaparanda, 32° at Wick, Cairn, Aberdeen, York-Loughborough and Oxford, 33° at Parsonstown, Harmerth, London and Paris. It has fallen very decidedly over England during the night, risen fast in Sweden. At Kaparanda a minimum of minus 15° F. is reported; this occurred at 8 pm yesterday.
WIND	SE ^{ly} and S ^{ly} , strong to a gale, over Scandinavia, SW ^{ly} light in the Netherlands, W ^{ly} and NW ^{ly} in our Islands and France - moderate at the eastern stations, strong in the South, and blowing a moderate to fresh gale in the southwest, West and northwest.
WEATHER	Dull, and in places rainy, to the eastward of the North Sea - fine at our eastern stations. Squally, with showers of cold rain, hail and snow, in the West and North. Lightning was seen in the South of England last night, and a aurora and lunar halo in London at midnight.
SEA	High off the extreme West and northwest coasts of Ireland and at Christiansund. Rough in the English and Irish Channels and over the Bay of Biscay. Slight or smooth along our own eastern coasts.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The main depression noticed in the northwest yesterday has moved northeastwards and now lies near the Shetlands, while its "V" shaped secondary has reached the North Sea and is apparently developing into a "hollow" in the West. The barometer still rises decidedly and the NW^{ly} winds are consequently still blowing hard in the West. Shallow local depressions are appearing over Scotland, and over some of the western parts of the Kingdom; these are likely to move southeastward, and cause the NW^{ly} wind to become stronger over England with passing cold showers.

FORECASTS

For the 24 hours ending at NOON on 8th December 1887.

DISTRICTS.	FORECASTS.	DISTRICTS.	FORECASTS.
0 { SCOTLAND NORTH	NW ^{ly} winds, becoming strong; cold showers.	6 { SCOTLAND WEST	NW ^{ly} winds, strong; but moderating later; squalls of sleet and cold rain.
1 { SCOTLAND EAST	NW ^{ly} winds, moderate to strong; squally; cold showers.	7 { ENGLAND N.W.	-----D-----D-----D-----
2 { ENGLAND N.E.	-----D-----D-----D-----	8 { ENGLAND S.W.	-----D-----D-----D-----
3 { ENGLAND EAST	Same as N° 5.	9 { IRELAND NORTH	-----D-----D-----D-----
4 { MIDLAND COUNTIES	Same as N° 5.	10 { IRELAND SOUTH	-----D-----D-----D-----
5 { ENGLAND SOUTH	N ^{ly} to NW ^{ly} winds, freshening considerably; showers of cold rain and wet snow.	WARNINGS NONE ISSUED.	

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

YESTERDAY'S 2 P.M. REPORTS.

	Bar.	Dry.	Wet.	Wind.	Wes.	Sea.		Bar.	Dry.	Wet.	Wind.	Wes.	Sea.		
Skudesnaes ...	29.57	44	44	SSE	8	r	5	Holyhead ...	29.21	42	40	W	9	bcg	7
Sunburgh Head ...	29.83	44	44	SSE	7	r	6	Valencia ...	29.47	40	37	WNW	5	cg	6
Stornoway ...	28.74	41	40	SW	6	e	6	Scilly ...	29.52	43	41	WNW	8	cg	6
Aberdeen ...	28.92	41	40	S	8	cg	6	Dungeness ...	29.40	45	43	SW	7	r	6
Shields ...	29.01	40	39	S	7	ap	3	London ...	29.55	44	42	SSW	4	cg	5
Ardrossan ...	28.97	42	39	WNW	5	o	4	Yarmouth ...	29.35	42	40	S	6	cg	5
Malin Head ...	29.03	39	36	NW	6	o	5	Jersey ...	29.53	45	43	W	7	bc	5
Mullaghmore ...	29.20	39	36	NW	7	crsq	5	Rochefort ...	29.24	50	49	SW	7	r	3
Belmullet ...	29.25	37	35	WNW	5	opst	5								

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

The reports for yesterday morning showed, that while the highest pressures of all (30.2 ins. and upwards) were lying over the Iberian Peninsula, a large area of relatively high readings extended over all the more eastern and southern parts of Europe. The lowest pressures 28.7 ins. and less, were found in a deep depression, the centre of which lay to the northwestward of the Hebrides, but a trough of "V-shaped" secondary disturbances was moving eastward across the Irish Sea and St. George's Channel.

The wind was strong to a gale over the greater part of the United Kingdom, — from W or NW in Ireland, and from S. or SW over England and Scotland, but in other parts of northwestern Europe, the S. and SW breezes were moderate in force. In Spain and Italy, the wind was chiefly NW, while over eastern Europe it was light and variable.

The weather varied greatly in different localities, but was upon the whole cloudy and unsettled, with fog or mist over the Netherlands and East of France, and rain and hail in the West of our Islands, as well as in North Germany.

Temperature had fallen in Ireland, the Netherlands and the South of France, as well as at some of the Russian stations, but risen elsewhere; readings ranged from 50° and upwards in Algeria, Spain and the South of Italy, to 10° or less over Finland and the North of Sweden. The highest individual readings were 59° at Brindisi, 58° at Malta, 54° at Aren, 53° at Sanguinaire and Affa, and 54° at Algiers, San Fernando, Oporto and Palermo; the lowest were 5° at Naparanda, 6° at Archangel, 9° at Hernissand, 10° at Uleaborg, 18° at St. Petersburg and 25° at Kuopio.

In the course of the day the depression off the Hebrides travelled slowly northeastwards, while the secondary disturbance in the West advanced eastwards across England.

The S. gale in the North gradually subsided while in the W and S the wind veered to W and NW generally with a decided fall of temperature.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

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

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

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

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DAILY WEATHER REPORT.

for Thursday 8th December

1887.

Issued by the Meteorological Office, 116, Victoria Street, London, R. H. SCOTT, Secretary.

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STATIONS.	+ YESTERDAY EVENING.						8 A.M. TO DAY.										PAST 24 HOURS.		
	Barometer at 3 p.m. and Sea Level.	Temp. in Shade.	WIND.		Weather.		BAROMETER.		SHADE TEMP.			WIND.		Weather.	Sea (0 to 9.)	SHADE TEMP.		Amount of Rainfall.	
			Dir.	Force, (0 to 12.)			Reading at 8 a.m. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Dir.	Force, (0 to 12.)			Max.	Min.		
SCANDINAVIA.	Inch.	°					Inch.	Inch.	°	°	°					°	°	Inch.	
Haparanda ...	29.94	28	S	2	O		29.93	+ .30	29	25	+ 22	SE	2	O	*	28	-17		
Hernösand ...	29.80	36	S	3	O		29.62	- .09	35	33	+ 1	SE	8	S	*	30	23	0.20	
Stockholm ...	29.73	36	SSE	6	T		29.62	- .23	38	37	+ 2	SSE	4	T	*	?	32	0.24	
Wisby ...	29.69	39	SSE	6	T		29.67	- .19	39	37	+ 4	WSW	2	O	*	41	30	0.39	
Bodö ...	29.43	40	ESE	5	O		29.39	- .08	38	33	+ 1	ESE	6	O	3	41	28		
Christiansund...	29.21	39	SSE	2	bc		29.25	+ .19	36	32	- 4	NE	2	b	4	43	32		
Skudesnaes ...	29.36	41	SSW	6	C		29.33		39	36		S	6	O	5	43	?		
Christiania Fjord (Fjorder)	29.42	38	SSE	3	T		29.44	+ .09	36	36	- 4	WSW	2	bc	3	41	36	0.32	
Skagen (The Scaw)	29.42	38	WSW	1	O		29.49	+ .12	33	33	- 6	WSW	1	O	2	41	32	0.12	
Fanö ...	29.51	35	SW	3	T		29.54	+ .18	34	34	- 6	SW	2	C	*	41	34	0.12	
BRITISH ISLANDS.																			
Sumburgh Head	29.17	36	W	0	bc		29.33	+ .44	30	30	- 6	W	0	O	3	39	28	0.12	
Stornoway ...	29.36	35	N	6	obs		29.41	+ .33	32	32	- 3	N	4	C	3	37	28	0.27	
Wick ...	29.31	32	NW	4	S		29.41	+ .32	24	23	- 10	NW	1	b	1	34	22	0.38	
Nairn ...	29.41	32	SW	1	O		29.46	+ .35	30	29	- 2	W	0	O	1	34	29	0.06	
Aberdeen...	29.40	34	W	3	b		29.50	+ .33	29	28	- 3	W	1	b	1	37	27		
Leith ...	29.51	34	W	3	bc		29.52	+ .26	36	34	+ 2	S	1	cm	*	37	32		
Shields ...	29.53	35	W	3	b		29.55	+ .19	36	35	+ 2	SSW	1	m	2	38	32		
Spurn Head ...	29.61	36	W	6	b		29.65	+ .20	37	35	+ 1	SW	4	ogm	3	38	33		
York ...	29.61	35	NW	3	b		29.66	+ .19	36	35	+ 4	SSW	1	f	*	37	31		
Loughborough	29.73	36	W	3	b		29.72	+ .16	37	36	+ 5	SSW	2	ogt	*	39	32		
GERMANY.																			
Ardrossan ...	29.58	38	N	3	bc		29.51	+ .18	35	34	- 1	NE	2	og	1	40	35	0.29	
Malin Head ...	29.62	37	WNW	4	bcnp		29.40	- .04	36	36	- 1	S	4	og	4	41	35	0.06	
Mullaghmore ...	29.73	39	NW	7	chrq		29.36	- .17	38	37	- 2	ESE	7	og	5	42	35	0.11	
Belmullet ...	29.77	43	NW	7	O		29.34	- .31	40	39	0	SE	3	O	*	45	39	0.06	
Donaghadee ...	29.70	34	WNW	4	b		29.50	+ .03	34	34	+ 1	SSW	2	b	0	36	32	0.05	
Barrow-in-Furness	29.65	39	WNW	6	C		29.57	+ .13	41	39	+ 3	SSE	2	O	*	43	34	0.12	
Liverpool (Bidston)	29.70	41	W	7	b		29.59	+ .09	37	36	+ 1	SE	2	T	4	41	36	0.07	
Holyhead ...	29.76	40	WNW	7	bcq		29.51	- .04	40	40	+ 3	ESE	4	omv	4	43	37	0.09	
Parsonstown ...	29.83	37	W	1	O		29.34	- .36	44	44	+ 11	S	1	T	*	44	32	0.16	
Valencia ...	29.93	45	WNW	2	og		29.46	- .36	52	52	+ 8	WSW	5	om	5	53	41	0.84	
Roche's Point...	29.91	41	WNW	4	bc		29.43	- .33	52	51	+ 14	W	4	bc	4	52	38	0.36	
Pembroke ...	29.87	43	WNW	5	bc		29.45	- .23	50	50	+ 8	SSW	5	rgm	4	50	41	0.36	
Scilly ...	29.97	47	WNW	8	C		29.60	- .25	52	52	+ 7	WSW	7	T	6	52	42	0.50	
Prawle Point ...	29.95	40	WNW	5	bc		29.67	- .14	48	48	+ 12	S	7	rmu	6	48	36	0.38	
Jersey ...	29.98	43	NW	4	bcq		29.87	+ .03	47	46	+ 5	SW	6	rm	4	47	41	0.18	
Hurst Castle ...	29.88	39	WSW	5	b		29.77	+ .06	45	45	+ 7	SW	5	rm	4	45	35	0.11	
Dungeness ...	29.77	35	WNW	5	C		29.82	+ .19	41	40	+ 5	WNW	4	T	4	42	34		
London ...	29.79	35	WNW	2	bm		29.79	+ .13	38	37	+ 5	S	2	T	*	41	32	0.04	
Oxford ...	29.84	35	WNW	3	b		29.74	+ .08	37	36	+ 5	S	3	mgt	*	40	32	0.05	
Cambridge ...	29.74	33	SW	1	b		29.76	+ .16	36	36	+ 3	S	1	ou	*	39	31		
Yarmouth ...	29.65	35	W	4	bc		29.76	+ .23	34	33	+ 1	SW	2	com	3	40	31		
Cuxhaven ...	29.56	38	WSW	3	O		29.63	+ .17	36	36	- 3	WSW	4	S	*	45	35		
Berlin ...	29.74	35	N	3	b		29.82	+ .26	31	30	- 5	WSW	3	b	*	41	30	0.42	
Wiesbaden ...	*	*	*	*	*		29.97	+ .31	33	32	- 6	SW	2	O	*	43	28	0.04	
Munich ...	29.89	32	W	5	b		30.03	+ .27	30	28	- 6	W	5	O	*	37	30	0.04	
FRANCE & NETHERLANDS.																			
The Helder ...	29.56	38	SW	7	b		29.73	+ .24	40	37	0	W	4	C	3	41	36	0.24	
Brussels ...	*	*	*	*	*		29.90	+ .25	34	33	- 9	SSW	3	bc	*	?	33		
Cape Gris Nez...	29.78	40	NW	8	bc		29.81	+ .10	42	40	+ 5	W	7	T	5	45	37		
Paris ...	29.91	40	WSW	3	O		30.02	+ .21	35	34	+ 2	S	1	O	*	44	3	0.04	
Brest ...	30.10	41	NW	8	T		29.94	+ .01	49	46	+ 5	SW	9	T	6	50	41	0.32	
Lorient ...	30.10	46	NW	7	b		29.97	- .02	60	48	+ 8	W	7	T	6	?	41	0.04	
Rochefort ...	30.17	47	WNW	7	b		30.18	+ .14	47	?	- 1	WSW	5	O	2	50	41	0.08	
Belfort ...	29.92	36	W	4	S		30.10	+ .23	33	32	- 4	W	1	O	*	40	29	0.08	
Lyons ...	?	37	W	1	bc		30.17	+ .16	35	35	- 4	W	1	O	*	?	?	?	
Nice ...	30.12	46	NW	7	b		29.95	+ .22	41	36	- 5	E	4	b	1	54	39		
Perpignan ...	30.13	47	NW	4	b		30.22	+ .16	46	41	- 2	NW	5	b	*	54	43		
Biarritz ...	30.25	51	W	7	bc		30.28	+ .16	48	45	- 2	WSW	7	O	5	55	45	0.24	
PORTUGAL.																			
Obrunna ...	*	*	*	*	*														
Lisbon ...	30.36	50	WNW	5	b		30.38	+ .07	44	41	- 6	NNE	4	b	2	55	43		

For Explanation of Columns, see p. 4.

† Received too late for insertion in Charts.

WEATHER CHARTS

for 8 a.m. on Thursday 8th December.

1887.

BAROMETER, WIND & SEA.

(Explanation of Map)

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

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

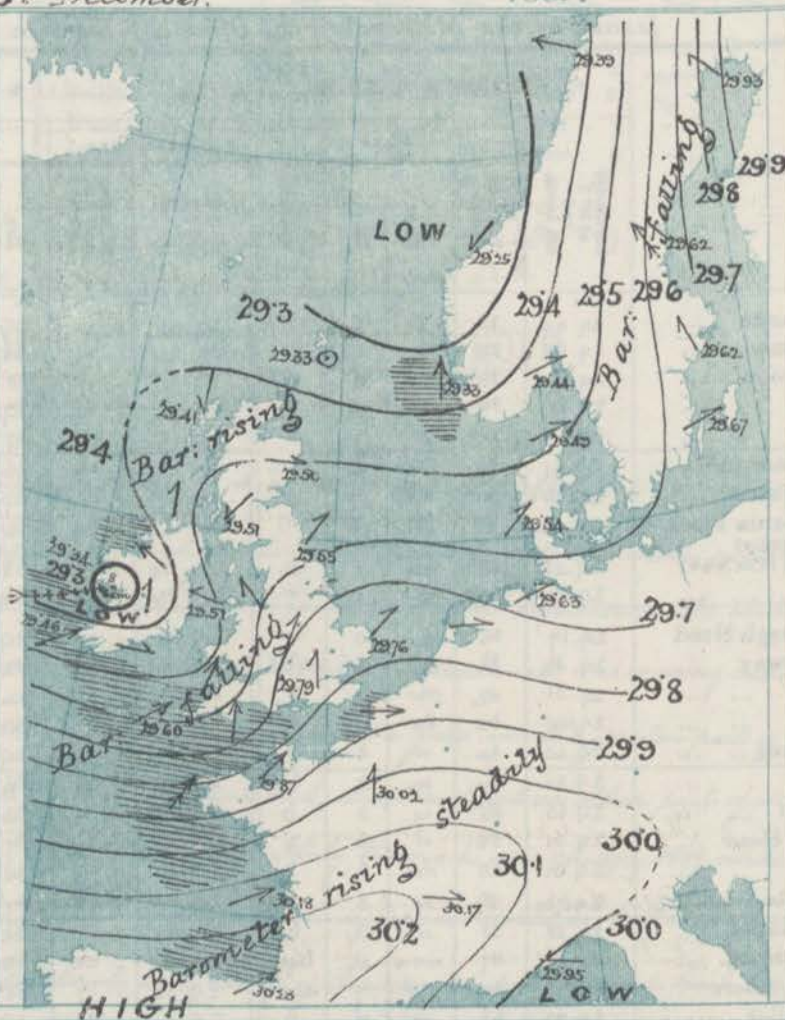
→ = forces above 10, → = forces 8 to 10,
→ = forces 5 to 7, → = forces 1 to 4,
○ = dead calm.

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

MEAN HEIGHT of the BAROMETER

at 8 a.m. for the month of December
During the 10 Years 1871—1880.

STATIONS.	MEAN READINGS.
Sumburgh Head	29.680
Stornoway	29.701
Wick	29.718
Nairn	29.741
Aberdeen	29.750
Leith	29.800
Shields	29.836
York	29.877
Ardrossan	29.810
Donaghadee	29.832
Holyhead	29.858
Liverpool	29.882
Valencia	29.879
Roche's Point	29.889
Pembroke	29.897
Scilly	29.943
Hurst Castle	29.938
Dover	29.942
LONDON	29.934
Oxford	29.937
Cambridge	29.926
Yarmouth	29.902



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.	Average Dry.	Average Wet.	
Sumburgh Head	42.0	34.5	39.0	37.6	4.33
Stornoway	44.8	33.5	38.9	37.8	5.66
Wick	42.0	32.1	37.8	36.4	3.18
Nairn	41.5	32.8	36.9	35.4	2.08
Aberdeen	41.8	32.9	36.9	35.2	3.34
Leith	44.3	33.6	38.4	37.0	2.01
Shields	42.8	34.3	39.2	36.9	2.74
York	42.5	31.9	36.2	35.4	2.45
Ardrossan	47.0	36.1	40.1	38.3	4.04
Donaghadee	46.7	36.1	40.1	39.1	2.84
Holyhead	46.8	36.6	42.9	41.3	3.84
Liverpool	43.6	35.7	39.1	37.4	2.70
Valencia	50.0	40.0	44.7	41.8	5.82
Roche's Point	47.7	39.3	42.9	41.4	4.74
Pembroke	47.1	40.4	43.7	42.6	4.06
Scilly	49.8	43.9	47.2	45.3	4.10
Hurst Castle	45.5	36.5	40.6	39.9	2.84
Dover	44.2	36.5	40.0	38.8	3.20
LONDON	44.5	33.9	38.1	37.1	2.14
Oxford	43.3	33.6	37.3	36.6	2.13
Cambridge	43.3	31.8	36.3	35.6	1.99
Yarmouth	42.2	33.8	37.9	37.2	2.95

Note — The Temperature means are for the 10 years 1871—80, the Rainfall means are mainly those for the 10 years 1866—85.



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30.3 in. and more over Spanish Peninsula, 30.0 in. and more over S. half of France, 29.9 in. and more over the eastern part of England.
Lowest, about 29.3 in. in small depression lying over Central Ireland and apparently growing deeper.
Gradients rather steep in south-west and also over Scandinavia, moderate elsewhere.

TEMPERATURE

Highest, 52° at Valencia, Rocher Point and Sicily, 50° at Lorient, 49° at Brest.
Lowest, 24° at Wick, 26° at Haravanda, 29° at Aberdeen, 30° at Ayr, 36° at Dublin and Cambridge, 44° at London.
It has been changing very abruptly during the past 24 hours, and is now rising fast in the SE. after a sharp frost early this morning.

WIND

Still blows hard from SE. in Sweden and some part of Norway - Calm in Scotland.
Moderate to light S. over greater part of England - SE. on our north-west coasts.
A moderate to fresh SW gale prevails in the south-west, and a SE gale at Mullaghmore.

WEATHER

Fine and bright on our north-west coasts, dull and gloomy elsewhere.
Much rain is reported in the south-west, south and south-east of England and over Brittany and the north of France.
A good deal of snow fell yesterday at many of our western and northern stations.

SEA

Rough in SW. moderate (but apparently rising) in the Channel, slight or smooth in the NW, N. and E.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The new depression has come in very suddenly and appears to be travelling in about an ENE² or NE³ direction.
It is probable that as it advances the gale on our south-west coasts will gradually extend up the Irish and English Channels, but not be severe. In the north showers of snow are again probable, but without much wind.

FORECASTS

for the 24 hours ending at NOON on 3rd December 1887.

DISTRICTS.

FORECASTS.

0	SCOTLAND NORTH	Variable breezes, finally E ² or SE ² , increasing in strength; snow or cold rain.
1	SCOTLAND EAST	----- D° ----- D° ----- D° -----
2	ENGLAND N.E.	SE ² to SW ² winds freshening; rainy, changeable.
3	ENGLAND EAST	----- D° ----- D° ----- D° -----
4	MIDLAND COUNTIES	----- D° ----- D° ----- D° -----
5	ENGLAND SOUTH	S ² and SW ² winds, strong to a gale; unsettled rainy.

DISTRICTS.

FORECASTS.

6	SCOTLAND WEST	SE ² winds, increasing, rainy; doubtful later.
7	ENGLAND N.W.	----- D° ----- D° ----- D° -----
8	ENGLAND S.W.	SW ² winds, strong to a gale; rainy to fair.
9	IRELAND NORTH	SE ² gales and rain then doubtful.
10	IRELAND SOUTH	W ² and SW ² winds, force doubtful at present; unsettled.

WARNINGS

The S. Cone was hoisted yesterday afternoon in districts 7, 9, 10 and parts of 6 and 8 and this morning in 5 and the remainder of 8.

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

YESTERDAY'S 2 P.M. REPORTS.

	Bar.	Dry.	Wet.	Wind.	Wes.	Sea.		Bar.	Dry.	Wet.	Wind.	Wes.	Sea.	
Skudesnaes ...	29.28	43	37	S	7	0	6	Holyhead ...	29.67	40	38	W.W	7	6
Sumburgh Head ...	29.36	39	36	W.W	3	6	5	Valencia ...	29.94	45	42	W.W	5	5
Stornoway ...	29.27	36	36	N	6	5	5	Scilly ...	29.93	44	45	N.W	8	6
Aberdeen ...	29.32	36	33	W	3	6	2	Dungeness ...	29.69	38	36	W.W	6	5
Shields ...	29.43	37	35	W	3	6	2	London ...	29.71	41	39	W.W	3	*
Ardrossan ...	29.47	36	35	W.W	6	0	5	Yarmouth ...	29.57	36	34	W	4	3
Malin Head ...	29.51	41	40	N.W	6	6	6	Jersey ...	29.89	45	42	W.W	4	4
Mullaghmore ...	29.67	40	38	N.W	8	6	7	Rocheport ...	29.96	49	46	N.W	7	3
Belmullet ...	29.74	42	38	W.W	6	6	*							

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

The reports for yesterday morning showed that an anticyclone with reading above 30.3 ins. was lying over and to the west of Portugal, while a large area of high pressure in which readings exceeded 30.1 ins. existed over Russia. The lowest readings 28.3 ins. and less, were found in a rather deep depression the centre of which was lying to the northward of the Shetlands, but a trough of "V" shaped secondary disturbances was shown over the eastern parts of the North Sea, Denmark and Germany. With these conditions the wind was W. or NW over the United Kingdom and the west and south of France, with gales at several of the more western stations, but SE. or S. over northern and central Europe. In Italy and Algeria variable breezes were reported. The weather was fine in the east of our Islands, as well as at several of the Spanish and Italian stations, but cloudy or overcast elsewhere, with rain in Germany, and showers of hail or snow in Ireland and the west and north of Great Britain. Temperature had risen a little over the Netherlands, Germany and the east and south of France, but fallen in most other localities, - quickly in the north of our Islands; readings ranged from 50° and upwards over Italy, Algeria, and some parts of Spain to 32° or less over northern and central Russia and to 5° or less over Lapland. The highest individual readings were 58° at Malta, 57° at Rhindia, 56° at Oran and Fismone, 55° at Algiers and for and 53° at Sanguinaires; the lowest were 1° at Ulesboj, 4° at Haparanda, 14° at Archangel, 17° at Kuopio, 26° at Moscow and 28° at Riga.

In the course of the day the depression in the far north travelled slowly northwards and partially filled up. Towards night a new disturbance began to approach our extreme western coasts, and the barometer therefore fell quickly in Ireland, while the wind there backed to the SW. and increased in force.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

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

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

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

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STATIONS.	+ YESTERDAY EVENING.						8 A.M. TO DAY.								PAST 24 HOURS.			
	Barometer at 32° F. and Sea Level.	Temp. in Shade.	WIND.		Weather.	Barometer. Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	SHADE TEMP.		Difference from 8 a.m. yesterday.	WIND.		Weather.	Sea (0 to 2.)	SHADE TEMP.		Amount of Rainfall.	
			Dir.	Force. (0 to 12.)				Dry.	Wet.		Dir.	Force. (0 to 12.)			Max.	Min.		
SCANDINAVIA.																		
Haparanda ..	29.72	24	SE	4	0	29.45	- .48	25	25	- 1	SE	2	0	*	28	23	0.43	
Hernösand ...	29.60	29	SW	4	0	29.41	- .21	31	31	- 4	W	0	0	*	39	?	0.12	
Stockholm ...	29.64	31	W	0	0	29.45	- .17	32	31	- 6	S	2	60	*	39	28	0.04	
Wisby ...	29.69	33	SSW	2	0	29.45	- .22	35	33	- 4	S	4	60	*	39	30	0.08	
Bodö ...	29.23	36	E	6	60	29.16	- .23	35	33	- 3	SSE	4	60	2	?	34	-	
Christiansund...	29.25	33	SW	4	0	29.10	- .15	31	30	- 6	ESE	3	0	4	34	28	0.20	
Skudesnaes ...	29.32	37	W	1	60	28.74	- .59	39	44	0	ESE	7	0	5	39	36	-	
Christiana Fjord (Fjord)	29.43	36	S	2	0	29.01	- .43	36	35	0	ESE	8	TS	4	36	30	-	
Skagen (The Sea)																		
Finnø ...																		
BRITISH ISLANDS.																		
Sumburgh Head	29.19	33	SE	0	0	28.93	- .40	36	35	+ 6	W	0	0	2	36	27	0.32	
Stornoway ...	29.03	36	E	5	0	29.10	- .31	36	35	+ 4	N	6	0	5	37	32	0.15	
Wick ...	29.09	34	SSE	4	0	29.06	- .35	34	33	+ 10	NW	3	3	1	38	24	0.55	
Nairn ...	29.00	33	E	2	0	29.03	- .43	37	35	+ 7	W	1	0	1	37	27	0.27	
Aberdeen...	29.11	38	SE	5	7	28.96	- .54	37	36	+ 8	NW	3	0	3	40	27	0.46	
Leith ...	28.98	43	SE	1	7	29.02	- .50	40	40	+ 4	N	1	0	2	46	35	0.15	
Shields ...	29.15	39	S	3	7	29.09	- .46	45	43	+ 9	WSW	6	0	2	49	35	0.20	
Spurn Head ...	29.28	43	S	5	7	29.13	- .52	45	43	+ 8	WSW	7	60	3	49	37	0.04	
York ...	29.22	40	E	2	7	29.15	- .51	46	42	+ 10	W	6	0	*	52	36	0.11	
Loughborough	29.28	47	SW	4	7	29.28	- .44	46	43	+ 9	WSW	5	60	*	58	36	0.11	
Ardrossan ...	28.89	38	E	3	7	29.05	- .46	41	40	+ 6	N	2	0	2	41	33	0.54	
Malin Head ...	28.89	48	W	6	60	29.13	- .27	40	40	+ 4	N	5	60	5	49	35	0.44	
Mullaghmore ...	29.05	50	W	6	60	29.24	- .12	45	44	+ 7	NW	7	60	6	51	37	0.40	
Belinulet ...	29.09	50	WNW	8	0	29.35	+ .01	44	42	+ 4	NW	2	0	*	51	40	0.44	
Donaghadee ...	29.00	50	NW	6	0	29.10	- .40	44	42	+ 10	WNW	6	0	4	51	34	0.28	
GERMANY.																		
Barrow-in-Furness	29.08	46	S	5	7	29.16	- .41	46	43	+ 5	SW	7	0	4	49	38	0.28	
Liverpool (Bldston)	29.16	49	SW	3	0	29.23	- .36	46	42	+ 9	WSW	7	60	6	52	37	0.19	
Holyhead ...	29.16	50	SW	6	0	29.28	- .23	47	44	+ 7	WSW	8	60	6	52	40	0.24	
Parsonstown ...	29.19	53	W	4	7	29.39	+ .05	45	41	+ 1	WSW	3	0	*	53	43	0.24	
Valencia ...	29.36	54	WSW	6	7	29.54	+ .08	49	46	- 3	W	5	0	5	54	48	0.21	
Roche's Point...	29.32	52	W	5	0	29.50	+ .07	48	45	- 4	W	4	0	4	53	47	0.06	
Pembroke ...	29.27	52	SW	7	7	29.46	+ .01	50	48	0	W	6	0	5	52	50	0.31	
Scilly ...	29.55	53	WSW	8	7	29.62	+ .12	51	50	- 1	W	4	0	6	58	50	0.22	
Prawle Point ...	29.47	52	SW	6	7	29.54	- .13	51	51	+ 3	WSW	6	0	5	52	45	0.55	
Jersey ...	29.61	53	WSW	6	7	29.64	- .23	54	53	+ 7	W	7	7	6	54	46	0.45	
FRANCE & NETHERLANDS.																		
Hurst Castle ...	29.45	50	WSW	6	7	29.49	- .28	49	48	+ 4	WSW	5	60	5	50	43	0.34	
Dungeness ...	29.44	50	SW	6	7	29.39	- .43	50	49	+ 9	W	6	0	5	50	40	0.33	
London ...	29.41	51	SW	4	7	29.40	- .39	50	47	+ 12	W	6	60	*	54	38	0.25	
Oxford ...	29.29	51	S	5	7	29.41	- .33	47	43	+ 10	WSW	2	0	*	53	37	0.23	
Cambridge ...	29.35	45	SW	2	0	29.34	- .42	47	44	+ 11	W	3	60	*	55	34	0.13	
Yarmouth ...	29.36	43	S	5	0	29.24	- .52	45	42	+ 11	WSW	4	60	3	50	32	0.05	
Cuxhaven ...	29.70	39	SW	5	0	29.09	- .54	44	44	+ 8	SW	5	0	*	45	?	0.54	
Berlin ...	29.87	33	SW	4	0	29.36	- .46	36	35	+ 5	S	5	0	*	39	30	-	
Wiesbaden ...						29.49	- .48	44	43	+ 11	SW	2	0	*	45	?	0.75	
Munich ...	30.02	30	SW	4	0	29.72	- .31	35	35	+ 5	SW	4	0	*	36	28	0.12	
NETHERLANDS.																		
The Helder ...	29.43	39	SSE	5	7	29.16	- .57	46	44	+ 6	SW	5	0	3	48	39	0.24	
Brussels ...						29.41	- .49	52	51	+ 18	WSW	5	0	*	53	?	0.32	
Cape Gris Nez...	29.45	44	WSW	8	7	29.41	- .40	51	51	+ 7	W	9	0	6	?	43	0.39	
Paris ...	29.74	?	SSW	5	0	29.65	- .37	54	53	+ 19	WSW	6	0	*	55	?	0.47	
Brast ...	29.77	52	N	9	7	29.73	- .21	51	47	+ 2	WNW	9	0	8	52	44	0.47	
Lorient ...	29.77	52	W	9	7	29.80	- .17	53	53	+ 3	WSW	8	0	7	53	46	0.67	
Rochefort ...	30.02	52	WSW	8	7	30.00	- .18	53	53	+ 6	W	8	0	4	53	46	0.67	
Belfort ...	30.04	34	W	1	0	29.77	- .33	47	46	+ 14	W	3	0	*	47	29	0.87	
Lyons ...	30.15	39	SSW	3	7	29.98	- .19	42	41	+ 7	S	4	0	*	42	?	0.47	
Nice ...	30.07	46	N	3	0	29.97	+ .02	41	37	0	E	1	60	0	54	37	-	
PERIN & SULLA.																		
Perpignan ...	30.24	44	W	1	0	30.11	- .11	55	49	+ 9	W	4	0	*	56	39	-	
Barrita ...	30.20	53	WSW	5	0	30.16	- .12	54	48	+ 6	WSW	5	0	6	54	?	-	
Corunna ...																		
Lisbon ...	30.89	56	N	5	0	30.39	+ .01	45	43	+ 1	N	1	0	2	54	41	-	

For Explanation of Columns, see p. 4.

WEATHER CHARTS

for 8 a.m. on Friday, 9th December, 1887.

BAROMETER, WIND & SEA.

(Explanation of Map)

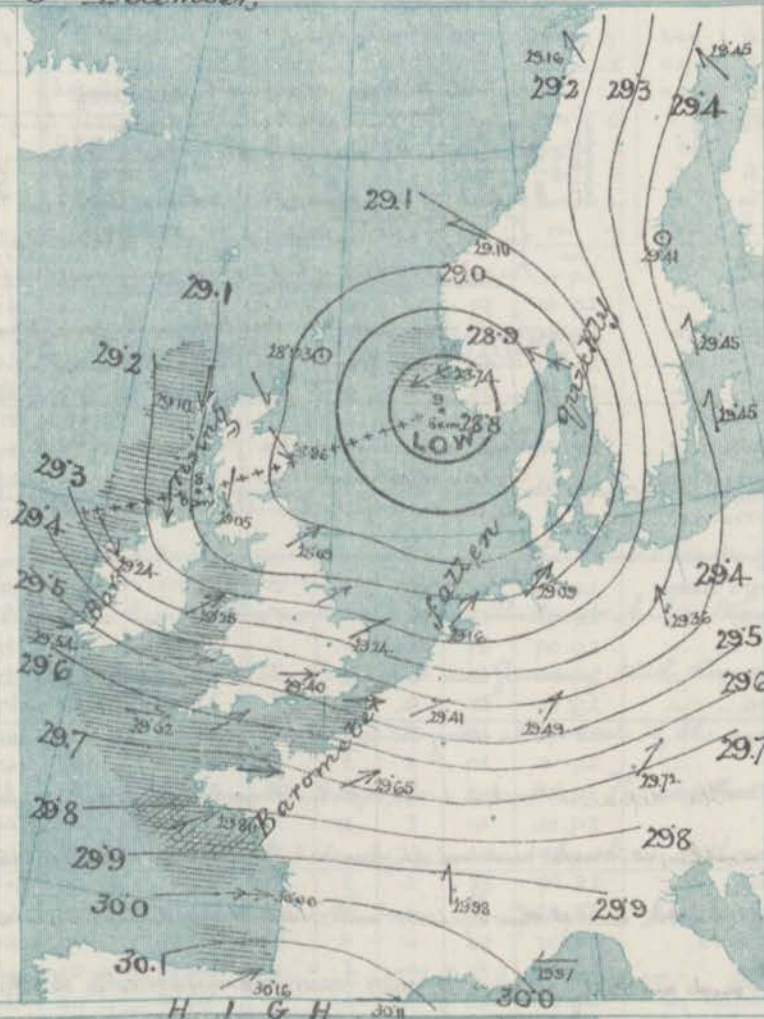
Barometer — Isobars are drawn for each tenth of an inch. Changes since previous morning are stated in words.
Wind — Arrows show the prevalent winds. They fly with the wind and their barbs and feathers refer to force, thus —
 — = forces above 10; — = forces 8 to 10;
 — = forces 5 to 7; — = forces 1 to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

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

MEAN HEIGHT of the BAROMETER

at 8 a.m. for the month of December.
 During the 10 Years 1871—1880.

STATIONS.	MEAN READINGS.
Sumburgh Head	29.680
Stornoway	29.701
Wick	29.713
Nairn	29.741
Aberdeen	29.750
Leith	29.800
Shields	29.836
York	29.877
Ardrossan	29.810
Donaghadee	29.882
Holyhead	29.858
Liverpool	29.888
Valencia	29.879
Roche's Point	29.880
Pembroke	29.807
Scilly	29.943
Hurst Castle	29.938
Dover	29.942
LONDON	29.984
Oxford	29.937
Cambridge	29.926
Yarmouth	29.902



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.	Avg. Day.	Avg. Night.	
Sumburgh Head	42.0	34.5	39.0	37.6	4.33
Stornoway	44.5	38.5	38.0	37.8	5.66
Wick	42.0	32.1	37.8	36.4	3.18
Nairn	41.5	32.8	36.9	35.4	2.08
Aberdeen	41.8	32.9	36.9	35.3	3.34
Leith	44.3	33.6	38.4	37.0	2.01
Shields	42.8	34.3	38.5	36.9	2.74
York	42.5	31.9	36.2	35.4	2.45
Ardrossan	47.0	36.1	40.1	38.3	4.04
Donaghadee	46.7	36.1	40.1	39.1	2.84
Holyhead	46.6	35.6	42.9	41.3	3.84
Liverpool	43.6	35.7	39.1	37.4	2.70
Valencia	50.0	40.0	44.7	41.8	5.82
Roche's Point	47.7	39.3	42.9	41.4	4.74
Pembroke	47.1	40.4	43.7	42.6	4.06
Scilly	49.8	43.0	47.2	45.3	1.10
Hurst Castle	45.5	36.5	40.6	39.9	2.54
Dover	44.2	36.5	40.0	38.8	3.20
LONDON	44.5	35.9	38.1	37.1	2.14
Oxford	43.3	33.0	37.3	36.0	2.13
Cambridge	43.3	31.8	36.3	35.0	1.09
Yarmouth	42.2	35.8	37.9	37.0	2.96

NOTE — The Temperature means are for the 10 years 1871—80, the Rainfall means are mainly those for the 30 years 1858—85.



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30.3 ins. and upwards over Portugal.
Lowest, 28.8 ins. and less in a depression lying off the SW. of Norway. The Danish reports have not yet arrived.
Gradients rather steep generally. Barometer rising on our western and northern coasts, but falling elsewhere.

TEMPERATURE

Highest, 55° at Liverpool, 54° at Jersey, Paris, and Biarritz, and 53° at Doune and Rochefort.
Lowest, 31° at Christiansund, 32° at Stockholm, 33° at Helsingfors, 34° at Nork, and 35° at Hode and Mielby.
Over the south-east of England the maximum temperature for the 24 hours occurred during the night.

WIND

Light from N. or NW. over the greater part of Scotland; strong from NW. in the north of Ireland.
Strong from SW. or W. over England, France and the Netherlands, with gales in the Bay of Biscay.
Moderate S. or SE. over Sweden; strong to a gale from E. in the south of Norway.

WEATHER

Fine at present over the greater part of Ireland and England.
Cloudy or overcast elsewhere, with rain in Germany, snow at Nork and Lyons and sleet at Faiden.
Heavy rain fell generally yesterday, the largest amounts being 0.9 in. at Belfast, 0.8 in. at Newcastle, 0.7 in. at Faiden and Rochefort and 0.6 in. at Nork and Havelberg.

SEA

High off the northwest of France, and rough or rather so on all our west and south coasts as well as at Norway.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The depression noticed over Ireland yesterday morning was joined later in the day by a deeper disturbance which arrived off our northwest coasts, and which has since travelled in an ENE. direction across Scotland to the south of Norway.

In the rear of this system some secondary disturbances are now forming over our northern coasts. These are likely to move SE. and an early renewal of rough unsettled weather is therefore probable over England.

FORECASTS

For the 24 hours ending at NOON on 10th December.

1887.

DISTRICTS.	FORECASTS.	DISTRICTS.	FORECASTS.
0 SCOTLAND NORTH	N. and NW. winds, moderate or fresh; unsettled, some snow showers.	6 SCOTLAND WEST	NW. winds, freshening; unsettled, some snow.
1 SCOTLAND EAST	-----D°-----D°-----D°-----	7 ENGLAND N. W.	Same as No. 2.
2 ENGLAND N. E.	SW. and W. winds, strong; squally, some showers.	8 ENGLAND S. W.	Same as No. 5.
3 ENGLAND EAST	-----D°-----D°-----D°-----	9 IRELAND NORTH	NW. winds, strong; squally, some showers.
4 MIDLAND COUNTIES	-----D°-----D°-----D°-----	10 IRELAND SOUTH	W. to SW. winds, increasing in force; fair to unsettled and some rain.
5 ENGLAND SOUTH	W. strong winds or gales; squally, some showers.	WARNINGS	
		The S. cone is still flying in districts 5 and 7 to 10. and parts of 3 and 6.	

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

YESTERDAY'S 2 P.M. REPORTS.

	Bar.	Day.	Wet.	Wind.	Wen.	Sea.		Bar.	Dry.	Wet.	Wind.	Wen.	Sea.
Skudesnaes ...	29.40	36	35	W 1	C	5	Holyhead ...	29.27	49	49	SW 4	Tm	4
Sumburgh Head ...	29.42	32	32	Z 0	S	2	Valencia ...	29.31	54	53	SW 7	Tm	6
Stormoway ...	29.23	33	32	NE 1	Cf	3	Scilly ...	29.55	53	53	WSW 6	T	6
Aberdeen ...	29.36	33	32	WSW 1	C	1	Dungeness ...	29.57	46	45	SW 6	T	5
Shields ...	29.38	40	37	SW 2	M	2	London ...	29.50	49	47	S 4	0	4
Ardrossan ...	29.25	38	37	E 3	T	2	Yarmouth ...	29.57	41	40	S 4	0.2	4
Malin Head ...	29.08	39	39	S 4	OT	4	Jersey ...	29.66	52	51	WSW 5	T	4
Mullaghmore ...	29.09	46	46	SW 5	T	4	Rochefort ...	30.10	52	50	SW 7	T	3
Belmullet ...	29.08	50	49	SW 5	T	*							

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

The reports for yesterday morning showed that pressure varied from about 30.3 ins. over the Ganib Peninsula, and from about the same value over Central Russia to about 29.3 ins. over Norway, and to about the same value in a small depression which had advanced over Ireland from the W. during the night. Rather steep gradients prevailed for W. winds over France and the mouth of the Channel and for S. winds over Scandinavia; elsewhere the gradients were irregular, and pressure was going very quickly over the British Isles. SE. to S. gales prevailed over Scandinavia and the Gulf of Bothnia, and moderate SW. gales in the southwest of England and west of France, the former being accompanied by showers of sleet and snow and the latter by considerable falls of rain, while over the whole of Western and Central Europe the weather was changeable, ^{and showers} were frequent. Temperature (after being low over England in the night) was rising in many places, most in the north, and ranged from only a few degrees below the freezing point over Finland and the north of Russia and in some of our own northern districts and from less than 40° over Central Algeria to about 50° on our extreme southwestern coasts, to rather above 55° over the southern parts of the Mediterranean. The lowest individual values were 20° at Archangel, 23° at Kuopio, 24° at Niek, 25° at Haparanda, 29° at Aberdeen, Carrel, and Berlin, 30° at Madrid, 36° at Algiers (Algeria); the highest were 58° at Malta, 57° at Brindisi, 55° at Sfax (Algeria), 53° at Palermo, 52° at Scilly, Languedoc and Valencia. The report from Tunis had not arrived when the Bulletin International was published.

Later in the day, a new depression advanced quickly to our NW. coast, and absorbing the one previously existing over Ireland moved quickly in an ENE. direction causing moderate to strong SW. to W. gales in our Islands, much rain, and high temperatures—the barometer rising to between 54° and 55° over our southern countries during the night. In London the midnight reading was 22° higher in the shade and 32° higher on the grass than those recorded at the same hour on the previous 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 Saturday 10th December 1887.

Issued by the Meteorological Office, 116, Victoria Street, London, R. H. SCOTT, Secretary.

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STATIONS.	† YESTERDAY EVENING.						§ A.M. TO DAY.								PAST 24 HOURS.			
	Barometer at 32° F. and Sea Level.	Temp. in Shade.	WIND.		Weather.	Barometer. Reading at 32° F. and Sea Level.	BAROMETER.		SHADE TEMP.			WIND.		Weather.	Sea. (0 to 9.)	SHADE TEMP.		Amount of Rainfall.
			Force. (0 to 12.)	Dir.			Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Force. (0 to 12.)	Dir.	Max.			Min.		
SCANDINAVIA.																		
Haparanda ...	29.38	28	SE	0	S	29.28	-17	24	24	-1	E	2	0	*	*	30	23	0.12
Hernösand ...	29.13	34	SSE	8	0	29.04	-37	31	31	0	NE	2	0	*	*	37	30	0.16
Stockholm ...	28.84	35	ESE	4	T	28.74	-71	33	32	+1	N	2	3	*	*	37	28	0.16
Wisby ...	28.85	39	SE	8	T	28.60	-65	37	36	+2	W	8	T	*	*	41	30	0.55
Bodö ...	29.12	32	ESE	2	0	29.14	-02	30	27	-5	NNE	2	0	1	*	25	-	-
Christiansund...	29.06	27	ESE	2	0	29.19	+09	32	30	+1	SW	4	3	5	*	32	25	-
Skudesnaes ...	28.08	38	NW	2	0	29.37	+63	25	33	-4	NW	6	0	5	*	39	?	-
Christiania Fjord (Farder)	28.78	35	N	8	0	29.09	+08	33	31	-3	NW	5	6	3	*	36	30	0.04
Skagen (The Scaw)																		
Fanö ...	29.49	40	W	6	0	29.27	+43	37	36	-6	NW	6	0	*	*	45	34	0.20
BRITISH ISLANDS.																		
Sumburgh Head	29.05	32	NW	7	S	29.52	+59	32	32	-4	NW	4	0	4	*	37	27	0.09
Stornoway ...	29.40	31	N	5	0	29.70	+60	29	29	-7	SW	3	0	3	*	37	28	0.10
Wick ...	29.32	30	NW	7	bc	29.65	+59	27	26	-7	WSW	3	0	5	*	34	21	0.27
Nairn ...	29.43	30	NW	4	S	29.70	+67	29	28	-8	W	0	6	1	*	37	23	0.02
Aberdeen...	29.35	32	NW	5	bsp	29.71	+75	30	29	-7	W	3	6	2	*	38	29	0.01
Leith ...	29.46	36	W	2	0	29.78	+76	30	29	-10	W	1	6m	*	*	43	29	-
Shields ...	29.44	37	NW	2	0	29.79	+70	30	29	-15	W	2	6c	2	*	46	28	-
Spurn Head ...	29.43	41	NW	6	0	29.82	+69	38	31	-12	NW	4	6	4	*	46	32	-
York ...	29.46	38	NW	2	0	29.85	+70	29	26	-17	W	1	6	*	*	49	27	-
Loughborough.	29.53	42	NW	3	0	29.87	+69	34	31	-12	W	1	6c	*	*	50	34	-
Ardrossan ...	29.52	37	NW	3	0	29.80	+75	34	33	-7	W	0	0f	0	*	42	31	-
Malin Head ...	29.56	39	NNE	3	bc	29.81	+68	37	34	-3	NNE	1	0	2	*	43	35	-
Mullaghmore ...	29.58	42	NNE	5	T	29.83	+59	39	37	-6	NW	4	0	2	*	47	36	0.05
Belmullet ...	29.63	42	NNE	3	0	29.88	+53	38	37	-6	NW	2	0	*	*	45	37	0.20
Donaghadee ...	29.61	41	NW	4	bc	29.82	+72	34	33	-10	NW	2	0	1	*	46	30	0.01
Barrow-in-Furness	29.49	42	NW	3	0	29.88	+67	34	31	-12	NE	2	6c	*	*	46	31	-
Liverpool (Bidston)	29.54	42	W	3	bc	29.86	+63	35	31	-11	SE	1	6	2	*	48	34	0.01
Holyhead ...	29.55	45	NW	5	op	29.86	+58	37	35	-10	WSW	1	0	3	*	48	35	0.14
Parsonstown ...	29.59	43	W	0	0	29.90	+51	34	33	-11	W	0	0	*	*	47	32	0.09
Valencia ...	29.59	50	NW	4	op	29.94	+40	37	36	-12	NW	1	6c	1	*	50	36	0.04
Roche's Point...	29.63	46	W	3	bc	29.93	+43	39	37	-9	NW	3	6	3	*	49	38	-
Pembroke ...	29.62	49	W	4	bc	29.87	+41	42	42	-8	NNE	2	0	2	*	50	42	0.03
Scilly ...	29.70	51	W	5	0	29.89	+27	48	46	-3	NW	5	6c	5	*	51	46	0.01
Prawle Point ...	29.72	48	NW	4	0	29.84	+34	46	45	-5	W	3	6c	3	*	51	43	0.03
Jersey ...	29.75	51	NW	4	opm	29.91	+27	48	46	-6	NW	3	6cm	3	*	54	47	0.21
Hurst Castle ...	29.64	46	W	4	bc	29.83	+34	43	43	-6	SE	1	m	3	*	51	40	-
Dungeness ...	29.55	48	W	5	bc	29.84	+45	38	38	-12	NW	3	6c	2	*	51	36	-
London ...	29.57	47	NW	4	0	29.87	+47	39	35	-11	NW	1	opm	*	*	51	38	-
Oxford ...	29.66	43	W	2	bc	29.89	+48	37	33	-10	NE	3	opm	*	*	51	37	-
Cambridge ...	29.51	46	W	3	0	29.90	+56	34	33	-13	N	1	0	*	*	51	34	-
Yarmouth ...	29.44	44	NW	6	0f	29.82	+58	32	30	-13	NW	2	6m	4	*	48	31	-
Cuxhaven ...	29.10	40	W	8	T	29.50	+41	40	39	-4	W	7	6	*	*	44	37	0.02
Berlin ...	29.27	45	SW	5	0	29.54	+18	38	35	+2	W	5	6	*	*	45	?	0.70
Wiesbaden ...	*	*	*	*	*	29.80	+31	41	39	-3	NW	1	0	*	*	52	39	0.04
Munich ...	29.67	50	W	7	0	29.88	+16	38	38	+3	N	5	T	*	*	50	34	0.87
FRANCE & NETHERLANDS.																		
The Helder ...	29.37	44	NW	5	0	29.73	+57	41	36	-5	NW	5	0	4	*	46	41	0.04
Brussels ...	*	*	*	*	*	29.85	+44	40	39	-12	NW	1	0	*	*	55	40	0.04
Cape Gris Nez...	29.54	48	W	9	0	29.85	+44	42	41	-9	SE	1	0	3	*	52	41	-
Paris ...	29.73	49	NW	5	T	29.90	+25	45	45	-9	SW	3	6c	*	*	56	43	0.24
Brest ...	29.80	49	W	4	m	29.95	+22	50	46	-1	NW	5	0	6	*	54	41	0.79
Lorient ...	29.83	52	WSW	7	T	29.97	+17	49	48	-4	W	3	0	5	*	52	46	0.28
Rochefort ...	30.02	53	W	8	T	30.06	+06	53	53	0	W	8	T	3	*	54	48	0.24
Belfort ...	29.80	51	W	5	bc	29.91	+14	43	42	-4	W	1	T	*	*	61	39	0.67
Lyons ...	29.99	46	S	3	0	29.87	-01	49	47	+7	SW	3	0	*	*	?	?	0.16
Nice ...	29.76	45	SE	3	0	29.89	-08	44	41	+3	E	1	0	1	*	52	41	-
Perpignan ...	30.09	59	NW	4	0	30.08	-03	61	54	+6	NW	5	0	*	*	62	?	-
Biarritz ...	30.16	59	SW	4	T	30.20	+04	57	55	+3	WSW	5	T	5	*	61	54	-
PORTUGAL.																		
Corunna ...	*	*	*	*	*													
Lisbon ...	29.97	53	N	4	0	30.34	-05	51	50	+6	W	0	0	2	*	54	?	-

For Explanation of Columns, see p. 4.

WEATHER CHARTS

for 8 a.m. on Saturday, 10th December, 1887.

BAROMETER, WIND & SEA.

(Explanation of Map)

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

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

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

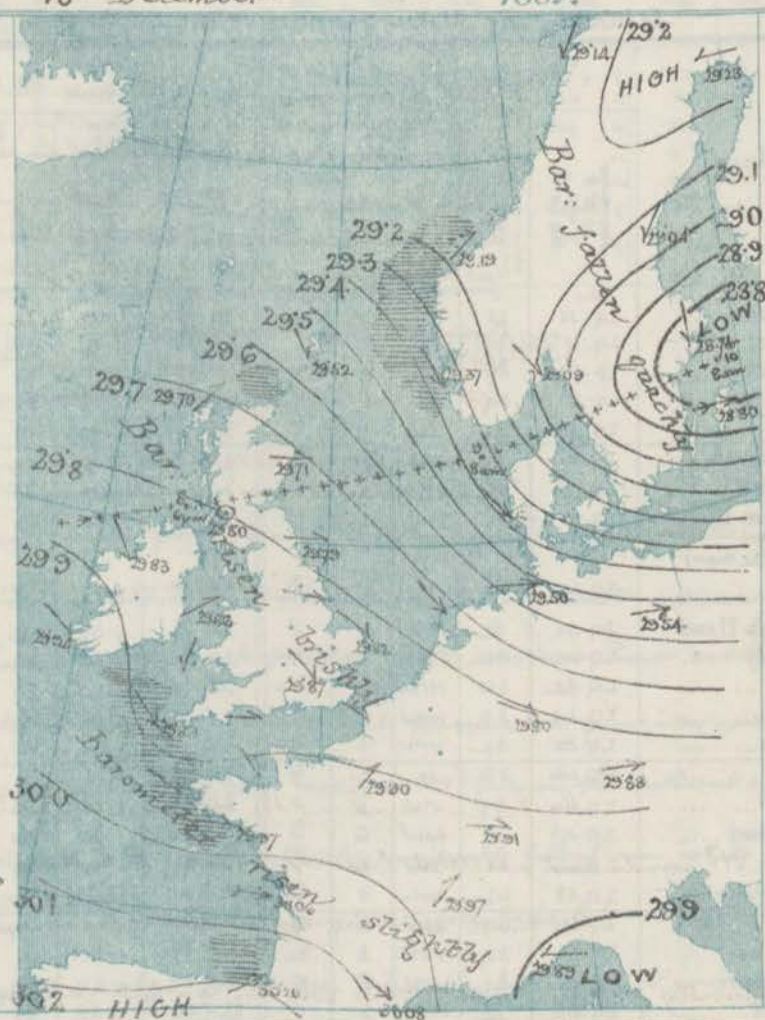
Sea Disturbance — where considerable is shown thus

■ = Rough. ■ = High.

MEAN HEIGHT of the BAROMETER

at 8 a.m. for the month of December
 During the 10 Years 1871—1880.

STATIONS.	MEAN READINGS.
Sumburgh Head	29.680
Stornoway	29.701
Wick	29.713
Nairn	29.741
Aberdeen	29.750
Leith	29.800
Shields	29.836
York	29.877
Ardrossan	29.810
Donaghadee	29.832
Holyhead	29.858
Liverpool	29.882
Valencia	29.879
Roche's Point	29.889
Pembroke	29.897
Scilly	29.943
Hurst Castle	29.938
Dover	29.942
LONDON	29.934
Oxford	29.937
Cambridge	29.926
Yarmouth	29.902



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.	Ath. & M.	Wet.	
Sumburgh Head	42.0	34.5	39.0	37.6	4.33
Stornoway	44.8	33.5	38.9	37.8	5.60
Wick	42.0	32.1	37.8	36.4	3.18
Nairn	41.5	32.8	36.9	35.4	2.08
Aberdeen	41.8	32.9	36.9	35.2	3.34
Leith	44.3	33.8	38.4	37.0	2.01
Shields	42.8	34.3	39.2	36.9	2.74
York	42.5	31.9	36.2	35.4	2.45
Ardrossan	47.0	36.1	40.1	38.3	4.04
Donaghadee	46.7	36.1	40.1	39.1	2.84
Holyhead	46.8	39.6	42.9	41.3	3.84
Liverpool	43.6	35.7	39.1	37.4	2.70
Valencia	50.0	40.0	44.7	41.8	5.82
Roche's Point	47.7	39.3	42.9	41.4	4.74
Pembroke	47.1	40.4	43.7	42.6	4.06
Scilly	49.8	43.9	47.2	45.3	4.10
Hurst Castle	45.5	36.5	40.6	39.9	2.84
Dover	44.2	36.6	40.0	38.8	3.20
LONDON	44.5	33.9	38.1	37.1	2.14
Oxford	43.3	38.6	37.3	36.6	2.13
Cambridge	43.3	31.8	36.3	35.6	1.09
Yarmouth	42.2	33.8	37.9	37.2	2.05

Note — The Temperature means are for the 10 years 1871—80, the Rainfall means are mainly those for the 20 years 1868—85



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30.3 ins. and upwards, over the British Peninsula.
 Lowest, 28.8 ins. and less, in a depression lying over the Baltic.
 Gradients rather steep over Denmark and the south of Scandinavia, but slight elsewhere. Barometer rising at all but the Swedish stations.

TEMPERATURE

Highest, 61° at Haparanda, 51° at Kiernitz, 53° at Rochefort, 51° at Dubou, 50° at Brest, and 48° at Dorpat and Lyons.
 Lowest, 24° at Haparanda, 27° at Misk, 25° at Stomansay, Nain and York, and 30° at Rode, Aberdeen, Leth, and Shields.
 Frost occurred last night over the northern parts of the United Kingdom, the lowest minima being 21° at Misk and 23° at Nain.

WIND

Moderate SW in the Heligoland and at Christiansund.
 NW or W in most other parts of Western Europe, strong in force over Denmark and the Baltic.
 Light NE at Rode, Haparanda and Hemöland.

WEATHER

Fair generally, but cloudy in many places, with snow at Stockholm and Christiansund and rain in S. Germany and the SW. of France.
 Rain fell yesterday at our western and most of the Continental stations, - heavily in France and snow was experienced in the N. of Scotland.

SEA

Rather rough off the coast of Norway as well as at the mouth of the English Channel and in the Bay of Biscay, moderate to smooth elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The backing wind in the extreme north seems to indicate the approach of another depression, so that freshening W. winds and unsettled weather are likely in Scotland.

A small and very shallow disturbance is lying over the southwest of England and as this moves eastwards it will probably occasion snow showers over our southern counties.

FORECASTS

For the 24 hours ending at NOON on 11th DEC^r

1887.

DISTRICTS.

FORECASTS.

0	SCOTLAND NORTH	SW ^{ly} and W ^{ly} winds, freshening; dull, unsettled some snow.
1	SCOTLAND EAST	W ^{ly} winds, freshening; fine to unsettled with some snow showers.
2	ENGLAND N.E.	-----D°-----D°-----D°-----
3	ENGLAND EAST	Same as No 5.
4	MIDLAND COUNTIES	Same as No 5.
5	ENGLAND SOUTH	NW ^{ly} winds, light; fair generally but possibly some snow showers, frost at night.

DISTRICTS.

FORECASTS.

6	SCOTLAND WEST	W ^{ly} winds, freshening; dull, some snow.
7	ENGLAND N.W.	W ^{ly} and NW ^{ly} winds, moderate; fair generally.
8	ENGLAND S.W.	-----D°-----D°-----D°-----
9	IRELAND NORTH	NW ^{ly} to W ^{ly} winds freshening; dull, some rain & sleet.
10	IRELAND SOUTH	Same as No 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.	Dry.	Wet.	Wind.	Wea.	Sea.		Bar.	Dry.	Wet.	Wind.	Wea.	Sea.
Skudeensnes ...	29.66	37	33	N H	c	H	Holyhead ...	29.45	44	42	WNW 6	bcq	6
Sumburgh Head ...	28.97	36	36	LS 0	S	2	Valencia ...	29.61	49	45	W 4	cm	4
Stornoway ...	29.35	33	32	N 6	bc	5	Scilly ...	29.68	51	50	W 5	0	6
Aberdeen ...	29.19	36	33	NW 6	b	H	Dungeness ...	29.47	49	47	W 5	c	H
Shields ...	29.18	42	40	NW 3	0	2	London ...	29.48	52	46	W 5	cq	*
Ardrossan ...	29.25	42	33	NW 4	bc	3	Yarmouth ...	29.30	48	44	W 5	bcq	3
Malin Head ...	29.43	42	40	N H	c	H	Jersey ...	29.69	52	51	NW 4	r	H
Mullaghmore ...	29.46	44	42	NW 5	c	3	Rocheport ...	30.00	53	53	W 8	r	4
Belmullet ...	29.49	45	43	N 2	bc	*							

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

Yesterday morning's reports showed that pressure varied from 30.3 ins: and more over the Iberian Peninsula, and from 30.1 ins: and more over Central Russia to a little below 29 ins: in a depression which lay over Denmark and the Røge Rack, and to somewhat below 29.5 ins: over the southeastern part of the Mediterranean. Gradients were rather steep over Western Europe and in Sweden moderate over our Islands and the North Sea. The wind was strong to a gale from the Nth or NWth on many parts of our coasts, and from W. over the Bay of Biscay and France, while in Norway it blew hard from the End, and in Sweden it was moderate from S. The weather was unsettled everywhere — with mild rain showers at the more southern stations, snow and sleet in the north. Temperature was low and falling over Northern and Central Europe and over Spain, but ^{had} risen fast and was very high for the time of year, over France and the greater parts of our Islands. The lowest individual values were — 4° F at Archangel, +22° at Moscow, 25° at Haparanda and Uleaborg, 26° at Kuopio and the highest were 57° at Malta, 55° at Genua and Brindisi, 54° at Biarritz, Chasseron, Lisieux and Jersey, 53° at several stations in the west of France and 50° to 51° over the southern and southwestern parts of the British Isles. At Funchal (Madeira) the reading was 63°.

Later in the day the wind began to veer in the south of our Islands and temperature fell over Northwestern Europe generally. In Caithness severe Nth squalls were experienced locally soon after noon, with snow, but there did not extend southwards.

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 11th December 1887.
 Issued by the Meteorological Office, 116, Victoria Street, London, R. H. SCOTT, Secretary.

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STATIONS.	+ YESTERDAY EVENING.						8 A.M. TO DAY.										PAST 24 HOURS.		
	Barometer at 32° F. and Sea Level.	Temp. in Shade.	WIND.		Weather.	Barometer Reading at 32° F. and Sea Level.	SHADE TEMP.		WIND.		Weather.	Sea. (0 to 9.)	SHADE TEMP.		Amount of Rainfall.				
			Dir.	Force. (0 to 12.)			Dry.	Wet.	Dir.	Force. (0 to 12.)			Max.	Min.					
SCANDINAVIA.																			
Haparanda ..	29.17	2	Z	0	0	29.12	- .16	21	21	- 3	Z	0	0	*	28	19	-		
Hernösand ...	29.15	29	NE	4	5	29.28	+ .24	11	10	- 20	Z	0	0	*	36	?	0.24		
Stockholm ...	29.16	28	WNW	4	0	29.38	+ .64	22	19	- 11	WNW	2	0	*	36	?	0.08		
Wisby ...	29.19	33	NW	9	0	29.40	+ .60	33	32	- 4	WNW	6	0C	*	41	30	0.04		
Bodö ...	29.40	29	ESE	2	0	29.29	+ .15	24	22	- 6	ESE	2	0	1	?	?	-		
Christiansund...	29.21	30	WSW	4	5	29.37	+ .18	37	35	+ 5	WNW	5	0	6	37	32	0.20		
Skudesnaes ...	29.57	33	WNW	6	0	29.10	+ .33	36	33	+ 1	WNW	5	0	5	36	32	-		
Christiania Fjord (Fæder)	29.29	33	W	5	0	29.47	+ .38	34	30	+ 1	W	5	0	3	34	28	-		
Skagen (The Scaw)	29.45	35	NNW	2	0	29.53		35	33		NNW	3	0	3	37	34	-		
Fanö ...	29.68	36	W	5	0	29.75	+ .48	34	33	- 3	WNW	3	0	*	41	32	-		
BRITISH ISLANDS.																			
Sumburgh Head	29.66	30	NNW	2	0	29.79	+ .27	34	33	+ 2	NNW	1	0	3	34	28	0.04		
Stornoway ...	29.82	33	Z	0	0	29.86	+ .16	29	29	0	Z	0	0	3	34	24	0.05		
Wick ...	29.77	31	NW	2	5	29.87	+ .22	24	23	- 3	NW	2	0	1	34	32	0.14		
Nairn ...	29.80	31	Z	0	0	29.95	+ .20	30	28	+ 1	SW	1	0	1	33	25	0.01		
Aberdeen...	29.79	32	W	2	0	29.93	+ .22	26	25	- 4	W	1	0	1	33	25	-		
Leith ...	29.85	33	W	1	0	29.96	+ .18	30	29	0	W	1	0	*	37	28	-		
Shields ...	29.86	33	WNW	2	0	29.99	+ .20	32	31	+ 2	W	2	0	2	36	27	-		
Spurn Head ...	29.89	36	WSW	3	0	29.97	+ .15	24	33	+ 1	W	3	0	3	37	32	-		
York ...	29.91	34	NW	1	0	30.02	+ .17	27	27	- 2	S	1	0	*	36	26	-		
Loughborough	29.95	32	SW	1	0	30.03	+ .16	29	28	- 5	E	1	0	*	41	26	-		
Ardrossan ...	29.88	35	E	1	0	29.96	+ .16	32	32	- 2	NE	1	0	1	42	32	0.06		
Malin Head ...	29.88	36	SSW	2	0	29.95	+ .14	35	34	- 2	SSW	2	0	3	41	34	0.02		
Mullaghmore	29.89	35	S	1	0	29.99	+ .16	36	35	- 3	ESE	2	0	2	41	34	0.06		
Belmullet ...	29.87	38	SE	3	0	30.02	+ .14	36	36	- 2	S	2	0	*	41	35	0.10		
Donaghadee ...	29.93	32	W	2	0	29.97	+ .15	34	34	0	W	1	0	0	40	30	0.03		
Barrow-in-Furness	29.90	33	NE	2	0	29.98	+ .15	33	32	- 1	NE	2	0	*	39	31	-		
Liverpool (Bidston)	29.92	38	SW	1	0	29.97	+ .11	34	33	- 1	SE	2	0	3	40	34	0.05		
Holyhead ...	29.97	41	WNW	1	0	29.92	+ .06	40	39	+ 3	SE	2	0	2	43	37	0.09		
Parsonstown ...	29.91	30	Z	0	0	29.99	+ .09	27	35	+ 3	Z	0	0	*	29	32	0.05		
Valencia ...	29.90	41	WSW	1	0	30.06	+ .11	46	41	+ 8	N	2	0	2	47	36	0.35		
Roche's Point...	29.93	44	SSE	1	0	30.00	+ .07	42	40	+ 3	WNW	3	0	3	45	39	0.22		
Pembroke ...	29.96	42	NE	2	0	29.96	+ .09	47	47	+ 5	W	3	0	2	48	40	0.05		
Scilly ...	29.99	46	NW	3	0	30.05	+ .16	50	49	+ 2	WNW	5	0	4	50	44	0.05		
Prawle Point ...	29.99	41	WNW	2	0	30.06	+ .22	47	46	+ 1	SW	4	0	3	52	34	0.01		
Jersey ...	29.96	49	W	3	0	30.14	+ .23	47	43	- 1	WSW	3	0	3	52	38	-		
Hurst Castle ...	29.94	36	NE	3	0	30.06	+ .23	43	42	0	SW	2	0	2	40	30	0.06		
Dungeness ...	29.89	35	NE	4	0	30.07	+ .23	30	29	- 8	NW	3	0	2	42	25	0.06		
London ...	29.94	38	NNE	2	0	30.07	+ .20	30	29	- 9	W	1	0	*	41	28	-		
Oxford ...	29.99	34	NNW	1	0	30.06	+ .17	33	31	- 4	S	1	0	*	38	29	-		
Cambridge ...	29.94	36	Z	0	0	30.06	+ .16	28	28	- 6	S	1	0	*	37	26	-		
Yarmouth ...	29.91	33	W	2	0	30.02	+ .20	27	27	- 5	W	2	0	4	36	26	-		
Cuxhaven ...	29.74	39	WNW	4	0	29.83	+ .33	37	37	- 3	NNW	3	0	*	41	35	0.04		
Berlin ...	29.80	38	WNW	4	0	29.83	+ .29	35	33	- 3	WNW	3	0	*	45	32	-		
Wiesbaden ...	*	*	*	*	*	30.01	+ .21	35	33	- 6	NW	2	0	*	48	34	0.04		
Munich ...	30.00	38	SW	3	0	?	?	35	34	- 3	W	5	0	*	41	34	0.24		
FRANCE & NETHERLANDS.																			
The Helder ...	29.88	40	WNW	3	0	29.96	+ .23	39	37	- 2	NW	4	0	1	41	39	0.01		
Brussels ...	*	*	*	*	*	30.10	+ .25	28	28	- 10	WSW	4	0	*	44	28	-		
Cape Gris Nez...	29.89	37	NE	4	0	30.07	+ .22	40	37	- 2	WSW	4	0	3	43	32	0.12		
Paris ...	29.94	45	SW	3	0	30.17	+ .27	31	31	- 14	NNE	1	0	*	57	30	-		
Brest ...	30.04	48	NW	5	0	30.15	+ .20	47	45	- 3	SW	5	0	5	52	41	-		
Lorient ...	30.02	48	NNW	4	0	30.16	+ .19	41	40	- 8	SSW	3	0	5	52	37	-		
Rochefort ...	30.03	52	W	7	0	30.26	+ .20	42	41	- 11	NNE	4	0	2	54	37	0.24		
Belfort ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		
Lyons ...	30.05	46	N	1	0	30.14	+ .17	44	40	- 5	NNW	3	0	*	54	43	0.12		
Nice ...	29.89	49	E	3	0	29.87	- .02	46	44	+ 2	E	3	0	2	54	44	-		
Perpignan ...	30.10	59	NW	3	0	30.08	0.00	58	53	- 3	NW	5	0	*	64	53	-		
Biarritz ...	30.16	57	WNW	4	0	30.17	- .03	54	51	- 3	W	7	0	3	59	50	0.04		
SPAIN.																			
Corunna ...	*	*	*	*	*	30.24	+ .02	55	54	- 2	SSW	1	0	4	61	52	-		
Lisbon ...	30.31	54	NNW	5	0	30.26	- .08	50	39	- 1	NNW	5	0	5	57	50	-		

For Explanation of Columns, see p. 4.

WEATHER CHARTS

for 8 a.m. on

Sunday 11th December

1887.

BAROMETER, WIND & SEA.

(Explanation of Map)

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

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

→ — force above 10; → — forces 8 to 10;

→ — forces 5 to 7; → — forces 1 to 4;

○ — dead calm.

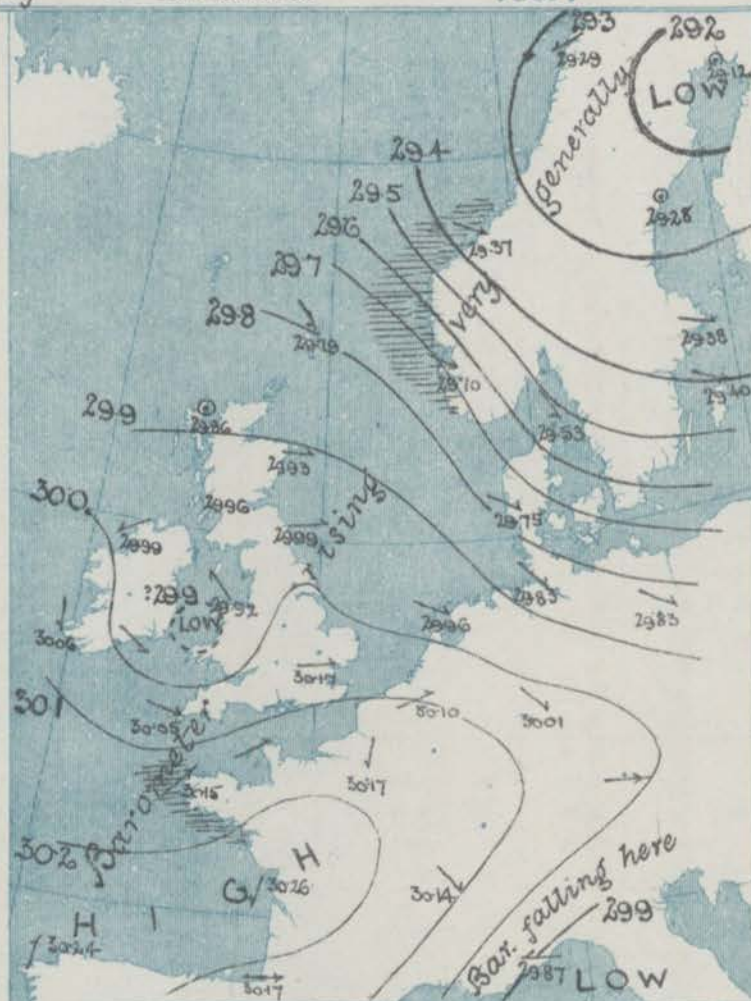
Sea Disturbance — where considerable is shown thus

■ — Rough. ■ — High.

MEAN HEIGHT of the BAROMETER

at 8 a.m. for the month of December.
During the 10 Years 1871—1880.

STATIONS.	MEAN READINGS.
	in.
Sumburgh Head	29.680
Stornoway	29.701
Wick	29.713
Nairn	29.741
Aberdeen	29.750
Leith	29.800
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Roche's Point	29.880
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Scilly	29.943
Hurst Castle	29.938
Dover	29.942
LONDON	29.934
Oxford	29.937
Cambridge	29.926
Yarmouth	29.902



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.

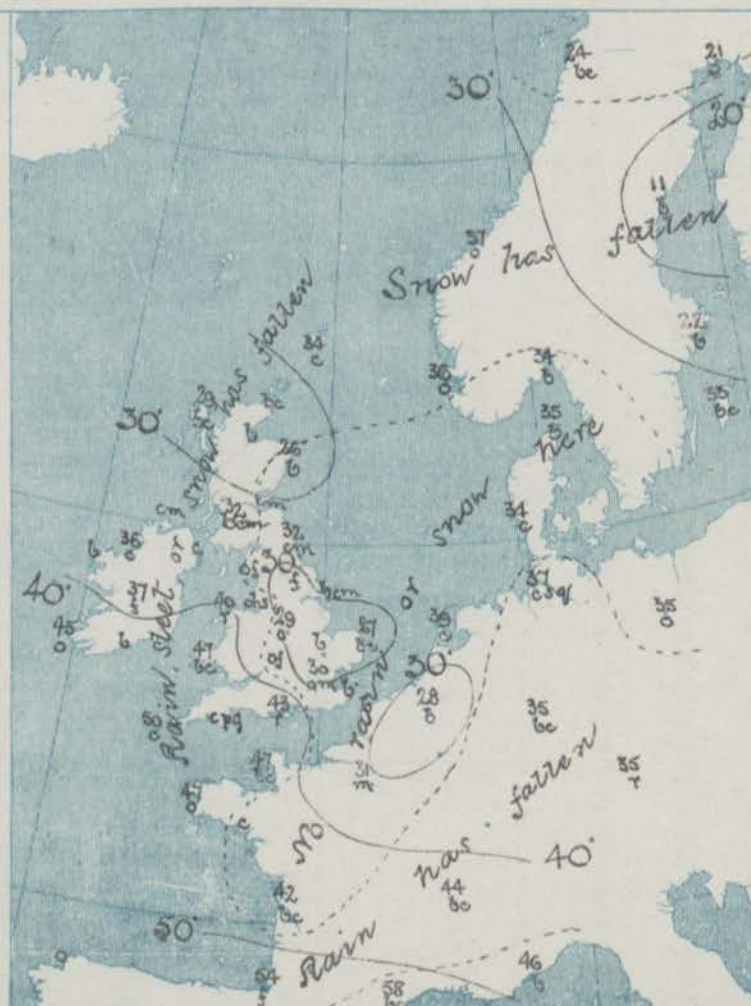
Rainfall A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE. AND RAINFALL.

for the month of December.

STATIONS	TEMPERATURE				RAINFALL. (Inches)
	Daily Max	Daily Min.	At 8 a.m.	WM.	
Sumburgh Head	42.0	34.5	39.0	37.6	4.33
Stornoway	44.8	38.5	38.0	37.8	5.66
Wick	42.0	32.1	37.8	36.4	3.18
Nairn	41.5	32.8	36.9	35.4	2.08
Aberdeen	41.8	32.9	36.9	35.3	3.34
Leith	44.3	39.6	38.4	37.0	2.01
Shields	42.8	34.3	39.2	36.0	2.74
York	42.5	31.9	36.2	35.4	2.46
Ardrossan	47.0	36.1	40.1	38.3	4.04
Donaghadee	46.7	36.1	40.1	39.1	2.84
Holyhead	48.8	39.6	42.9	41.3	3.84
Liverpool	43.6	35.7	39.1	37.4	2.70
Valencia	50.0	40.0	44.7	41.8	5.82
Roche's Point	47.7	39.3	42.9	41.4	4.74
Pembroke	47.1	40.4	43.7	42.6	4.06
Scilly	49.8	43.9	47.2	45.3	4.10
Hurst Castle	45.5	36.5	40.6	39.9	2.64
Dover	44.2	36.5	40.0	38.8	3.20
LONDON	44.5	33.9	38.1	37.1	2.14
Oxford	43.3	33.6	37.3	36.6	2.13
Cambridge	43.3	31.8	36.3	35.6	1.09
Yarmouth	42.2	33.8	37.9	37.2	2.06

Note — The Temperature means are for the 10 years 1871—80, the Rainfall means are mainly those for the 10 years 1856—83.



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30.2 in. and upwards, in our anticyclone lying over Portugal, the southern part of the Bay of Biscay and the west of France.
Lowest, 29.2 in. and less, in a depression lying over the north of Sweden. A small shallow disturbance is lying over the St. George's Channel.
Gradients moderate on the eastern shores of the North Sea, but slight elsewhere. Barometer rising elsewhere.

TEMPERATURE

Highest, 58° at Perpignan, 54° at Biarritz, 50° at Scilly and Lisbon, and 47° at Pembroke, Havre Point and Jersey.
Lowest, 11° at Helsingfors, 21° at Haparanda, 22° at Stockholm, 24° at Wick and 26° at Aberdeen.
Sharp frost occurred over Great Britain last night.

WIND

W. or N.W. over Scandinavia, Denmark, Germany, and the north and east of our Islands; strong in force at Nykøbing Christiansund.
Moderate S.W. over the Channel and the northwest of France.
Light from S.E. over Central England and North Wales.

WEATHER

Dull and unsettled over the more central parts of our Islands, with rain at Holyhead and hail shown at Liverpool.
Fair or fine in most other parts of Western Europe.
Rain or sleet fell yesterday at all but our eastern stations.

SEA

Rather rough off the northwest of Scotland, but moderate to smooth elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The depression which had reached the Baltic yesterday, has disappeared from our area. A very small and shallow disturbance is advancing eastwards over the St. George's Channel, but the barometer is rising even at the English stations.

FORECASTS

for the 24 hours ending at NOON on 12TH DEC^R 1887.

DISTRICTS.

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

FORECASTS.

NONE ISSUED

DISTRICTS.

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

WARNINGS

FORECASTS.

NONE ISSUED.

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 south cone which was hoisted yesterday in districts 8 to 10 has been lowered this morning.

YESTERDAY'S 2 P.M. REPORTS.

	Bar.	Dry.	Wet.	Wind.	Wec.	Sea.		Bar.	Dry.	Wet.	Wind.	Wec.	Sea.
Skudeenæs ...	29.49	36	32	WNW 6	chg	5	Holyhead ...	29.89	47	39	W 3	bcp	2
Sumburgh Head ...	29.60	30	30	WNW 4	s	4	Valencia ...	29.91	47	45	S 3	cv	3
Stornoway ...	29.76	34	33	SW 3	c	3	Scilly ...	29.96	47	44	NW 3	c	5
Aberdeen ...	29.76	32	31	W 3	b	1	Dungeness ...	29.89	39	36	NE 4	c	2
Shields ...	29.83	34	33	WNW 3	b	2	London ...	29.91	41	35	NNE 2	omg	*
Ardrossan ...	29.84	35	37	W 4	c	3	Yarmouth ...	29.88	36	33	NNW 3	b	4
Malin Head ...	29.86	36	36	SW 2	op	3	Jersey ...	29.93	52	47	WNW 3	b	3
Mullaghmore ...	29.89	39	37	SW 2	c	2	Rochefort ...	29.96	53	52	WNW 5	r	2
Belmullet ...	29.92	41	39	ESE 2	b	*							

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

The reports for yesterday morning showed that the highest pressures 30.3 ins: and upwards were still lying over Spain and Algeria. The depression which lay over the Danish coast on Friday was travelling away over the Baltic, but a secondary disturbance was apparently located over Eastern Europe. W² or NW² breezes prevailed over the greater part of Europe, but in Germany the wind was chiefly SW², while in the northern parts of Russia and Scandinavia it was E² or NE². Rain was falling at several of the French stations as well as at Moscow and St. Petersburg and snow over Northern Russia, but elsewhere the weather though cloudy in places was mostly fair. Temperature had risen a little in Germany, Austria, Spain and Italy as well as at several of the Russian stations, but fallen elsewhere, readings ranged from 50° and upwards over Algeria and Southern Europe to 15° or less over Northern Russia. The highest individual readings were 61° at Perpignan, 58° at Malta, 57° at Rimini and Trieste and 56° at Budapest and Caspian; the lowest were 15° at Archangel, 24° at Hakonada, 25° at Ulsaborg, 26° at Kuopio and 27° at Nisk.

In the course of the day the depression over the Baltic continued to travel eastwards, but a small shallow disturbance appeared off the west of Ireland, where the wind backed to SW or S, with unsettled rainy weather. Snow or sleet fell in many parts of England with frost at night.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

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

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

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

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

DAILY WEATHER REPORT.

for Monday 12th December

1887.

Issued by the Meteorological Office, 116, Victoria Street, London, R. H. SCOTT, Secretary.

Issued by the Meteorological Office, 116, Victoria Street, London, W. H. SCOTT, Secretary.

STATIONS.	† YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
	Barometer at 32° F. and Sea Level.	Temp. in Shade.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Weather.	Sea. (0 to 9.)	SHADE TEMP.		Amount of Rainfall.	
			Dir.	Force. (0 to 12.)		Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Dir.	Force. (0 to 12.)			Max.	Min.		
SCANDINAVIA.	Haparanda ..	29.19	17	2	0	bc	29.45	+ .33	18	18	- 3	N	2	0	*	21	12	Ins.
	Hernösand ...	29.40	19	2	0	b	29.84	+ .26	23	23	+ 12	N	2	0	*	28	10	-
	Stockholm ...	29.49	22	2	0	0	29.66	+ .28	23	22	+ 1	NW	2	0	*	30	21	-
	Wisby ...	29.52	34	NW	6	bc	29.70	+ .30	32	31	- 1	NW	6	0	*	34	28	-
	Bodö ...	29.38	31	ESE	1	S	29.49	+ .20	36	32	+ 12	W	2	0	1	36	23	-
	Christiansund...	29.65	35	WSW	6	0	29.80	+ .13	37	33	0	SSW	4	0	5	37	30	0.32
	Skudesnaes ...	29.81	34	2	0	C	29.72	+ .02	37	36	+ 1	WNW	2	0	3	?	34	-
	Christiania Fjord (Færdar)	29.65	34	WNW	3	b	29.75	+ .28	29	26	- 5	WSW	2	0	1	37	25	-
	Skagen (The Scaw)	29.68	35	WNW	4	b	29.81	+ .28	33	30	- 2	WNW	1	0	2	37	28	-
	Faenø ...	29.86	32	NW	2	b	29.95	+ .20	38	31	- 1	W	2	0	*	37	32	-
BRITISH ISLANDS.	Sumburgh Head	29.64	38	SW	4	T	29.83	+ .04	35	33	+ 1	N	3	0	4	39	31	0.29
	Stornoway ...	29.78	36	W	5	C	29.91	+ .05	29	28	0	2	0	0	3	39	26	0.08
	Wick ...	29.76	34	W	2	C	29.94	+ .07	34	33	+ 10	NW	2	0	1	35	22	0.07
	Nairn ...	29.81	35	W	2	b	29.93	+ .03	34	33	+ 4	2	0	0	1	34	26	0.01
	Aberdeen...	29.89	29	SW	1	C	29.95	+ .02	33	31	+ 7	WNW	1	0	1	35	25	-
	Leith ...	29.95	32	W	1	bc	29.99	+ .03	32	32	+ 2	W	1	0	*	36	27	-
	Shields ...	29.99	34	W	2	b	30.02	+ .03	34	33	+ 2	WSW	1	0	2	37	30	-
	Spurn Head ...	30.00	36	NW	2	b	30.07	+ .10	28	28	- 6	WSW	2	0	3	38	27	-
	York ...	30.03	27	SW	1	b	30.08	+ .06	24	24	- 3	2	0	0	*	32	22	-
	Loughborough	30.04	34	ESE	1	0	30.12	+ .09	30	29	+ 1	WSW	1	0	*	34	29	0.15
GERMANY.	Ardrossan ...	29.96	41	WSW	3	bc	29.97	+ .01	38	38	+ 1	NE	1	0	1	41	31	0.05
	Malin Head ...	29.97	39	W	3	b	29.93	- .02	34	33	+ 1	S	3	0	3	41	33	0.02
	Mullaghmore ...	30.02	40	SW	4	C	29.92	- .07	34	33	- 2	ESE	5	0	3	46	31	0.14
	Belmullet ...	30.03	39	WNW	1	0	29.82	- .20	37	35	+ 1	ESE	5	0	*	43	35	0.07
	Donaghadee ...	30.04	32	WSW	1	bc	30.01	+ .04	26	26	- 8	SSW	2	0	0	39	26	-
	Barrow-in-Furness	30.06	32	NE	2	bc	30.05	+ .07	31	31	- 2	ESE	3	0	*	38	30	0.12
	Liverpool (Bidston)	30.04	33	NE	1	0	30.06	+ .09	28	27	- 6	SE	3	0	3	35	27	0.07
	Holyhead ...	30.03	38	ESE	1	b	30.01	+ .09	33	33	- 7	SSE	1	0	2	42	32	0.05
	Parsonstown ...	30.08	33	2	0	b	29.91	- .08	37	35	0	SE	3	0	*	38	28	-
	Valencia ...	30.08	41	NNE	1	C	29.76	- .30	47	45	+ 2	ESE	7	0	6	49	39	0.01
FRANCE & NETHERLANDS.	Roche's Point...	30.08	35	NW	2	b	29.86	- .14	47	45	+ 5	SSE	5	0	4	47	34	-
	Pembroke ...	30.06	44	NW	2	C	30.00	+ .04	38	38	- 9	E	4	0	2	47	36	-
	Scilly ...	30.07	49	W	4	0	29.87	- .18	49	48	- 1	SSE	5	0	5	50	39	0.06
	Prawle Point ...	30.08	44	W	3	b	30.02	- .04	46	44	- 1	E	4	0	3	50	37	0.01
	Jersey ...	30.10	49	WNW	4	bc	30.07	- .07	48	46	+ 1	SSW	3	0	3	51	46	0.01
	Hurst Castle ...	30.02	43	WNW	3	bc	30.10	+ .04	37	36	- 6	E	4	0	2	49	34	0.17
	Dungeness ...	29.96	41	WNW	3	C	30.09	+ .02	32	32	+ 2	N	2	0	2	45	29	0.28
	London ...	30.00	38	W	1	bf	30.13	+ .06	32	31	+ 2	SE	1	0	*	40	30	0.06
	Oxford ...	30.08	37	WNW	2	0	30.12	+ .06	32	30	- 1	E	2	0	*	40	32	0.09
	Cambridge ...	30.06	34	2	0	0	30.13	+ .07	31	31	+ 3	2	0	0	*	34	27	-
PENINSULA.	Yarmouth ...	29.98	33	W	1	0	30.09	+ .07	25	25	- 2	W	3	0	3	34	24	-
	Cuxhaven ...	29.90	34	W	3	T	29.99	+ .16	36	36	- 1	W	3	0	*	36	33	0.06
	Berlin ...	29.96	35	WNW	2	0	30.01	+ .18	35	33	0	WSW	3	0	*	41	34	-
	Wiesbaden ...	*	*	*	*	*	30.08	+ .07	34	33	- 1	W	1	0	*	41	34	0.24
	Munich ...	30.16	30	W	4	0	30.06	?	30	30	- 5	W	3	0	*	39	28	0.16
	The Helder ...	29.99	40	W	1	b	30.07	+ .11	36	35	- 3	SSW	1	0	1	41	36	0.08
	Brussels ...	*	*	*	*	*	30.15	+ .05	33	33	+ 5	2	0	0	*	37	?	0.20
	Cape Gris Nez...	29.96	39	SW	7	C	30.10	+ .03	38	37	- 2	NNE	3	0	3	46	36	0.24
	Paris ...	30.13	39	SSW	4	C	30.14	- .03	38	?	+ 7	SW	1	0	*	41	?	0.04
	Brest ...	30.16	47	WSW	4	T	29.99	- .16	47	44	0	ESE	7	0	5	52	41	0.16
SOUTH AFRICA.	Lorient ...	30.18	49	WSW	4	0	30.06	- .10	48	42	+ 7	SSE	5	0	5	50	39	0.12
	Rochefort ...	30.26	42	2	0	b	30.19	- .07	42	41	0	SSE	5	0	5	52	37	-
	Belfort ...	30.06	40	W	1	b	30.21	-	34	33	-	W	1	0	*	45	27	-
	Lyons ...	30.23	39	N	1	b	30.23	+ .09	32	31	- 12	N	1	0	*	47	31	-
	Nice ...	29.90	47	E	1	b	29.99	+ .12	43	39	- 3	E	1	0	2	57	?	-
	Perpignan ...	30.10	54	NW	5	b	30.12	+ .04	57	48	- 7	W	1	0	*	63	48	-
	Biarritz ...	30.21	52	E	3	0	30.17	- .00	54	53	0	WSW	1	0	2	54	50	0.04
	Corunna ...	*	*	*	*	*	30.18	- .08	49	48	- 1	NNE	4	0	2	59	48	-
	Lisbon ...	30.24	54	N	5	b	30.18	- .08	49	48	- 1	NNE	4	0	2	59	48	-

For Explanation of Columns, see p. 4. † Received too late for insertion in Charts.

WEATHER CHARTS

for 8 a.m. on Monday, 12th December.

1887.

BAROMETER, WIND & SEA.

(Explanation of Map)

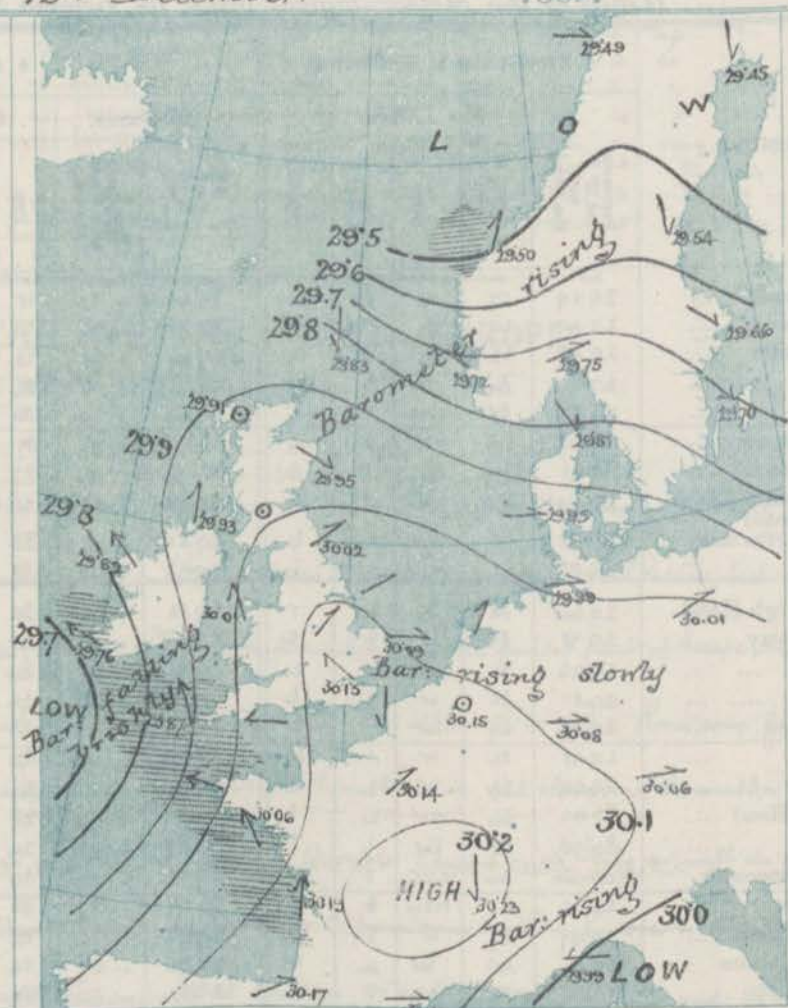
Barometer — Isobars are drawn for each tenth of an inch. Changes since previous morning are stated in words.
Wind — Arrows show the prevalent winds. They fly with the wind and their barbs and feathers refer to force, thus —
 — forces above 10; — forces 8 to 10;
 — forces 5 to 7; — forces 1 to 4;
 ○ —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

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

MEAN HEIGHT of the BAROMETER

at 8 a.m. for the month of December.
 During the 10 Years 1871—1880.

STATIONS.	MEAN READINGS.
Sumburgh Head	29.680
Stornoway	29.701
Wick	29.713
Nairn	29.741
Aberdeen	29.750
Leith	29.800
Shields	29.836
York	29.877
Ardrossan	29.810
Donaghadee	29.832
Holyhead	29.858
Liverpool	29.882
Valencia	29.879
Roche's Point	29.889
Pembroke	29.897
Scilly	29.943
Hurst Castle	29.938
Dover	29.942
LONDON	29.984
Oxford	29.987
Cambridge	29.926
Yarmouth	29.902



GENERAL SITUATION AT 8 A.M.

PRESSURE	<p>Highest, 30.1 ins: and more over Spain, France and England, 30.2 ins: and more over Central France.</p> <p>Lowest, 29.5 ins: in northwest of Norway, and 29.7 ins: and less off our southwestern coasts.</p> <p>Gradients slight in north and east, rather steep in west and southwest. Barometer falling fast in southwest, rising in north and east.</p>
TEMPERATURE	<p>Highest, 54° at Biarritz, 49° at Dieppe and Sully, 47° at Yarmouth, Rochester and Brest.</p> <p>Lowest, 18° at Haparanda, 23° at Helsingfors and Stockholm, 24° at York, 25° at Yarmouth, 28° at Spang, 30° at Loughborough and Munich, 32° in London and at Belfast.</p> <p>Frost occurred over our Midland counties early this morning.</p>
WIND	<p>Very light from the Wnd over the northern and eastern parts of our area, and calm in several places.</p> <p>In the west and southwest it has backed to SE. and is increasing in force.</p>
WEATHER	<p>Fair as a whole in the north and east, but with fog in several places and snow at Copenhagen and Munich.</p> <p>In the west and southwest it is densely overcast, and rain is falling on the coasts of Brittany.</p>
SEA	<p>Rough and rising in the southwest, rather so in the Bay of Biscay, slight or smooth elsewhere. In the Straits of Dover it is smooth.</p>

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

As the new depression advances northwards SE^{ly} to S^{ly} and SW^{ly} winds will spread all over the kingdom; they are likely to blow hard in the west and southwest, and possibly on all our other coasts later, with squalls of cold rain, sleet or snow. Our northwest, west, and southwest coasts have all been warned.

FORECASTS

For the 24 hours ending at NOON on 13th December 1887.

DISTRICTS.	FORECASTS.	DISTRICTS.	FORECASTS.
0 { SCOTLAND NORTH	Wind becoming SE ^{ly} and increasing; fair at first then snow or cold rain.	6 { SCOTLAND WEST	SE ^{ly} winds, strong to a gale, sleet or cold rain.
1 { SCOTLAND EAST	----- D ^o ----- D ^o ----- D ^o -----	7 { ENGLAND N. W.	----- D ^o ----- D ^o ----- D ^o -----
2 { ENGLAND N. E.	----- D ^o ----- D ^o ----- D ^o -----	8 { ENGLAND S. W.	S ^{ly} and SW ^{ly} gales; rainy, very unsettled.
3 { ENGLAND EAST	Same as N ^o 5	9 { IRELAND NORTH	SE ^{ly} and S ^{ly} gales; rainy, squally, very unsettled.
4 { MIDLAND COUNTIES	Same as N ^o 5	10 { IRELAND SOUTH	----- D ^o ----- D ^o ----- D ^o -----
5 { ENGLAND SOUTH	SE ^{ly} and S ^{ly} winds, increasing greatly; sleet and cold rain.	WARNINGS The S. cone has been hoisted this morning in districts 6 to 10 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.

	Bar.	Dry.	Wet.	Wind.	Wva.	Sea.		Bar.	Dry.	Wet.	Wind.	Wva.	Sea.
Skudesnaes ...	29.76	34	33	N 2	S	4	Holyhead ...	29.99	39	39	NE 3	0	2
Sumburgh Head							Valencia ...						
Stornoway ...	29.79	38	37	W 3	6c	3	Scilly ...						
Aberdeen ...							Dungeness ...	29.98	43	42	SW 5	7	4
Shields ...							London ...						
Ardrossan ...							Yarmouth ...						
Malin Head ...	29.96	39	38	SW 4	6c	3	Jersey ...	30.09	50	47	W 5	0	4
Mullaghmore ...							Rochefort ...	30.26	49	47	SE 1	6	2
Belmullet ...	30.03	42	40	NW 2	6	*							

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

The reports for yesterday morning showed that pressure was highest (30.3 ins. and upwards), over Spain and Algeria, and lowest (28.9 ins. and less) in a large depression lying over North Russia. A small disturbance with readings below 29.5 ins. was however, lying over the North of Italy, while a shallow local depression was found over the St. George's Channel: moderate breezes from the Wnd and NWnd prevailed over the greater part of North and northwest Europe, but in the North of France, the wind was S. or SW. while over Italy and the South of France it circulated round the depressions noticed above. The weather varied greatly in different localities, but was upon the whole in a somewhat cloudy unsettled state, with fog and rain at many of the English stations, and snow at Archangel and Hamburg. Temperature had fallen generally, and readings ranged from 5° and upwards over the Mediterranean, the extreme South of France, and northern parts of Algeria and Spain, to 15° and less over the Gulf of Bothnia. The highest individual readings were 61° at Cagliari, 60° at Malta, 59° at Palermo, 58° at Perpignan, 57° at Algiers, 56° at Languisari, and 56° at Palma, the lowest were 11° at Helsingfors, 12° at Uleaborg, 18° at Krasnoyarsk, 21° at Khabarovsk, 22° at Stockholm and 24° at Rode, Helsingfors and Wisk. In the course of the day the small depression over our West coast, moved eastwards across England, and occasioned rain and sleet in most places. A new disturbance appeared off the North of Scotland in the evening, but this was not of sufficient depth to occasion any decided increase of wind.

SUMMARY OF CHANGES IN THE WEATHER OVER THE BRITISH ISLANDS AND THEIR NEIGHBOURHOOD FROM THE 4TH TO THE 10TH DECEMBER 1887.

The weather during this week has been of a changeable unsettled character, but free from features of any extreme character except in temperature - which was very high occasionally for the time of year. It commenced with gradients for NW winds, complicated however by small disturbances which lay over the North of England and at the mouth of St. George's Channel. Early on the 4th, a depression moved to the south-eastwards fresh and important depressions reached our northwest and West coasts, causing S. gales which subsequently veered to the West and NW and brought rain to all parts of the country, followed by hail, sleet, or snow in most of the northern and western districts. These soon travelled away to the north-eastwards, and by 8 a.m. on the 8th had disappeared from our area. In their rear the barometer rose generally and temperature fell, but Thursday (8th) brought new disturbances to our western coasts, one of which filled up quickly, while the other travelled eastwards at great speed across our more northern districts and caused S.W. and W. gales in most places, and very mild weather followed by cold NW and N. breezes reduced temperature, and some slight further falls of snow and cold rain. There were, thus, two well formed depressions reported (in addition to the several smaller ones too numerous to mention here). 1. The deep depression which reached the Hebrides early on the 6th in which the barometer fell below 28.7 ins. at Stornoway, and which was accompanied by a "V" shaped system passing over Ireland and England. 2. The less deep system which reached the West of Scotland on Thursday night, and travelling quickly to the eastward, disappeared over the Baltic on Saturday while subsidiary "homocycles" moved south-eastwards over the United Kingdom and North Sea. At the close of the week pressure remained highest in the South, whence a ridge extended northwards over England, and there were indications that further depressions were advancing towards us from the 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).

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DAILY WEATHER REPORT.

for Tuesday, 13th December

1887.

Issued by the Meteorological Office, 116, Victoria Street, London, R. H. SCOTT, Secretary.

STATIONS.	+ YESTERDAY EVENING.						8 A.M. TO DAY.										PAST 24 HOURS.		
	Barometer at 32° F. and Sea Level.	Temp. in Shade.	WIND.			Weather.	BAROMETER.		SHADE TEMP.			WIND.			Weather.	Sea. (0 to 9.)	SHADE TEMP.		Amount of Rainfall.
			Dir.	Force. (0 to 12.)			Reading at 8 a.m. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Dir.	Force. (0 to 12.)				Max.	Min.	
SCANDINAVIA.	Haparanda ..	29.78	17	SE	2	0	29.90	+ .45	15	15	- 3	NNE	1	0	*	21	10	-	-
	Hernösand ...	29.78	9	SE	0	6	29.84	+ .30	21	20	- 12	NE	2	2	*	25	9	0.08	-
	Stockholm ...	29.81	19	SE	0	6	29.82	+ .16	25	24	+ 2	SE	0	6	*	25	18	-	-
	Wisby ...	29.85	36	NW	6	0	29.85	+ .15	37	35	+ 5	NW	6	0	*	37	30	-	-
	Bodö ...	29.54	26	ENE	4	6	29.70	+ .21	24	22	- 12	ENE	5	6	2	?	23	-	-
	Christiansund...	29.72	33	NW	8	3	29.82	+ .32	24	26	- 8	SSW	4	6	5	?	27	0.20	-
	Skudesnaes ...	29.89	33	SE	0	3	29.72	- .00	88	35	+ 1	ESE	6	0	4	?	?	-	-
	Christiania Fjord (Færder)	29.76	33	W	3	6	29.86	+ .11	22	22	- 7	NNE	2	5	1	34	18	-	-
	Skagen (The Scaw)	29.80	37	NW	2	6	29.86	+ .05	33	31	0	SE	0	6	1	37	32	0.12	-
	Faenø ...	29.99	37	W	4	6	29.90	- .05	33	32	0	SSE	4	6	*	39	32	0.12	-
BRITISH ISLANDS.	Sumburgh Head	29.89	31	SE	0	6	29.29	- .34	40	40	+ 5	SSE	5	7	5	40	30	0.01	-
	Stornoway ...	29.67	39	SE	6	0	29.85	- .106	46	46	+ 17	S	6	0	5	46	26	0.05	-
	Wick ...	29.43	39	SE	3	0	29.06	- .388	43	43	+ 9	S	8	7	6	43	26	0.15	-
	Nairn ...	29.78	32	SE	1	0	29.05	- .88	40	39	+ 6	SE	0	0	1	43	30	0.06	-
	Aberdeen ...	29.88	32	SSE	1	0	29.17	- .78	43	42	+ 10	S	8	0	5	43	29	0.20	-
	Leith ...	29.83	38	SE	1	0	29.15	- .84	44	42	+ 12	SSE	3	0	*	44	29	0.05	-
	Shields ...	29.90	28	SSW	3	em	29.86	- .66	41	40	+ 7	SSW	6	om	2	41	27	0.11	-
	Spurn Head ...	29.96	32	SSE	4	0	29.63	- .54	43	43	+ 15	S	6	rm	3	43	27	0.11	-
	York ...	29.96	28	S	2	f	29.41	- .67	43	43	+ 19	S	2	0	*	43	23	0.23	-
	Loughborough	29.96	32	SE	3	0	29.44	- .68	49	48	+ 19	SSE	2	ou	*	49	29	0.19	-
GERMANY.	Ardrossan ...	29.75	36	NE	2	om	29.05	- .92	48	48	+ 15	SSE	5	0	4	48	32	0.26	-
	Malin Head ...	29.52	37	SSE	5	ogf	28.83	- 1.10	49	48	+ 15	SSW	4	OT	3	50	34	0.09	-
	Mullaghmore ...	29.44	43	SE	8	ogf	28.91	- 1.01	48	48	+ 14	SE	5	OT	4	53	34	0.42	-
	Belanlet ...	29.39	44	SE	8	0	29.02	- .80	44	42	+ 7	NW	7	7	*	50	37	0.73	-
	Donaghadee ...	29.66	42	SE	7	0	29.01	- 1.00	51	51	+ 25	SW	7	7	4	51	26	0.17	-
	Barrow-in-Furness	29.82	32	SSE	4	0	29.22	- .83	46	46	+ 15	SE	7	0	*	46	30	0.18	-
	Liverpool (Midston)	29.82	32	SSE	5	0	29.26	- .80	48	47	+ 20	SE	5	7	4	49	28	0.08	-
	Holyhead ...	29.72	40	SE	1	op	29.18	- .86	49	49	+ 16	S	8	rgm	6	50	32	0.26	-
	Parsonstown ...	29.81	45	SE	5	r	29.04	- .87	48	47	+ 11	SSW	2	0	*	52	36	0.30	-
	Valencia ...	29.41	52	SSE	7	rg	29.20	- .56	45	42	- 2	NW	4	rg	5	54	44	0.80	-
FRANCE & NETHERLANDS.	Roche's Point...	29.83	47	SSE	6	r	29.13	- .78	50	50	+ 3	WSW	3	0	5	50	45	0.80	-
	Pembroke ...	29.68	41	SSE	7	r	29.21	- .79	50	50	+ 12	S	7	rg	7	50	38	0.42	-
	Scilly ...	29.67	52	SW	3	f	29.30	- .57	52	52	+ 3	S	6	ogp	6	52	44	0.39	-
	Prawle Point ...	29.80	48	SE	7	r	29.43	- .89	49	49	+ 3	S	7	rg	6	57	43	0.34	-
	Jersey ...	29.92	46	SE	5	rm	29.61	- .46	50	49	+ 2	SSE	6	rm	5	51	44	0.26	-
	Hurst Castle ...	29.90	47	SSE	4	0	29.55	- .55	50	50	+ 13	S	8	7	5	50	35	0.43	-
	Dungeness ...	30.04	43	SSE	4	em	29.66	- .43	46	46	+ 44	SW	6	rm	5	47	32	0.25	-
	London ...	29.99	37	S	2	0	29.58	- .55	49	48	+ 17	S	5	0	*	49	32	0.25	-
	Oxford ...	29.86	40	SE	3	r	29.49	- .63	50	49	+ 18	S	5	rg	*	50	32	0.28	-
	Cambridge ...	30.00	34	S	2	0	29.53	- .60	48	47	+ 17	S	2	0	*	49	29	0.22	-
PENINSULA.	Yarmouth ...	30.05	27	WSW	1	f	29.62	- .47	43	42	+ 18	S	5	0	4	43	24	0.09	-
	Cuxhaven ...	30.12	32	WSW	2	bc	30.04	+ .05	29	28	- 7	SSE	3	6	*	37	29	-	-
	Berlin ...	30.18	35	NW	3	0	30.16	+ .15	27	26	- 8	S	2	6	*	39	27	-	-
	Wiesbaden ...	*	*	*	*	*	30.10	+ .02	30	29	- 4	NE	2	0	*	36	28	-	-
	Munich ...	30.03	44	SE	0	S	30.14	+ .08	24	24	- 6	E	5	m	*	41	?	0.32	-
	The Helder ...	30.12	33	S	1	f	29.78	- .29	34	33	- 2	S	5	0	3	39	30	-	-
	Brussels ...	*	*	*	*	*	29.85	- .30	37	35	+ 4	S	7	0	*	37	31	-	-
	Cape Gris Nez...	30.08	?	WSW	1	bc	29.69	- .41	41	41	+ 3	S	9	7	6	43	36	0.04	-
	Paris ...	30.13	41	SSE	3	0	29.88	- .26	38	36	0	S	4	0	*	48	?	-	-
	Brest ...	29.85	51	SW	7	r	29.58	- .41	50	49	+ 3	SW	9	7	7	52	43	0.47	-
PENINSULA.	Lorient ...	29.92	52	SSW	5	r	29.67	- .39	57	50	+ 3	SSW	7	0	5	52	46	0.67	-
	Rochefort ...	30.10	48	SSE	1	0	29.88	- .31	44	42	+ 2	SSE	5	0	2	48	39	-	-
	Belfort ...	30.17	35	NW	1	0	30.01	- .20	32	32	- 2	NW	1	6	*	37	28	-	-
	Lyons ...	30.19	37	NW	1	6	30.07	- .16	32	32	0	SE	3	f	*	44	30	-	-
	Nice ...	30.01	46	E	1	6	30.15	+ .16	42	39	- 1	ENE	1	bc	2	57	41	-	-
	Perpignan ...	30.09	52	SE	0	6	30.04	- .08	49	46	- 2	ENE	3	0	*	60	39	-	-
	Biarritz ...	30.02	53	ENE	5	6	29.85	- .32	58	50	+ 4	WSW	7	0	2	59	46	-	-
	Corunna ...	*	*	*	*	*	29.83	- .09	55	53	-	S	8	0	4	61	50	-	-
	Lisbon ...	30.44	46	NE	3	f	30.09	- .09	49	49	0	SSE	3	0	2	50	46	-	-

For Explanation of Columns, see p. 4.

† Received too late for insertion in Charts

WEATHER CHARTS

for 8 a.m. on *Tuesday, 13th December, 1887.*

BAROMETER, WIND & SEA.

(Explanation of Map.)

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

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

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

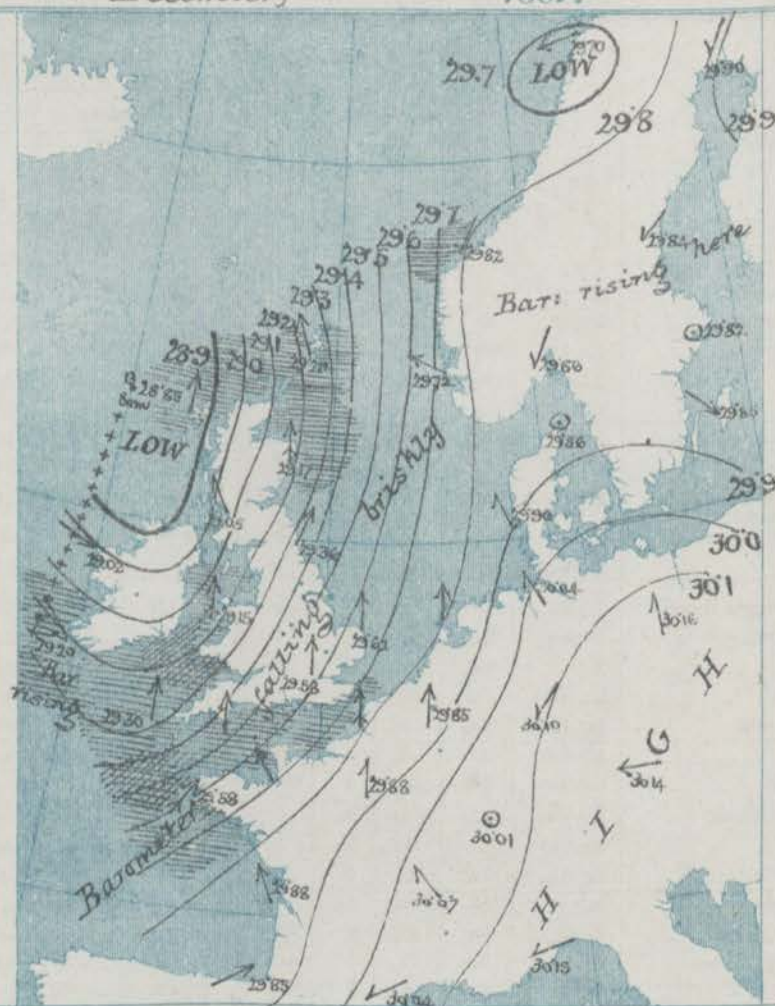
Sea Disturbance — where considerable is shown thus

■ — Rough, ■ — High.

MEAN HEIGHT of the BAROMETER

at 8 a.m. for the month of December
During the 10 Years 1871—1880.

STATIONS.	MEAN READINGS.
	in.
Sumburgh Head	29.680
Stornoway	29.701
Wick	29.713
Nairn	29.741
Aberdeen	29.750
Leith	29.800
Shields	29.836
York	29.877
Ardrossan	29.810
Donaghadee	29.832
Holyhead	29.858
Liverpool	29.882
Valencia	29.879
Roche's Point	29.889
Pembroke	29.897
Seilly	29.943
Hurst Castle	29.938
Dover	29.942
LONDON	29.934
Oxford	29.937
Cambridge	29.926
Yarmouth	29.902



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	42.0	34.5	39.0	37.6	4.33
Stornoway	44.8	33.5	38.9	37.8	5.00
Wick	42.0	32.1	37.8	36.4	3.18
Nairn	41.5	32.5	36.9	35.4	2.08
Aberdeen	41.8	32.9	36.9	35.3	3.34
Leith	44.3	33.8	38.4	37.0	2.01
Shields	42.8	34.3	39.2	36.9	2.74
York	42.5	31.0	36.2	35.4	2.45
Ardrossan	47.0	36.1	40.1	38.3	4.04
Donaghadee	46.7	36.1	40.1	39.1	2.84
Holyhead	46.8	39.6	42.9	41.3	3.84
Liverpool	43.6	35.7	39.1	37.4	2.70
Valencia	50.0	40.0	44.7	41.8	5.82
Roche's Point	47.7	39.3	42.9	41.4	4.74
Pembroke	47.1	40.4	43.7	42.6	4.06
Seilly	49.8	43.9	47.2	45.3	4.10
Hurst Castle	45.5	36.5	40.6	39.9	2.84
Dover	44.2	36.5	40.0	38.8	3.20
LONDON	44.5	33.9	38.1	37.1	2.14
Oxford	43.3	33.6	37.3	36.6	2.13
Cambridge	43.3	31.5	36.3	35.6	1.99
Yarmouth	42.2	33.8	37.9	37.2	2.05

NOTE — The Temperature means are for the 10 years 1871—80, the Rainfall means are mainly those for the 20 years 1866—85.



GENERAL SITUATION AT 8 A.M.

PRESSURE	Highest, 30.1 in. and ^{up to} over Germany, Switzerland and the south of France; 30.0 in. and upwards over the Iberian Peninsula. Lowest, 28.9 in. and less, in a large depression lying off the W. and NW. of Scotland. A trough of V-shaped secondary disturbance has advanced over Ireland. Gradients rather steep over our Islands and the North Sea. Barometer falling briskly over Great Britain and France, but rising again at Valencia.
TEMPERATURE	Highest, 58° at Kilmory, 51° at Seville, 51° at Donaghadee and Dorset, and 50° at Rochelle, Pembroke, Hunt Castle, Jersey and Brest. Lowest, 15° at Haparanda, 21° at Herneford, 22° at Jæmtar, 24° at Rode and Munich, 25° at Stockholm, and 27° at Berlin. A considerable rise has taken place over Great Britain, but in the west of Ireland the thermometer is now falling again.
WIND	Strong to gale from the S ^W or SE ^W over the greater part of our Islands and their immediate neighbourhood. Moderate to strong from NW. in the west of Ireland. Light E ^W over the southern parts of Germany and France; chiefly N ^W in Sweden.
WEATHER	Dull over our Islands and France with rain in most parts of the United Kingdom. Fine at the German, Danish, and several of the Scandinavian stations. Heavy rain fell yesterday in the west, the largest amounts being 0.8 in. at Valencia and Seville, 0.7 in. at Balmuccia.
SEA	High at Pembroke and rough or rather so on all but our east coasts.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The main depression in the northwest will probably travel away in a northerly direction, but the secondary disturbances over our west coasts are likely to take a somewhat more easterly course. Strong winds or gales from the S^W with squally, rainy weather are therefore likely to continue for a time over our more eastern districts, while in the west the wind will probably shift to the NW^W with a temporary improvement in the weather.

FORECASTS

For the 24 hours ending at NOON on 14th DEC^r

1887.

DISTRICTS.	FORECASTS.	DISTRICTS.	FORECASTS.
10 SCOTLAND NORTH	S ^W gales, moderating later; dull, squally, some rain.	6 SCOTLAND WEST	SE ^W and S ^W gales, veering and moderating later; squally, rain at times.
11 SCOTLAND EAST	-----D°-----D°-----D°-----	7 ENGLAND N.W.	-----D°-----D°-----D°-----
12 ENGLAND N.E.	-----D°-----D°-----D°-----	8 ENGLAND S.W.	S ^W to W ^W winds, strong; squally, showery.
13 ENGLAND EAST	Same as N°5	9 IRELAND NORTH	NW ^W and W ^W winds, backing later, squally, showery.
14 MIDLAND COUNTIES	Same as N°5	10 IRELAND SOUTH	-----D°-----D°-----D°-----
15 ENGLAND SOUTH	S ^W strong winds or gales, veering and moderating later; squally and rainy to fair.	WARNINGS	
		The S. cone was hoisted yesterday on all our coasts.	

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

YESTERDAY'S 2 P.M. REPORTS.

	Bar.	Dry.	Wet.	Wind.	Wes.	Sea.		Bar.	Dry.	Wet.	Wind.	Wes.	Sea.
Skudesnaes ...	29.83	38	35	W 1/2 W 1/4	4	0	Holyhead ...	29.87	39	36	SE 2	C	2
Sumburgh Head ...	29.93	30	28	N 1	6	3	Valencia ...	29.57	49	48	SE 6	Tr	6
Stormoway ...	29.83	38	37	SE 3	0	3	Scilly ...	29.75	52	52	S 5	f d	6
Aberdeen ...	29.95	34	32	W 1/2 W 1/4	1	1	Dungeness ...	30.08	42	41	SSW 4	C	3
Shields ...	29.98	36	34	SE 2	C	2	London ...	30.07	37	36	SE 2	O	*
Ardrossan ...	29.90	36	36	N 1	C	1	Yarmouth ...	30.09	27	26	W 1	T	3
Malin Head ...	29.77	36	35	SSW 3	C	3	Jersey ...	29.98	46	45	SE 5	T	4
Mullaghmore ...	29.70	39	37	SE 6	org	5	Rochefort ...	30.15	46	44	SSW 5	O	2
Belmullet ...	29.57	39	38	SE 6	O	*							

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

The reports for yesterday morning showed that pressure varied from between 30.10 ins. and 30.25 ins. over Spain, France, and England, and from about 30.0 ins. over Southern Russia to about 29.2 ins. on the shores of the White Sea, and to 29.7 ins. (and less) off our southern coasts. Over the northern and eastern countries the barometer was rising, but in the west it was falling fast owing to the advance of a new and large depression, which was approaching the southwest coasts of the British Isles apparently from the ^{west} south-westward. The wind was strong from NW. over the Baltic, light from W. and SW. at our northern stations and over the North Sea, and over the latter regions the weather had cleared considerably after the cold showers which fell on Sunday. In the west and southwest of the British Isles however, and in Brittany, the wind had shifted to SE. and S. and was increasing, with a very dull gloomy appearance and in some places rain. Temperature had changed irregularly; it was low over the eastern and northeastern parts of our Islands, as well as in some parts of northern and central Europe, but was rising over Brittany and the southeastern parts of the British Islands. The lowest individual values were 3° at Bleaborg, 4° at Archangel, 16° at Kuopio, 18° at Haparanda, 22° at St. Petersburg, 23° at Stockholm and Herisand, 24° at York, 25° at Yarmouth, 26° at Donaghadee, 28° at Liverpool, 29° at Memel, Cassel and Berlin, 30° at Munich and 31° in London. The highest were 55° at Algiers and Sanguinaires, 54° at Biarritz, 52° at Bilbao, 51° at Perpignan, 49° at Lillo, 47° at Valencia, Jersey and Brest.

During the succeeding 24 hours the barometer fell very fast over the United Kingdom, S. gales spread over nearly the whole Kingdom, as the depression referred to above moved northwards, and brought with them a very decided rise of temperature and with rain — the latter being heaviest in the west.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

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

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

† The evening observations are taken at 6 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8 p.m. In Sweden and Denmark, the observations are taken at 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 14th DEC^r

1887.

Issued by the Meteorological Office, 116, Victoria Street, London, R. H. SCOTT, Secretary.

STATIONS.	+ YESTERDAY EVENING.						8 A.M. TO DAY.										PAST 24 HOURS.		
	Barometer at 32° F. and Sea Level.	Temp. in Shade.	WIND.		Weather.		BAROMETER.		SHADE TEMP.		Difference from 8 a.m. yesterday.	WIND.		Weather.			SHADE TEMP.		Amount of Rainfall.
			Dir.	Force (0 to 12.)			Reading at 8 P. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.		Dir.	Force (0 to 12.)				Max.	Min.	
SCANDINAVIA.																			
Haparanda ..	29.96	11	2	0	0		29.95	+ .05	9	9	- 6	2	0	0	*		18	9	—
Hernösand ...	29.95	21	NNE	2	5		29.94	+ .10	22	21	+ 1	NNE	2	0	*		22	7	0.08
Stockholm ...	29.89	22	2	0	0		29.87	+ .05	24	22	- 1	ENE	4	0	*		27	18	—
Wisby ...	29.80	31	N	4	6		29.77	- .08	29	?	- 8	SE	4	6	*		39	29	—
Bodö ...	29.80	23	ENE	4	6		29.74	+ .04	22	19	- 2	ENE	4	6	2		25	19	—
Christiansund...	29.48	42	SE	5	6		29.38	- .44	36	33	+ 7	SE	3	0	3		36	28	—
Skudesnaes ...	29.29	38	SE	8	0		29.29	- .43	40	36	+ 2	SE	8	0	5		40	37	—
Christiania Fjord (Fjorder)	29.75	26	NE	4	5		29.59	- .27	31	30	+ 9	ENE	6	5	3		?	?	—
Skagen (The Scaw)	29.65	35	S	4	0		29.50	- .36	35	35	+ 2	S	4	0	2		36	32	0.24
Faro ...	29.53	35	S	5	7		29.43	- .47	38	38	+ 5	S	5	7	*		38	30	0.28
BRITISH ISLANDS.																			
Sumburgh Head	29.08	45	SSE	6	7		29.09	- .20	38	38	- 2	2	0	0	4		46	37	0.31
Stornoway ...	28.90	39	SW	3	6		28.95	+ .10	39	39	- 7	S	6	0	6		48	34	0.80
Wick ...	28.95	40	W	4	0		29.10	+ .04	38	37	- 5	S	3	0	2		45	34	0.20
Nairn ...	29.00	40	WSW	2	0		29.05	.00	40	36	0	S	3	0	2		48	32	0.03
Aberdeen...	29.01	40	S	1	6		29.17	.00	34	33	- 9	SSW	3	0	0		46	31	0.13
Leith ...	29.09	40	WSW	3	0		29.10	+ .01	36	35	- 8	S	1	0	2		50	35	0.03
Shields ...	29.12	41	SSW	2	0		29.28	- .08	36	35	- 5	SSW	4	0	2		48	34	0.04
Spurn Head ...	29.43	36	S	6	0		29.42	- .11	36	36	- 7	SSE	5	0	3		44	34	0.06
York ...	29.8	49	S	1	7		29.39	- .02	34	33	- 9	S	1	0	*		50	33	—
Loughborough	29.24	49	SW	3	7		29.43	- .01	37	35	- 12	SSW	4	0	*		51	32	0.08
GERMANY.																			
Ardrossan ...	29.11	43	W	5	0		29.11	+ .06	42	40	- 6	S	5	0	4		53	40	0.09
Malin Head ...	29.10	38	SSW	4	0		28.89	+ .06	37	36	- 12	S	5	0	5		49	34	0.19
Mullaghmore	29.17	36	SSW	5	0		28.91	.00	38	37	- 10	SW	8	0	6		48	32	0.24
Belmullet ...	29.16	38	W	7	0		28.84	- .08	43	40	- 1	SW	7	0	*		44	36	0.29
Donaghadee ...	29.23	36	SW	3	0		29.13	+ .12	35	34	- 16	SW	3	0	1		51	34	—
FRANCE & NETHERLANDS.																			
Barrow-in-Furness	29.20	42	WSW	3	0		29.27	+ .05	40	39	- 6	SE	6	0	*		48	37	0.27
Liverpool (Bidston)	29.23	42	W	5	0		29.31	+ .05	38	37	- 10	S	3	0	4		52	35	0.49
Holyhead ...	29.28	43	WNW	6	0		29.29	+ .14	43	41	- 6	SW	6	0	6		50	40	0.31
Parsonstown ...	29.30	38	2	0	6		29.11	+ .07	38	36	- 10	S	3	0	*		49	33	0.06
Valencia ...	29.35	43	WSW	5	0		29.08	- .12	47	43	+ 2	SW	7	0	6		47	38	0.14
Roche's Point...	29.38	42	W	3	0		29.23	+ .10	43	42	- 7	WSW	5	0	5		50	39	0.18
Pembroke ...	29.37	45	W	4	0		29.22	+ .11	45	45	- 5	SSW	6	0	6		50	42	0.22
Scilly ...	29.47	47	WNW	8	0		29.42	+ .12	45	44	- 7	SW	6	0	6		52	42	0.26
Prawle Point ...	29.44	45	WNW	5	0		29.50	+ .07	45	44	- 4	SW	6	0	5		51	41	0.08
Jersey ...	29.44	52	W	6	0		29.63	+ .02	47	43	- 3	WNW	4	0	3		52	45	0.22
Hurst Castle ...	29.37	49	SW	7	0		29.55	.00	46	44	- 4	SW	6	0	5		51	35	0.10
Dungeness ...	29.42	48	SSW	6	0		29.59	- .07	43	41	- 2	WNW	4	0	4		50	40	0.10
London ...	29.25	40	SSW	6	0		29.54	- .04	38	36	- 11	S	2	0	*		51	36	0.05
Oxford ...	29.35	49	SW	4	0		29.57	+ .02	37	35	- 13	S	4	0	*		53	36	0.06
Cambridge ...	29.31	49	SSW	3	0		29.53	.00	34	33	- 14	W	1	0	*		50	33	0.04
Yarmouth ...	29.40	45	SSW	5	0		29.54	- .08	37	36	- 6	SW	2	0	3		47	35	0.03
Cuxhaven ...	29.73	33	S	6	0		29.55	- .49	41	41	+ 12	SW	4	0	*		41	?	0.34
Berlin ...	29.88	28	S	4	0		29.73	- .42	36	35	+ 9	SSW	2	0	*		36	27	0.04
Wiesbaden ...	*	*	*	*	*		29.78	- .32	37	36	+ 7	E	1	0	*		37	28	0.04
Munich ...	29.96	26	W	1	0		29.94	- .20	34	34	+ 10	S	2	0	*		34	24	0.04
ITALY.																			
The Helder ...	29.49	37	S	4	0		29.88	- .22	43	41	+ 9	W	3	0	3		45	34	0.24
Brussels ...	*	*	*	*	*		29.66	- .19	44	43	+ 7	WSW	1	0	*		50	?	0.08
Cape Gris Nez...	29.45	45	SSW	9	0		29.61	- .08	44	41	+ 3	SW	3	0	4		46	41	0.16
Paris ...	29.71	47	SSW	5	0		29.73	- .15	44	44	+ 6	SSW	1	0	*		50	?	0.04
Brest ...	29.61	49	WNW	7	0		29.62	+ .04	48	45	- 2	WSW	8	0	7		52	41	0.32
Lorient ...	29.62	51	WNW	7	0		29.70	+ .03	48	44	- 3	WSW	5	0	5		52	45	0.08
Rochefort ...	29.84	49	S	5	0		29.83	- .05	49	48	+ 5	W	4	0	2		52	44	0.20
Belfort ...	*	*	*	*	*		*	*	*	*	*	*	*	*	*		*	*	*
Lyons ...	29.96	49	S	5	0		29.87	- .20	49	47	+ 17	S	5	0	*		32	?	—
Nice ...	30.19	46	E	1	0		30.13	- .02	43	42	+ 1	E	1	0	3		50	44	0.04
Perpignan ...	29.97	50	2	0	0		29.90	- .14	46	45	- 3	WSW	3	0	*		53	45	—
Biarritz ...	29.88	58	S	7	0		29.89	+ .04	53	51	- 5	W	7	0	2		61	52	?
Coronna ...	*	*	*	*	*		*	*	*	*	*	*	*	*	*		*	*	*
Narbon ...	30.01	54	SW	3	0		30.12	+ .03	52	49	+ 3	NW	4	0	6		57	47	0.83

For Explanation of Columns, see p. 4.

WEATHER CHARTS

for 8 a.m. on

Wednesday, 14th December.

1887.

BAROMETER, WIND & SEA.

(Explanation of Map)

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

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

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

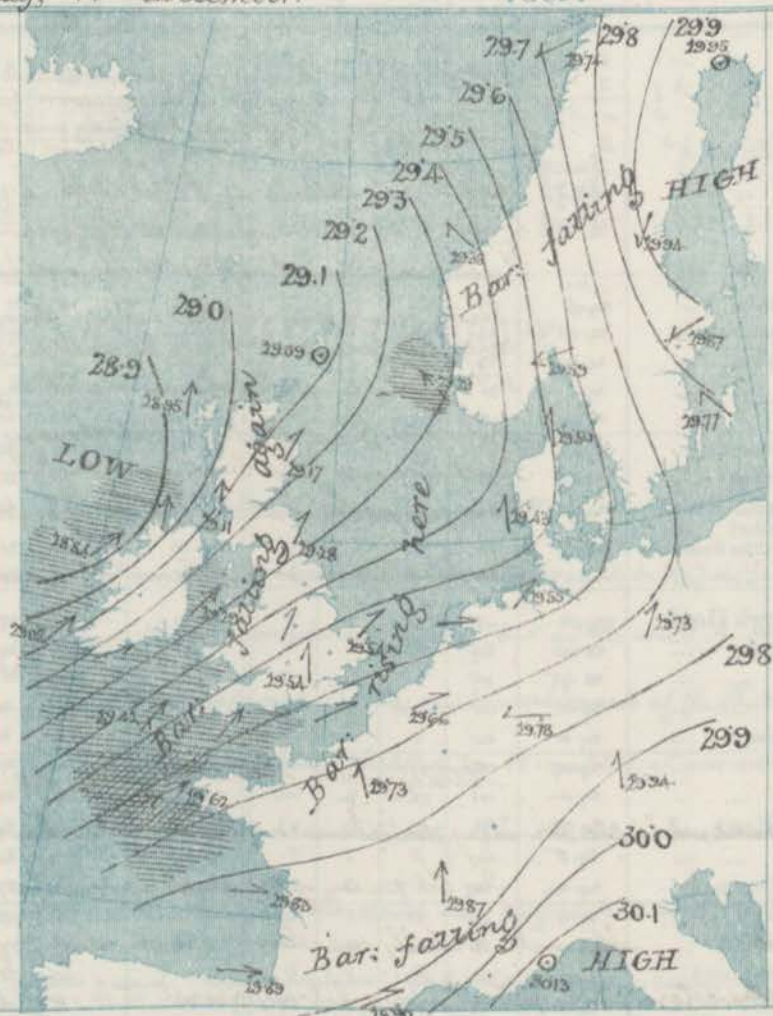
Sea Disturbance — where considerable is shown thus

■ — Rough. ■ — High.

MEAN HEIGHT of the BAROMETER

at 8 a.m. for the month of December
During the 10 Years 1871—1880.

STATIONS.	MEAN READINGS.
Sumburgh Head	29.080
Stornoway	29.701
Wick	29.713
Nairn	29.741
Aberdeen	29.750
Leith	29.800
Shields	29.836
York	29.877
Ardrossan	29.810
Donaghadee	29.832
Holyhead	29.858
Liverpool	29.882
Valencia	29.879
Roche's Point	29.889
Pembroke	29.897
Scilly	29.943
Hurst Castle	29.938
Dover	29.942
LONDON	29.984
Oxford	29.937
Cambridge	29.926
Yarmouth	29.902



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	42.0	34.5	39.0	37.6	4.33
Stornoway	44.8	33.5	38.9	37.8	5.06
Wick	42.0	32.1	37.8	36.4	3.18
Nairn	41.5	32.8	36.9	35.4	2.08
Aberdeen	41.8	32.9	36.9	35.2	3.34
Leith	44.3	33.8	38.4	37.0	2.01
Shields	42.8	34.3	39.2	36.9	2.74
York	42.5	31.9	36.2	35.4	2.45
Ardrossan	47.0	36.1	40.1	38.3	4.04
Donaghadee	46.7	36.1	40.1	39.1	2.84
Holyhead	46.8	39.6	42.9	41.3	3.84
Liverpool	43.6	35.7	39.1	37.4	2.70
Valencia	50.0	40.0	44.7	41.8	6.82
Roche's Point	47.7	39.3	42.0	41.4	4.74
Pembroke	47.1	40.4	43.7	42.6	4.98
Scilly	49.8	43.6	47.2	45.3	4.10
Hurst Castle	45.5	36.5	40.6	39.9	2.84
Dover	44.2	36.5	40.0	38.8	3.20
LONDON	44.5	38.9	38.1	37.1	2.14
Oxford	43.3	35.6	37.3	36.0	2.13
Cambridge	43.3	31.8	36.3	35.6	1.50
Yarmouth	42.2	33.8	37.9	37.2	2.95

NOTE — The Temperature means are for the 10 years 1871—80, the Rainfall means are mainly those for the 20 years 1865—85.



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest 30.13 ins. at Nice, 30.12 ins. at Lisbon, 29.9 ins. and upwards over the Gulf of Bothnia.
Lowest 28.9 ins. and less in a depression lying off our extreme northwest coast.
Gradients rather steep over Ireland and the West of Scotland.
Barometer rising over the eastern part of Great Britain, but falling elsewhere, - quickly in West.

TEMPERATURE

Highest 53° at Biarritz, 52° at Lisbon, 49° at Rochefort and Lyons, 48° at Brest, and about 47° at Dublin and Jersey.
Lowest 9° at Napuranda, 22° at Hernösand and Bodo, 24° at Stockholm, 29° at Wisby and 31° at Färnebo.
Frost occurred last night over the northern and central parts of Great Britain.

WIND

Strong from SW in the West and southwest of our Islands, and the northwest of France.
Moderate from the S.W. over the northern and eastern parts of Great Britain, as well as in South Germany and the East of France.
E. (N.E. to S.E.) in Scandinavia, with a gale at Skudenes.

WEATHER

Fair over Great Britain, but showery and squally in the West of Ireland.
Dull at most of the Continental stations, with snow at Lucerne, and rain at Fano, Nelder and Biarritz.
Rain fell yesterday at all but the Scandinavian stations, the largest amount being 0.8 in. at Stornoway.

SEA

Rough or rather so on all our West and southwest coasts, but moderate or slight elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The depression noticed yesterday morning off the northwest of Scotland has travelled away to the northwards, while the secondary disturbances over Ireland have passed eastward to the North Sea.

In the course of the night however, a new disturbance has advanced to our extreme northwest coasts. This will probably occasion a renewal of S. gales and squally rainy weather over the northern and northwestern parts of the Kingdom, but at present it is very doubtful whether our southeastern stations will be much affected.

FORECASTS

For the 24 hours ending at NOON on 15th December 1887.

DISTRICTS.

FORECASTS.

0	SCOTLAND NORTH	S th winds, increasing to a gale; fair to squally and rainy.
1	SCOTLAND EAST	.....D.....D.....D.....
2	ENGLAND N.E.	S th winds, moderate to strong; fair to squally and rainy.
3	ENGLAND EAST	Same as N° 5.
4	MIDLAND COUNTIES	Same as N° 5.
5	ENGLAND SOUTH	S th and S.W. winds, moderate to strong; fine to dull and some rain.

DISTRICTS.

FORECASTS.

6	SCOTLAND WEST	S th and S.W. winds, increasing to a gale; squally, some rain.
7	ENGLAND N.W.	.....D.....D.....D.....
8	ENGLAND S.W.	S.W. winds, strong; squally, some rain.
9	IRELAND NORTH	S.W. strong winds and gales; squally, rainy.
10	IRELAND SOUTH	.....D.....D.....D.....

WARNINGS

The SOUTH CONE has been rehoisted this morning in districts 6, 7, 9 and 10, but lowered in districts 3 and 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.

	Bar.	Dry.	Wet.	Wind.	Wes.	Sea.		Bar.	Dry.	Wet.	Wind.	Wes.	Sea.		
Skudeanæs ...	29.54	39	36	SE	8	0	5	Holyhead ...	29.15	47	46	WNW	6	rmq	6
Sumburgh Head ...	29.04	42	42	SSE	6	r	6	Valencia ...	29.35	41	38	W	5	chg	5
Stornoway ...	28.79	44	44	SW	5	r f	5	Scilly ...	29.33	48	47	NW	8	0	6
Aberdeen ...	28.96	45	44	S	8	r q	6	Dungeness ...	29.51	47	46	SSW	6	r	5
Shields ...	29.12	48	47	SSW	4	0	2	London ...	29.42	51	49	SSW	5	orm	*
Ardrossan ...	29.01	45	42	W	5	0	4	Yarmouth ...	29.47	44	43	SSW	5	rg	4
Malin Head ...	29.04	41	40	W	4	0	4	Jersey ...	29.47	52	50	S	6	r	5
Mullaghmore ...	29.12	44	40	W	6	c	5	Rochefort ...	29.88	50	49	S	5	r	2
Belmullet ...	29.16	40	39	WSW	5	bc	*								

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

The reports for yesterday morning showed that pressure had become highest (30.1 to 30.3 in.) over Central Europe and the Mediterranean, while it was lowest (rather below 29.0 in.) off our northwest coast, and below 29.6 in. in a small depression over the South of Russia. To the northwestward of the British Isles lay a deep and rather complex depression, moving northeastwards. S. gales, mild weather and much rain prevailed over our Islands and their neighbourhood, N. winds and cold weather, with local snow showers over Finland, strong NW. winds and snow over the South of Russia, variable air and calms, with cold fair weather over Central Europe and the Mediterranean. Temperature which had risen rapidly over Northwestern Europe, but fallen over the northern part, was below the freezing point, all but the most western countries, where it was very high for the time of year. The lowest individual values were 5° at Archangel, 15° at Haparanda, Uleaborg and Kuopio, 19° at Helsingfors, 21° at Hernösand, 23° at Riga, 24° at Manisk, 25° at Stockholm, 26° at Cassel, 27° at Berlin, 29° at Hamburg, and Christiansund, and 30° at Wiesbaden; the highest were 58° at Biarritz, 55° at Barcelona, Algiers, and Malta, 54° at Bilbao, 52° at Scilly, 51° at Donaghadee, and 50° at several stations, in the West and South of the British Islands. At Funchal (Madeira) the temperature was 61°.

Later in the day the wind shifted to the westward—first at our western, and afterwards at our eastern stations, with drier and colder weather, and the gales lulled very generally with a rising barometer. The conditions however, showed that no permanent improvement could be hoped for, as new depressions were evidently approaching our western coasts from the 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 8 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8 p.m. In Sweden and Denmark, the observations are taken at 8 p.m. (Christiania time).

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

DAILY WEATHER REPORT.

for Thursday, 15th December 1887.

Issued by the Meteorological Office, 116, Victoria Street, London, R. H. SCOTT, Secretary.

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STATIONS.	† YESTERDAY EVENING.						8 A.M. TO DAY.										PAST 24 HOURS.		
	Barometer at 32° F. and Sea Level.	Temp. in Shade.	WIND.		Weather.	Barometer. Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	SHADE TEMP.			WIND.		Weather.	Sea (0 to 9.)	SHADE TEMP.		Amount of Rainfall.		
			Dir.	Force (0 to 12.)				Dry.	Wet.	Difference from 8 a.m. yesterday.	Dir.	Force (0 to 12.)			Max.	Min.			
SCANDINAVIA.																			
Haparanda ..	29.96	7	Z	0	b	30.08	+13	-11	-11	-20	N	2	b	*	18	?	-		
Hernösand ...	29.93	25	E	2	S	29.96	+02	24	23	+2	E	2	S	*	27	18	0.04		
Stockholm ...	29.77	30	E	2	0	29.76	-11	33	32	+9	SE	2	S	*	3	18	0.04		
Wisby ...	29.76	34	SSE	4	S	29.69	-08	37	36	+8	SE	4	T	*	37	27	0.16		
Bodö ...	29.73	26	ENE	4	b	29.72	-02	25	23	+3	E	6	b	3	?	?	-		
Christiansund...	29.45	36	SE	4	0	29.54	+16	35	?	-1	ESE	2	0	2	36	32	0.12		
Skudesnaes ...	29.49	39	ESE	6	bc	29.51	+22	40	36	0	ESE	6	0	5	40	36	-		
Christiana Fjord (Farder)	29.54	31	N/E	6	S	29.61	+02	30	28	-1	NNE	4	b	1	34	25	-		
Skagen (The Scaw)	29.49	37	W	3	b	29.62	+12	34	33	-1	N	1	b	1	39	32	0.12		
Fanö ...	29.59	35	SW	2	b	29.56	+13	34	34	-4	S	4	f	*	41	32	0.04		
BRITISH ISLANDS.																			
Sumburgh Head	29.18	38	SSE	1	bc	29.29	+20	40	40	+2	SSE	1	0	4	43	38	0.14		
Stornoway ...	29.98	42	S	6	0	29.21	+26	31	31	-8	Z	0	bc	2	42	30	-		
Wick ...	29.10	40	S	5	c	29.26	+16	34	34	-4	N	1	m	2	43	24	-		
Nairn ...	29.05	40	Z	0	0	29.22	+17	32	31	-8	Z	0	b	1	40	32	-		
Aberdeen...	29.15	41	S	4	c	29.21	+04	40	39	+6	NNE	3	rm	3	43	34	0.25		
Leith ...	29.12	39	S	1	b	29.18	+02	39	38	+3	W	1	0	*	43	35	-		
Shields ...	29.18	40	S	3	c	29.18	-10	39	38	+8	WNW	2	0	2	41	34	0.07		
Spurn Head ...	29.31	41	S	6	b	29.21	-21	38	38	+2	S	3	bc	3	43	35	0.02		
York ...	29.25	40	S	3	b	29.22	-17	38	37	+4	S	1	f	*	41	34	0.03		
Loughborough	29.30	40	SW	3	b	29.20	-23	42	41	+5	SW	2	0	*	46	37	0.07		
GERMANY.																			
Ardrossan ...	28.98	43	S	5	c	29.26	+15	39	38	-3	NNE	2	bc	1	44	38	0.06		
Malin Head ...	28.77	39	SSE	5	0	29.28	+39	43	42	+6	NW	3	bc	4	44	36	0.02		
Mullaghmore ...	28.77	43	SSW	7	q/p	29.34	+43	46	44	+8	WNW	6	bc	5	46	38	0.33		
Belmullet ...	28.81	45	W	10	q/p	29.41	+57	44	42	+1	W	2	bc	*	47	40	0.27		
Donaghadee ...	28.97	41	SW	4	c	29.29	+16	42	41	+7	N	4	bc	2	45	35	0.05		
FRANCE & NETHERLANDS.																			
Barrow-in-Farress	29.09	41	SE	6	0	29.23	-04	39	39	-1	N	2	c/p	*	42	38	0.07		
Liverpool (Bidston)	29.13	41	SE	5	0	29.24	-07	40	39	+2	NW	2	0	2	44	37	0.26		
Holyhead ...	29.04	40	SSW	6	thl	29.29	-00	45	44	+2	NW	8	c/p	7	47	40	0.95		
Parsonstown ...	28.99	40	SSW	1	0	29.44	+33	41	39	+3	Z	0	bc	*	45	37	0.24		
Valencia ...	29.51	47	WNW	6	c/p	29.55	+47	47	44	0	WNW	5	c/p	5	49	39	0.21		
Roche's Point...	29.12	43	W	4	b	29.52	+29	46	44	+3	WNW	4	b	4	46	41	0.25		
Pembroke ...	29.05	45	SW	8	ry	29.43	+11	47	47	+2	WNW	6	c/p	6	48	40	0.32		
Scilly ...	29.31	47	WSW	9	o/p	29.54	+12	50	48	+5	WNW	8	c/p	6	50	44	0.18		
Prawle Point ...	29.34	47	W	7	bc	29.46	-04	46	44	+1	W	6	c/p	5	48	41	0.16		
Jersey ...	29.54	47	SW	5	b	29.53	-10	50	46	+3	WNW	5	c/p	4	50	44	0.19		
PENIN. SULA.																			
Hurst Castle ...	29.40	46	SW	7	b	29.34	-26	46	44	-1	W	7	c/p	5	50	42	0.34		
Dungeness ...	29.43	47	SW	6	ry	29.33	-26	46	44	+3	WSW	5	c	4	48	43	0.16		
London ...	29.43	42	SW	3	c	29.27	-27	42	40	+4	N	2	bc	*	49	38	0.33		
Oxford ...	29.30	42	SE	5	0	29.25	-26	43	42	+6	SW	4	o/p	*	44	37	0.12		
Cambridge ...	29.29	38	S	2	b	29.24	-29	37	36	+3	S	1	b	*	45	33	0.17		
Yarmouth ...	29.47	40	SSW	4	bc	29.28	-26	39	38	+2	SSW	3	bc	3	44	35	0.11		
Cuxhaven ...	29.64	37	SW	2	0	29.63	+08	37	37	-4	SSE	2	b	*	41	35	-		
Berlin ...	29.74	40	SSW	2	T	29.71	-02	39	37	+3	SSW	2	0	*	41	?	0.04		
Wiesbaden ...	*	*	*	*	*	29.73	-05	41	40	+4	C	1	0	*	43	36	0.39		
Munich ...	29.80	35	Z	0	0	29.83	-11	35	35	+1	W	4	T	*	39	34	0.16		
FRANCE & NETHERLANDS.																			
The Helder ...	29.56	36	S	1	f	29.41	-15	39	38	-4	S	3	c	2	43	36	-		
Brussels ...	*	*	*	*	*	29.48	-18	42	41	-2	SSW	7	T	*	45	39	0.04		
Cape Gris Nez...	29.52	43	SSW	8	0	29.32	-29	44	44	0	SW	9	T	*	46	43	0.20		
Paris ...	29.71	42	SSW	3	b	29.59	-14	43	42	-1	SW	5	T	*	50	40	0.04		
Brest ...	29.54	49	WSW	8	0	29.64	+02	48	46	0	NW	8	0	*	52	41	0.24		
Lorient ...	29.63	48	W	8	f	29.68	+92	49	46	+1	WNW	7	c	4	50	43	0.15		
Rochefort ...	29.84	49	WSW	7	0	29.82	-01	50	48	+1	WSW	7	c	3	52	43	0.12		
Belfort ...	29.80	38	W	8	S	29.79	-01	32	34	-10	W	1	bc	*	46	33	1.10		
Lyons ...	29.53	48	WSW	3	0	29.88	+01	39	37	-10	S	3	bc	*	51	38	0.16		
Nice ...	29.93	49	E	4	T	29.85	-28	48	45	+5	W	3	T	4	48	?	0.53		
Perpignan ...	29.91	50	NW	3	0	29.96	+06	41	36	-5	W	1	b	*	54	36	0.04		
Biarritz ...	29.93	52	W	4	b	29.91	+02	51	46	+5	SW	4	0	6	57	45	0.12		
PENIN. SULA.																			
Corunna ...	*	*	*	*	*	30.25	+13	54	53	+2	W	3	bc	6	54	50	-		
Lisbon ...	30.24	53	WSW	4	b														

For Explanation of Columns, see p. 4.

WEATHER CHARTS

for 8 a.m. on *Thursday, 15th December, 1887.*

BAROMETER, WIND & SEA.

(Explanation of Map)

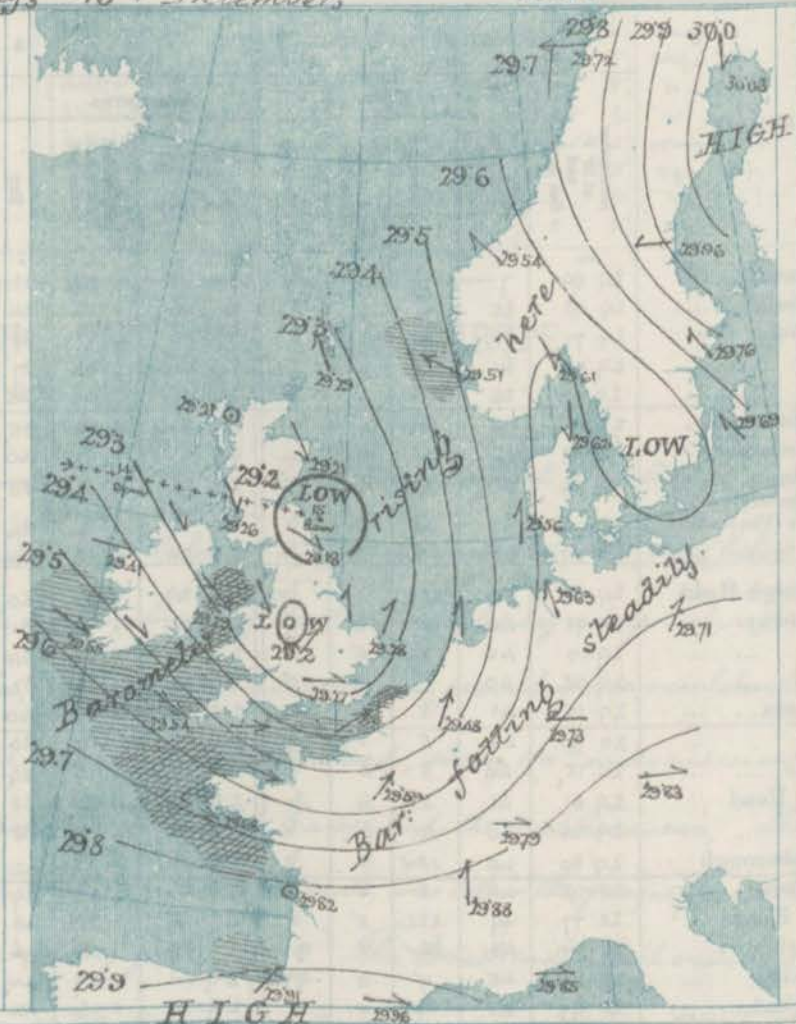
Barometer—Isobars are drawn for each tenth of an inch. Changes since previous morning are stated in words.
Wind—Arrows show the prevalent winds. They fly with the wind and their barbs and feathers refer to force, thus—
 *— forces above 10, — forces 8 to 10,
 — forces 5 to 7, — forces 1 to 4,
 ○ = dead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

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

MEAN HEIGHT of the BAROMETER

at 8 a.m. for the month of December.
 During the 10 Years 1871—1880.

STATIONS.	MEAN READINGS.
	in.
Sumburgh Head	29.680
Stornoway	29.701
Wick	29.713
Nairn	29.741
Aberdeen	29.750
Leith	29.800
Shields	29.880
York	29.877
Ardrossan	29.910
Donaghadee	29.832
Holyhead	29.858
Liverpool	29.882
Valencia	29.879
Roche's Point	29.880
Pembroke	29.897
Scilly	29.943
Hurst Castle	29.938
Dover	29.942
LONDON	29.984
Oxford	29.987
Cambridge	29.996
Yarmouth	29.902



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

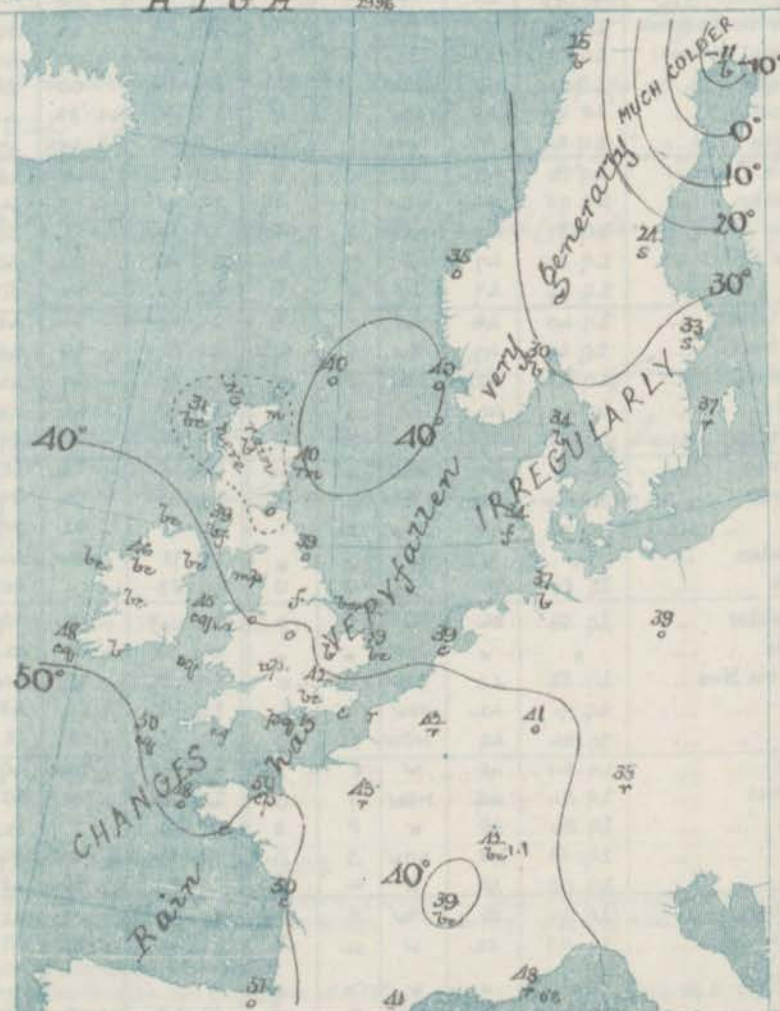
Temperature—Isotherms are drawn for each 10° changes since previous morning are stated in words.
Weather—is shown by Letters of the Beaufort Scale.
Rainfall—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

for the month of December.

STATIONS.	TEMPERATURE				RAINFALL (Inches)
	Daily Max.	Daily Min.	A.T. & M. Dry.	A.T. & M. Wet.	
Sumburgh Head	42.0	34.5	39.0	37.6	4.33
Stornoway	44.8	38.5	38.0	37.8	5.05
Wick	42.0	32.1	37.8	36.4	3.18
Nairn	41.5	32.8	36.9	35.4	2.08
Aberdeen	41.8	32.9	36.9	35.8	3.24
Leith	44.3	33.6	38.4	37.0	2.01
Shields	42.8	34.3	39.2	36.9	2.74
York	42.5	33.9	38.2	35.4	2.45
Ardrossan	47.0	33.1	40.1	38.3	4.05
Donaghadee	46.7	35.1	40.1	39.1	2.84
Holyhead	46.8	30.6	42.0	41.3	3.84
Liverpool	43.6	35.7	39.1	37.4	2.70
Valencia	50.0	40.0	44.7	41.8	5.82
Roche's Point	47.7	39.3	42.9	41.4	4.74
Pembroke	47.1	40.4	43.7	42.6	4.08
Scilly	49.8	43.0	47.2	45.3	4.10
Hurst Castle	45.5	36.5	40.6	39.9	2.84
Dover	44.2	36.5	40.0	38.8	3.20
LONDON	44.5	33.0	38.1	37.1	2.14
Oxford	43.3	33.6	37.3	36.6	2.13
Cambridge	43.3	31.8	36.3	35.6	1.99
Yarmouth	42.2	33.8	37.9	37.2	2.96

NOTE—The Temperature means are for the 10 years 1871—80, the Rainfall means are mainly those for the 10 years 1866—83.



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30.2 ins. and upwards over Portugal; relatively high 30.0 ins. and upwards over the Gulf of Bothnia.
 Lowest, 29.2 ins. and less, ^{in depression} lying off the north-east of England, and also in a secondary disturbance lying over our NW coasts.
 Gradients still rather steep over our western and southern coasts. Barometer rising except in southeast.

TEMPERATURE

Highest, 54° at Lisbon, 51° at Biarritz, 50° at Seilly, Jersey and Rochefort, 49° at Lorient, and 48° at Brest and Nice.
 Lowest, -11° F at Haparanda, +24° at Hinnösand, 25° at Bodo, 30° at Saender, 31° at Storöfjär and 32° at Åminne.

WIND

Strong to gale from the NWth on our west and south-west coasts, and from W. in the Channel.
 Moderate Sth over the east coast of England and the greater part of the North Sea; SEth in Scandinavia.
 Light from NW. in Scotland.

WEATHER

Fine at many of our western and northern stations, but changeable and showery elsewhere.
 Snow is falling in Sweden and rain at Munich and Kiev.
 Heavy squalls of hail and rain occurred over England last night, with lightning in many places.

SEA

High at Holyhead and also on the N. and NW. coasts of France, and rough in the west and south generally.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

Conditions remain very unsettled, and although the depressions noticed above will probably continue to fill up gradually it is not unlikely that other disturbances will shortly appear in the west.

Squally, showery weather is therefore likely to continue on all our west and south coasts, with gales at the more exposed stations.

FORECASTS

For the 24 hours ending at NOON on 16th DEC^r

1887.

DISTRICTS.

FORECASTS.

0	SCOTLAND NORTH	Light breezes, chiefly NW th ; changeable, some cold showers.
1	SCOTLAND EAST	-----D°-----D°-----D°-----
2	ENGLAND N.E.	-----D°-----D°-----D°-----
3	ENGLAND EAST	SW th winds, fresh; changeable, some cold showers.
4	MIDLAND COUNTIES	-----D°-----D°-----D°-----
5	ENGLAND SOUTH	W th winds, strong, a gale on coast; squally, some cold showers.

DISTRICTS.

FORECASTS.

6	SCOTLAND WEST	NW th winds, freshening; squally, some showers.
7	ENGLAND N.W.	NW th to W th strong winds and gales; squally, showery.
8	ENGLAND S.W.	-----D°-----D°-----D°-----
9	IRELAND NORTH	NW winds, backing later, fair to unsettled and some rain.
10	IRELAND SOUTH	-----D°-----D°-----D°-----

WARNINGS

The S. cone was hoisted last evening in districts 0 to 3, but has been lowered this morning in districts 0 to 3. It is still flying in districts 5, 6, 7, 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 N. and S.E. is likely to veer towards S. or S.W., the South Cone is hoisted in preference to the North Cone.

YESTERDAY'S 2 P.M. REPORTS.

	Bar.	Dry.	Wet.	Wind.	Wes.	Sea.		Bar.	Dry.	Wet.	Wind.	Wes.	Sea.
Skudesnaes ...	29.45	36	35	ES 6	0	5	Holyhead ...	29.42	45	43	SSW 7	cmg p	7
Sumburgh Head ...	29.16	40	39	S 1	0	4	Valencia ...	29.06	49	44	W 6	cmg p	5
Stornoway ...	28.95	41	40	SE 6	0 m	5	Scilly ...	29.36	49	47	WSW 8	0 q	6
Aberdeen ...	29.16	39	37	S 4	6 c	2	Dungeness ...	29.52	47	43	SW 6	c	4
Shields ...	29.34	40	38	S 2	c	2	London ...	29.48	46	43	S 4	c	*
Ardrossan ...	29.03	44	42	S 5	6 c	4	Yarmouth ...	29.49	44	42	S 4	b	3
Malin Head ...	28.85	38	38	S 4	0	5	Jersey ...	29.57	49	45	SW 6	6 c	5
Mullaghmore ...	28.82	42	39	SSW 6	6 c	7	Rochefort ...	29.46	50	47	W 5	6 c	2
Belmullet ...	28.77	46	43	WSW 7	0	*							

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

Yesterday morning's observations showed that the high pressure area referred to as prevailing over Central and Southern Europe on Tuesday was moving south-eastward, while a new one in the far north showed little change. Depressions were still passing north-eastwards over Northern Europe and the British Isles, but the small one over Southern Russia had disappeared entirely. SW² to SE² winds were reported over all the northern countries with constantly changing rain weather, while both in the south of France and over Finland and the Gulf of Bothnia the wind was E², but the weather somewhat unsettled. It was only over eastern and south-eastern Europe and the eastern and southern parts of the Mediterranean that the weather was fair. The highest temperatures over the Mediterranean had risen, while those over France and England had become less high, but had spread further to the eastward than on the 13th; sharp frost was, nevertheless, still prevalent over Austria, Russia, Lapland, and Sweden, and had become more severe in most places. The lowest individual values were 9° at Archangel and Haparanda, 12° at Kuopio and Kiina, 14° at Uleaborg, 15° at Hango and Hermanstad, 17° at Helsingfors, 18° at St Petersburg, 22° at Helsingfors and Trieste, 24° at Tharso and Nislaif, and 31° at Fander; the highest were 62° at Malta, 60° at Palma, 58° at Algiers, 56° at Sfor, Cagliari, and San Fernando, 54° at Barcelona and Sanguinetti, 53° at Biarritz, 47° at Valencia and Jersey, and 46° at Paris.

During the day equally rough unsettled weather was prevalent over the United Kingdom and neighbourhood, with heavy squalls of rain and hail, and with thunder in some places, lightning in many, nor was there any sign of improvement.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

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

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

+ The evening observations are taken at 6 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8 p.m. In Sweden and Denmark, the observations are taken at 3 p.m. (Christiania time).

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

DAILY WEATHER REPORT.

for Friday 16th December

1887.

Issued by the Meteorological Office, 116, Victoria Street, London, R. H. SCOTT, Secretary.

Issued by the Meteorological Office, 116, Victoria Street, London, R. H. SCOTT, Secretary.

+ YESTERDAY EVENING.																	8 A.M. TO DAY.										PAST 24 HOURS.		
STATIONS.	Barometer at 32° F. and Sea Level.	Temp. in Shade.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Weather.	Sea (0 to 9.)	SHADE TEMP.		Amount of Rainfall.												
			Dir.	Force. (0 to 12.)		Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Dir.	Force. (0 to 12.)			Max.	Min.													
SCANDINAVIA.																													
Haparanda ...	29.18	-12	N	2	b	30.16	+ .08	-4	-4	+ 7	2	0	bc	*	12	-15	—												
Hernösand ...	29.93	27	ENE	4	s	29.84	- .12	28	27	+ 4	ENE	2	0	*	28	21	0.20												
Stockholm ...	29.74	33	Z	0	f	29.73	- .03	32	32	- 1	Z	0	f	*	24	27	0.16												
Wisby ...	29.75	38	SE	4	r	29.74	+ .05	35	34	- 2	NW	4	0	*	41	30	0.16												
Bodö ...	29.78	27	ENE	6	0	29.74	+ .02	25	22	0	ENE	6	0	3	27	25	—												
Christiansund...	29.36	33	ESE	4	0	29.41	- .13	34	31	- 1	ESE	4	0	3	36	30	—												
Skudesnaes ...	29.79	40	ESE	6	0	29.26	- .25	41	37	+ 1	ESE	8	0	6	?	39	—												
Christiania Fjord (Fjorder)	29.72	30	NNW	2	0	29.64	+ .03	33	31	+ 3	ENE	4	0	1	?	27	—												
Skagen (The Scaw)	29.68	34	S	2	0	29.56	- .06	38	38	+ 4	S	3	0	2	?	32	—												
Faßö ...	29.56	36	ESE	4	r	29.54	- .02	39	39	+ 5	S	4	f	*	39	34	—												
BRITISH ISLANDS.																													
Sumburgh Head	29.27	44	SSE	3	0	28.87	- .42	41	41	+ 1	SSE	4	r	6	44	39	0.27												
Stornoway ...	29.12	43	S	5	0	28.73	- .48	42	42	+ 11	S	2	c	2	44	29	0.20												
Wick ...	29.20	41	S	1	0	28.79	- .47	40	40	+ 6	SW	2	bc	1	41	34	0.05												
Nairn ...	29.21	32	Z	0	bc	28.83	- .39	37	35	+ 5	Z	0	c	1	42	32	0.01												
Aberdeen...	29.29	25	W	1	bc	28.29	- .32	38	37	- 2	SSW	3	c	2	43	34	0.15												
Leith ...	29.32	40	W	1	bc	28.91	- .27	45	44	+ 6	SW	1	nm	*	48	37	0.10												
Shields ...	29.39	39	SW	1	m	29.03	- .15	45	44	+ 6	SSW	1	c	2	49	37	0.14												
Spurn Head ...	29.46	40	W	3	b	29.19	- .02	48	47	+ 10	SSW	6	bape	3	48	37	0.08												
York ...	29.45	38	W	1	b	29.14	- .08	50	48	+ 12	SW	5	c	*	50	35	0.11												
Loughborough	29.54	40	SSE	1	0	29.28	+ .08	51	49	+ 9	SW	5	0	*	51	39	0.16												
Ardrossan ...	29.28	45	SSW	3	c	28.91	- .35	46	45	+ 7	SSW	5	0	4	48	38	0.29												
Malin Head ...	29.13	43	S	5	0	28.83	- .45	41	41	- 2	WSW	5	org	4	46	40	0.37												
Mullaghmore ...	29.18	46	SSW	8	rg	28.97	- .37	44	43	- 2	SW	7	upg	6	50	42	0.53												
Belmullet ...	29.16	50	NNW	7	r	28.97	- .44	46	44	+ 2	? NW	8	olthp	*	50	42	0.58												
Donaghadee ...	29.34	44	SSW	4	c	28.98	- .31	45	43	+ 3	SSW	5	b	3	48	38	0.17												
Barrow-in-Furness	29.43	43	S	3	c	29.09	- .44	47	46	+ 8	SW	6	p	*	48	39	0.42												
Liverpool (Bidston)	29.49	43	WSW	3	0	29.16	- .08	49	45	+ 9	SW	7	b	5	52	40	0.10												
Holyhead ...	29.47	46	SW	5	0	29.15	- .14	49	48	+ 4	SW	8	cmg	6	50	45	0.13												
Parsonstown ...	29.37	47	S	2	0	29.18	- .26	44	42	+ 3	SW	2	bc	*	51	40	0.16												
Valencia ...	29.40	52	SSE	7	rw	29.30	- .25	48	44	+ 1	WSW	7	cu	6	53	44	0.24												
Roche's Point...	29.48	50	WSW	4	r	29.33	- .19	48	46	+ 2	W	5	bc	4	50	44	0.25												
Pembroke ...	29.56	49	SW	4	0	29.31	- .12	50	49	+ 3	SW	7	b	7	51	47	0.22												
Scilly ...	29.67	50	SW	6	0	29.50	- .04	51	50	+ 1	SW	6	0	6	51	48	0.07												
Prawle Point ...	29.72	47	W	5	bc	29.57	+ .05	51	51	+ 5	SW	7	mr	7	51	?	0.19												
Jersey ...	29.77	49	NNW	4	bcn	29.68	+ .15	52	51	+ 2	SW	6	omp	5	52	48	0.04												
Hurst Castle ...	29.66	45	W	4	b	29.49	+ .15	50	50	+ 5	WSW	7	nm	5	50	43	0.10												
Dungeness ...	29.58	46	NNW	4	c	29.52	+ .19	49	49	+ 3	SW	6	r	5	49	42	0.01												
London ...	29.60	41	NW	2	bf	29.47	+ .20	52	50	+ 10	SW	5	rg	*	52	40	0.03												
Oxford ...	29.63	41	W	3	c	29.41	+ .16	51	50	+ 8	SSW	5	rg	*	52	41	0.02												
Cambridge ...	29.56	42	NW	1	0	29.36	+ .12	51	50	+ 14	SW	3	r	*	52	35	0.02												
Yarmouth ...	29.50	40	W	3	am	29.39	+ .11	49	48	+ 10	SSW	5	0	4	49	37	0.03												
Cuxhaven ...	29.59	39	SSE	3	f	29.66	+ .03	41	40	- 4	S	3	0	*	41	?	0.12												
Berlin ...	29.74	37	SW	1	c	29.79	+ .08	38	37	- 1	SW	2	0	*	43	36	—												
Wiesbaden ...	*	*	*	*	*	29.90	+ .17	43	41	+ 2	SW	2	0	*	45	41	0.08												
Munich ...	29.86	35	SW	3	0	30.04	+ .21	38	36	+ 3	W	5	0	*	39	34	0.12												
FRANCE & NETHERLANDS.																													
The Helder ...	29.52	42	SSW	1	c	29.57	+ .09	43	43	+ 4	SSW	8	0	4	43	39	0.08												
Brussels ...	*	*	*	*	*	29.67	+ .19	44	44	+ 2	SSW	4	r	*	45	42	0.12												
Cape Gris Nez...	29.47	43	SSW	8	0	29.54	+ .22	46	46	+ 2	SSW	8	r	7	50	43	0.08												
Paris ...	29.76	44	WSW	3	bc	29.80	+ .21	45	44	+ 2	SW	5	0	*	49	41	0.04												
Brest ...	29.84	50	NNW	5	0	29.74	+ .10	50	46	+ 2	SW	9	r	7	52	43	0.08												
Lorient ...	29.89	50	W	5	0	29.84	+ .16	52	51	+ 3	WSW	7	0	6	?	45	0.04												
Rochefort ...	29.99	49	NNW	5	r	30.07	+ .25	52	51	+ 2	WSW	7	r	3	54	45	0.08												
Belfort ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*												
Lyons ...	29.95	44	SSW	5	bc	30.14	+ .26	41	40	+ 2	SSW	3	0	*	48	38	0.04												
Nice ...	29.89	45	W	5	b	30.03	+ .18	44	39	- 4	E	1	b	2	54	39	—												
Perpignan ...	30.06	49	Z	0	c	30.20	+ .24	44	41	+ 3	SW	3	0	*	60	41	—												
Biarritz ...	30.08	54	W	7	r	30.16	+ .25	53	51	+ 2	SW	4	0	5	59	50	0.08												
SPAIN.																													
Corunna ...	*	*	*	*	*	30.17	*	55	54	*	S	4	bc	4	57	52	0.08												
Lisbon ...	30.32	54	NNW	3	b	30.34	+ .09	51	51	- 3	Z	0	f	5	59	50	—												

For Explanation of Columns, see p. 4.

WEATHER CHARTS

for 8 a.m. on

Friday, 16th December,

1887.

BAROMETER, WIND & SEA.

(Explanation of Map)

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

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

* — forces above 10; — forces 8 to 10;

— forces 5 to 7; — forces 1 to 4;

○ — dead calm.

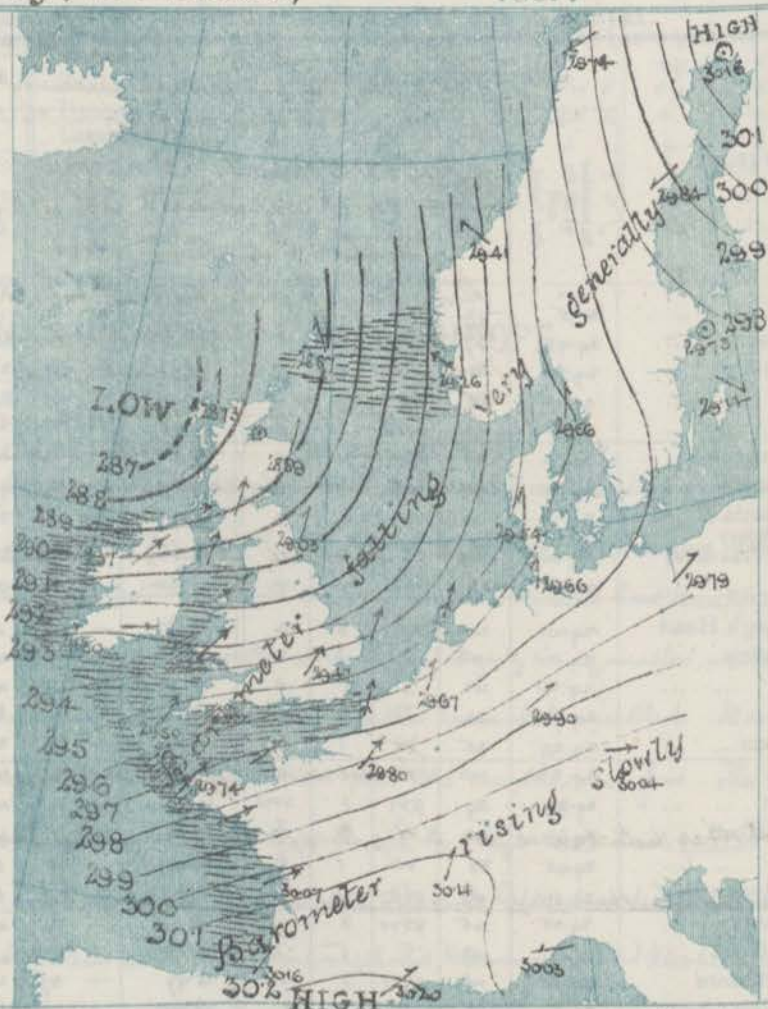
Sea Disturbance — where considerable is shown thus

— Rough. — High.

MEAN HEIGHT of the BAROMETER

at 8 a.m. for the month of December
During the 10 Years 1871—1880.

STATIONS.	MEAN READINGS.
Sumburgh Head	29.680
Stornoway	29.701
Wick	29.713
Nairn	29.741
Aberdeen	29.750
Leith	29.800
Shields	29.886
York	29.877
Ardrossan	29.810
Donaghadee	29.832
Holyhead	29.858
Liverpool	29.882
Valencia	29.879
Roche's Point	29.889
Pembroke	29.897
Scilly	29.943
Hurst Castle	29.938
Dover	29.942
LONDON	29.934
Oxford	29.987
Cambridge	29.926
Yarmouth	29.902



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.

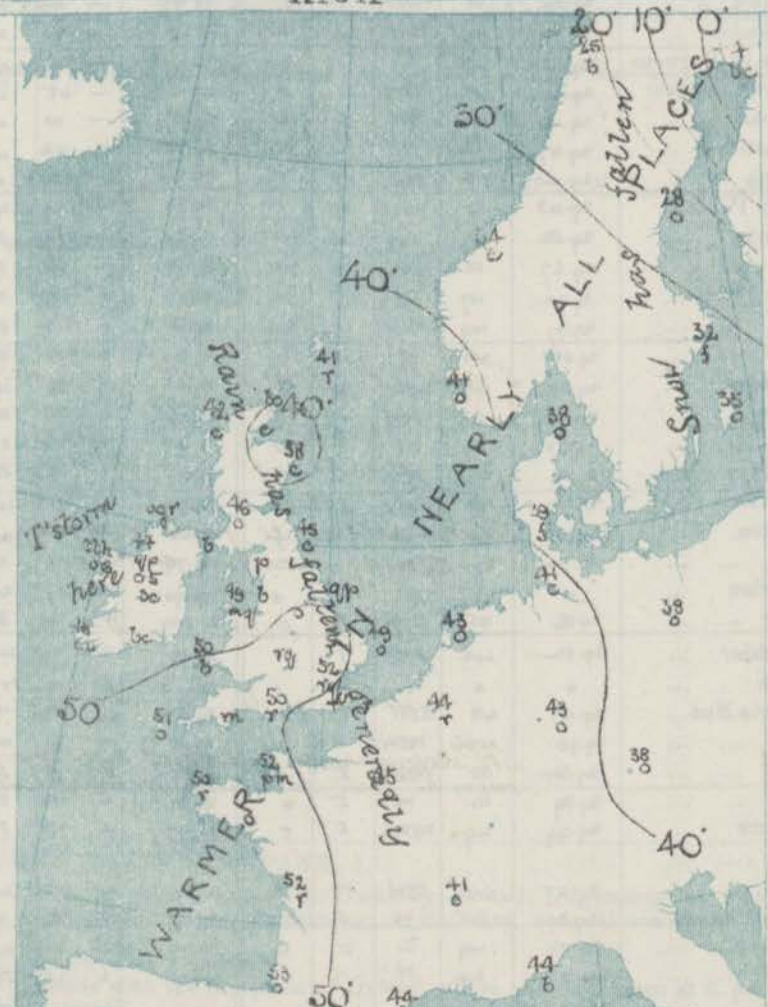
Rainfall — A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

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	42.0	34.5	39.0	37.6	4.33
Stornoway	44.8	33.5	38.9	37.8	5.06
Wick	42.0	32.1	37.8	36.4	3.18
Nairn	41.5	32.8	36.0	35.4	2.08
Aberdeen	41.8	32.9	36.0	35.3	3.34
Leith	44.3	33.8	38.4	37.0	2.01
Shields	42.8	34.3	39.2	36.9	2.74
York	42.5	31.9	38.2	35.4	2.45
Ardrossan	47.0	36.1	40.1	38.3	4.04
Donaghadee	46.7	36.1	40.1	39.1	2.84
Holyhead	46.8	36.0	42.9	41.3	3.84
Liverpool	48.6	35.7	39.1	37.4	2.70
Valencia	50.0	40.0	44.7	41.8	6.82
Roche's Point	47.7	39.3	42.0	41.4	4.74
Pembroke	47.1	40.4	43.7	42.6	4.06
Scilly	49.8	43.6	47.2	45.3	4.10
Hurst Castle	45.6	36.5	40.6	39.9	2.84
Dover	44.2	36.5	40.0	38.8	3.20
LONDON	44.5	33.9	38.1	37.1	2.14
Oxford	43.9	33.6	37.2	36.6	2.73
Cambridge	43.3	31.8	36.3	35.0	1.99
Yarmouth	42.2	33.8	37.9	37.2	2.05

Note — The Temperature means are for the 10 years 1871—80, the Rainfall means are mainly those for the 10 years 1866—83.



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest 30.3 ins. and upwards over Portugal; 30.1 ins. and upwards in the North of Sweden.
 Lowest 28.7 ins. and less in a depression lying off the northwest of Scotland.
 Gradients rather steep excepting in North. Barometer falling generally but beginning to rise again in southwest.

TEMPERATURE

Highest 53° at Biarritz, 52° at Jersey, London, Lorient and Rochefort and 51° at Lundy and Bunkle Point.
 Lowest -11° at Naparanda, 25° at Bodo, 28° at Hernösand and 32° at Stockholm; lowest in our Islands 34° at Naime.

WIND

Strong to a gale from the SW^W over the greater part of Ireland, England and the West and North of France.
 Moderate from SW. over Germany and East of France.
 Moderate from S. in Denmark and Scotland; E. in Scandinavia.

WEATHER

Fair at several of our western and northern stations but showery in the North of Ireland, with thunder and lightning at Belmullet.
 Squally and rainy in the South and southeast of England and the North of France.
 Dull at most of the Continental stations, with fog at Stockholm and Lüne.

SEA

High at Pembroke, Bunkle Point and Brest, and rough on all our western and southern coasts.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The depression off the northwest of Scotland will probably travel away to the northward, but other disturbances are likely to approach our West and southwest coasts shortly, so that no permanent improvement in the weather is to be expected at present.

FORECASTS

For the 24 hours ending at NOON on 17th December 1887.

DISTRICTS.

FORECASTS.

0	SCOTLAND NORTH	S ^W winds, varying in force; changeable; some rain.
1	SCOTLAND EAST	.....D.....D.....D.....
2	ENGLAND N.E.	S ^W and S ^W winds, fresh or strong; squally and rainy to fair.
3	ENGLAND EAST	.....D.....D.....D.....
4	MIDLAND COUNTIES	.....D.....D.....D.....
5	ENGLAND SOUTH	S ^W strong winds and gales; squally and rainy at first, some improvement later.

DISTRICTS.

FORECASTS.

6	SCOTLAND WEST	S ^W winds, strong to moderate; squally, showery.
7	ENGLAND N.W.	.....D.....D.....D.....
8	ENGLAND S.W.	S ^W strong winds and gales; squally, showery.
9	IRELAND NORTH	S ^W and W ^W winds, strong; squally, showery.
10	IRELAND SOUTH	.....D.....D.....D.....

WARNINGS

The SOUTH CONE is still flying in districts 0, 1, 5 and 8.

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

YESTERDAY'S 2 P.M. REPORTS.

	Bar.	Dry.	Wet.	Wind.	Wes.	Sea.		Bar.	Dry.	Wet.	Wind.	Wes.	Sea.
Skudesnaes ...	29.54	39	35	ESE	6	4	Holyhead ...	29.46	45	44	W	5	6
Sumburgh Head ...	29.30	42	41	SSE	1	4	Valencia ...	29.52	49	48	SW	5	5
Stornoway ...	29.24	38	38	SW	2	2	Scilly ...	29.66	50	48	WNW	6	6
Aberdeen ...	29.28	39	38	WNW	1	2	Dungeness ...	29.41	46	44	WNW	5	4
Shields ...	29.22	41	39	W	2	2	London ...	29.46	47	44	WNW	5	4
Ardrossan ...	29.24	42	42	WSW	2	1	Yarmouth ...	29.36	43	42	W	2	4
Malin Head ...	29.32	44	43	SSW	3	3	Jersey ...	29.67	49	46	NW	4	4
Mullaghmore ...	29.37	46	44	SSW	5	3	Rochefort ...	29.91	51	48	WNW	5	3
Belmullet ...	29.35	46	44	SW	3	*							

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

The Continental information is not to hand.

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 17th December 1887.

Issued by the Meteorological Office, 116, Victoria Street, London, A. H. SCOTT, Secretary.

Issued by the Meteorological Office, 116, Victoria Street, London, R. H. SCOTT, Secretary.

STATIONS.	+ YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
	Barometer at 32° F. and Sea Level.	Temp. in Shade.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Weather.	Sea. (0 to 9.)	SHADE TEMP.		Amount of Rainfall.	
			Dir.	Force, (0 to 12.)		Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Dir.	Force, (0 to 12.)			Max.	Min.		
SCANDINAVIA.																		
Haparanda ..	29.91	9	NE	4	S	29.76	- .40	9	9	+ 18	NE	4	0	*	10	- 11	0.16	
Hernösand ...	29.69	23	ENE	2	0	29.88	- .46	22	22	0	NE	6	S	*	30	19	0.24	
Stockholm ...	29.62	32	E	2	0	29.84	- .39	38	37	+ 6	SE	0	0	*	?	30	0.20	
Wisby ...	29.62	39	S	4	0	29.85	- .39	41	41	+ 6	SW	4	0	*	41	32	0.20	
Bodö ...	29.56	22	ESE	1	0	29.44	- .30	19	19	- 6	ESE	9	0	5	25	18	-	
Christiansund...	28.98	39	SE	1	0	28.87	- .54	38	36	+ 4	SE	3	0	2	39	32	-	
Skudesnaes ...	28.88	46	SSE	8	1	28.95	- .31	43	41	+ 2	SW	6	1	5	?	41	-	
Christiania Fjord (Fjorder)	29.12	36	ESE	8	3	29.03	- .61	42	36	+ 9	S	5	0	4	?	?	0.63	
Skagen (The Scaw)	29.12	41	S	5	0	29.12	- .44	41	40	+ 3	SW	3	0	3	41	37	0.32	
Fanö ...	29.26	42	SW	4	0	29.25	- .29	42	42	+ 3	SW	4	0	*	43	39	0.28	
BRITISH ISLANDS.																		
Sumburgh Head	28.72	40	SE	3	0	28.79	- .08	42	42	+ 1	SE	0	0	4	45	37	0.06	
Stornoway ...	28.73	43	W	5	1	29.12	+ .39	39	39	- 3	W	10	1	7	45	37	0.70	
Wick ...	28.78	40	S	2	0	28.90	+ .11	40	40	0	NW	7	1	4	42	37	0.12	
Nairn ...	28.80	41	SW	2	0	29.06	+ .23	40	38	+ 3	SW	5	0	2	43	36	0.14	
Aberdeen...	28.85	40	SW	1	0	28.98	+ .09	43	38	+ 5	W	8	0	3	44	37	0.05	
Leith ...	28.95	42	SW	3	0	29.20	+ .29	40	38	- 5	W	5	0	*	46	39	0.08	
Shields ...	29.04	45	SW	4	0	29.30	+ .27	40	38	- 5	SW	7	0	2	48	39	0.01	
Spurn Head ...	29.21	45	SW	6	0	29.44	+ .25	42	40	- 6	WSW	8	0	3	50	40	-	
York ...	29.17	47	WSW	5	0	29.49	+ .35	42	38	- 8	W	5	0	*	51	39	0.03	
Loughborough	29.32	45	WSW	4	0	29.64	+ .36	40	37	- 11	W	4	0	*	51	40	-	
Ardrossan ...	29.01	45	WSW	4	0	29.38	+ .47	44	40	- 2	WSW	8	0	5	46	39	0.16	
Malin Head ...	29.04	44	W	6	0	29.46	+ .63	43	39	+ 2	NW	5	0	6	47	31	0.27	
Mullaghmore ...	29.22	45	W	7	0	29.51	+ .64	44	41	0	WSW	7	0	6	47	39	0.26	
Belinulet ...	29.30	44	W	9	0	29.69	+ .72	48	45	+ 2	W	6	0	*	48	40	0.32	
Donaghadee ...	29.19	43	W	6	0	29.53	+ .55	40	37	- 5	W	6	0	*	46	38	0.15	
Barrow-in-Furness	29.14	46	WSW	6	1	29.51	+ .42	43	39	- 4	NW	7	0	*	49	42	0.09	
Liverpool (Bldston)	29.22	46	WSW	6	0	29.58	+ .42	42	39	- 7	W	8	0	6	49	41	0.03	
Holyhead ...	29.23	48	SW	6	0	29.66	+ .51	43	40	- 6	W	8	0	7	49	42	0.01	
Parsonstown ...	29.34	44	WSW	2	0	29.76	+ .58	38	36	- 6	WSW	2	0	*	48	37	0.06	
Valencia ...	29.53	46	WSW	6	0	29.87	+ .57	44	42	- 2	W	5	0	5	51	41	0.13	
Roche's Point...	29.48	42	W	6	1	29.84	+ .51	43	41	- 5	W	4	0	4	50	40	0.12	
Pembroke ...	29.39	49	WSW	7	0	29.81	+ .50	46	46	- 4	W	7	0	6	50	44	0.12	
Scilly ...	29.87	50	WSW	7	0	29.97	+ .47	48	45	- 3	WSW	6	0	7	52	43	0.08	
Prawle Point ...	29.53	48	W	5	0	29.96	+ .45	44	42	- 7	W	5	0	5	52	40	0.16	
Jersey ...	29.66	49	W	6	0	30.03	+ .35	47	42	- 5	WSW	5	0	5	53	46	0.36	
Hurst Castle ...	29.50	48	W	6	0	29.86	+ .37	44	42	- 6	W	6	0	4	50	40	0.03	
Dungeness ...	29.49	49	WSW	6	0	29.80	+ .28	42	39	- 7	WSW	6	0	4	51	41	0.13	
London ...	29.46	47	WSW	4	0	29.78	+ .31	40	37	- 12	WSW	5	0	*	53	40	0.10	
Oxford ...	29.45	45	WSW	4	0	29.78	+ .37	38	36	- 13	WSW	3	0	*	52	38	0.19	
Cambridge ...	29.39	45	SW	4	0	29.86	+ .30	40	38	- 11	SW	4	0	*	54	38	0.02	
Yarmouth ...	29.38	45	WSW	4	0	29.58	+ .19	40	37	- 9	W	5	0	3	50	38	0.07	
Cuxhaven ...	29.42	41	SSW	6	1	29.43	- .23	45	45	+ 4	SW	4	0	*	45	41	0.26	
Berlin ...	29.70	44	SSW	5	1	29.66	- .23	45	44	+ 7	WSW	2	1	*	45	?	0.35	
Wiesbaden ...	*	*	*	*	*	29.75	- .15	46	42	+ 3	W	5	0	*	50	43	0.12	
Munich ...	29.99	37	SW	3	0	29.91	- .13	41	37	+ 3	W	6	1	*	45	36	0.04	
FRANCE & NETHERLANDS.																		
The Helder ...	29.40	45	SW	4	0	29.80	- .30	44	40	+ 1	W	7	0	4	46	43	0.08	
Brussels ...	*	*	*	*	*	29.76	+ .09	42	41	- 2	WSW	7	1	*	51	41	0.63	
Cape Gris Nez...	?	49	SW	8	0	29.74	+ .20	44	41	- 2	WSW	8	0	3	50	?	0.12	
Paris ...	29.75	51	SW	5	1	29.96	+ .16	45	41	0	WSW	4	0	*	53	43	0.20	
Brest ...	29.73	50	W	9	0	30.15	+ .41	48	45	- 2	NW	7	0	7	54	41	-	
Lorient ...	29.80	51	W	7	0	30.16	+ .32	48	44	- 4	NW	7	0	7	52	45	0.28	
Rochefort ...	30.01	52	WSW	8	0	30.26	+ .19	50	48	- 2	WSW	7	0	1	55	45	0.24	
Belfort ...	30.02	44	W	3	0	30.06	*	45	44	*	W	3	0	*	47	42	0.08	
Lyons ...	30.12	46	S	3	0	30.17	+ .03	46	43	+ 5	W	4	0	*	50	?	0.04	
Nice ...	30.15	46	E	1	0	30.10	+ .07	42	39	- 2	E	1	0	0	55	39	-	
Perpignan ...	30.23	50	SE	0	0	30.23	+ .03	43	41	- 1	SW	3	0	*	61	?	-	
Biarritz ...	30.13	56	SE	0	0	30.34	+ .18	53	52	+ 0	W	5	1	5	61	52	0.04	
Corunna ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Lisbon ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

For Explanation of Columns, see p. 4.

WEATHER CHARTS

for 8 a.m. on Saturdays, 17th December, 1887.

BAROMETER, WIND & SEA.

(Explanation of Map)

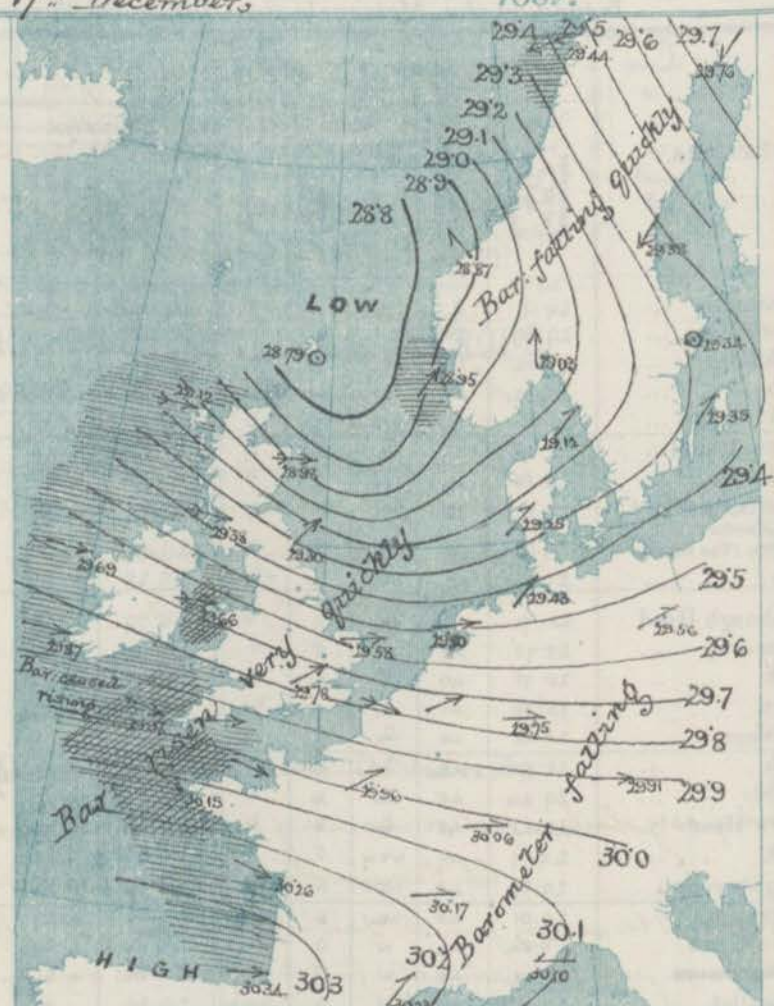
Barometer — Isobars are drawn for each tenth of an inch. Changes since previous morning are stated in words.
Wind — Arrows show the prevalent winds. They fly with the wind and their barbs and feathers refer to force, thus —
 — force above 10, — force 8 to 10,
 — force 5 to 7, — force 1 to 4,
 ○ — dead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

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

MEAN HEIGHT of the BAROMETER

at 8 a.m. for the month of December.
 During the 10 Years 1871—1880.

STATIONS.	MEAN READINGS.
Sumburgh Head	29.680
Stornoway	29.701
Wick	29.713
Nairn	29.741
Aberdeen	29.750
Leith	29.800
Shields	29.836
York	29.877
Ardrossan	29.810
Donaghadee	29.832
Holyhead	29.858
Liverpool	29.882
Valencia	29.879
Roche's Point	29.889
Pembroke	29.907
Scilly	29.943
Hurst Castle	29.938
Dover	29.942
LONDON	29.984
Oxford	29.987
Cambridge	29.926
Yarmouth	29.902



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

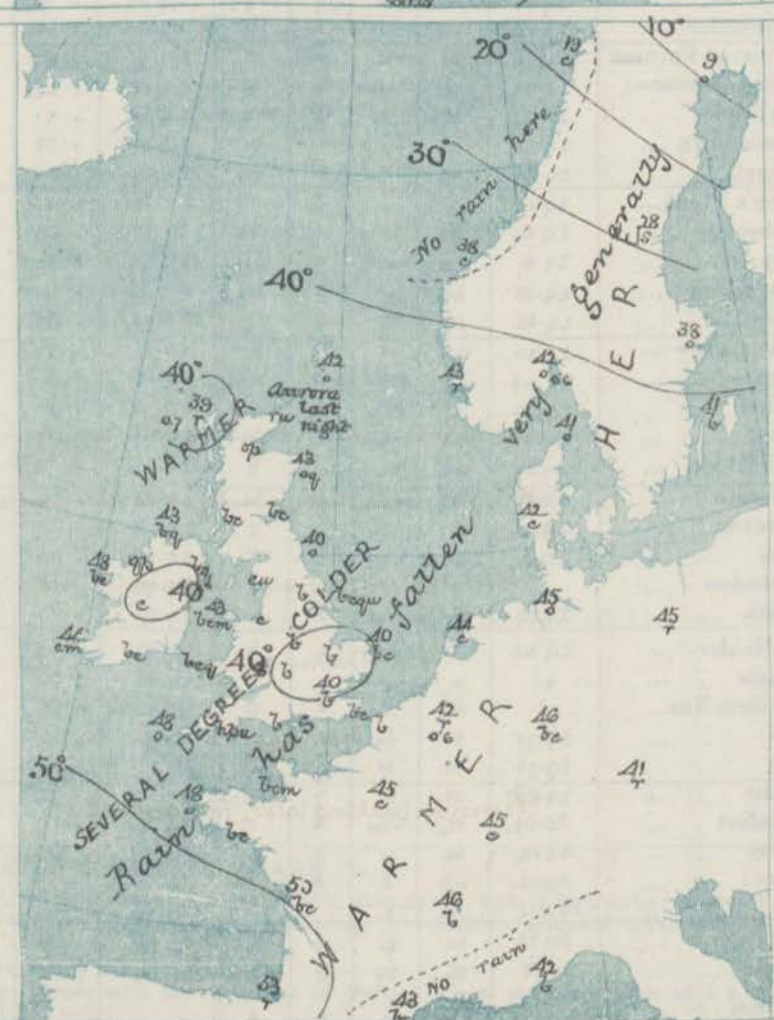
Temperature — Isotherms are drawn for each 10° Changes since previous morning are stated in words.
Weather — is shown by Letters of the Beaufort Scale.
Rainfall — A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted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

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

for the month of December.

STATIONS	TEMPERATURE				RAINFALL (Inches)
	Daily Max	Daily Min.	Avg. at Day.	at Night.	
Sumburgh Head	42.0	34.5	39.0	37.6	4.33
Stornoway	41.8	38.6	38.0	37.8	5.65
Wick	42.0	32.1	37.8	36.4	3.18
Nairn	41.6	32.8	36.9	35.4	2.08
Aberdeen	41.8	32.0	36.9	35.3	3.84
Leith	44.3	33.6	38.4	37.0	2.01
Shields	42.8	34.3	39.2	36.9	2.74
York	42.5	31.9	36.2	35.4	2.45
Ardrossan	47.0	35.1	40.1	38.3	4.04
Donaghadee	46.7	36.1	40.1	39.1	2.84
Holyhead	46.8	36.6	42.9	41.3	3.84
Liverpool	43.6	35.7	39.1	37.4	2.70
Valencia	50.0	40.0	44.7	41.8	5.82
Roche's Point	47.7	39.3	42.9	41.4	4.74
Pembroke	47.1	40.4	43.7	42.0	4.06
Scilly	49.8	43.9	47.2	45.3	4.10
Hurst Castle	45.5	36.5	40.6	39.9	2.84
Dover	44.2	36.5	40.0	38.8	3.20
LONDON	44.5	38.9	38.1	37.1	3.14
Oxford	43.3	33.6	37.3	36.6	2.13
Cambridge	43.3	31.8	36.3	35.6	1.99
Yarmouth	42.2	33.8	37.9	37.2	2.95

Note — The Temperature means are for the 10 years 1871—80, the Rainfall means are mainly those for the 10 years 1866—85.



GENERAL SITUATION AT 8 A.M.

PRESSURE	Highest 30.3 ins. and upwards over Spain and the southwest of France; relatively high 29.4 ins. and upwards in the North of Sweden. Lowest 28.8 ins. and less in a large depression having its centre between the Shetlands and West of Norway. <i>Barometer rising in our Islands and France, but falling elsewhere.</i>
TEMPERATURE	Highest 53° at Biarritz, 50° at Rochepot, 48° at Belmullet, Lill, Brest and Lorient and 47 at Jersey. Lowest 9° at Haparanda, 19° at Bodø, 28° at Hernösand, and 38° at Stockholm, Christiansund, Parsonstown and Oxford.
WIND	Strong from the Westward over our Islands and the North of France, with gales at many of our northern stations. Moderate from S.W. over Denmark and the southern parts of Norway and Sweden. Strong from E or N.E. over the northern parts of Scandinavia.
WEATHER	Fine over the greater part of Ireland, England and France. Cloudy elsewhere with rain in the North of Scotland, as well as in Germany and Belgium and snow at Hernösand. Showers fell yesterday in all parts of the Kingdom, and aurora was seen at Wick during the night.
SEA	High at Stormoway and Holyhead as well as at the mouth of the Channel, and rough in the West and South generally.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The barometer is still rising quickly on our northwest coasts and as the depression in the North is moving very slowly a further increase of wind from the north-westward is probable in the extreme North of Scotland.

At Valentin the recovery of pressure has apparently ceased, and at Babbacombe cirrus is reported to be moving from the west north-westward. These indications seem to point to the advance of a new disturbance from the westward, but at present the size and depth of the system are unknown.

FORECASTS

For the 24 hours ending at NOON on 18th December 1887.

DISTRICTS.	FORECASTS.	DISTRICTS.	FORECASTS.
0 SCOTLAND NORTH	N.W. strong winds and gales; squally, some rain or sleet.	6 SCOTLAND WEST	W. strong winds and gales, moderating later; squally, some showers.
1 SCOTLAND EAST	W. to N.W. winds, strong; squally, some cold showers.	7 ENGLAND N.W.	----- D° ----- D° ----- D° -----
2 ENGLAND N.E.	W. winds, strong; squally, but generally fair.	8 ENGLAND S.W.	W. winds, backing later; fair to cloudy and unsettled.
3 ENGLAND EAST	Same as No 5.	9 IRELAND NORTH	----- D° ----- D° ----- D° -----
4 MIDLAND COUNTIES	Same as No 5.	10 IRELAND SOUTH	----- D° ----- D° ----- D° -----
5 ENGLAND SOUTH	W. winds, backing later; fair generally.	WARNINGS	The south cone is still flying in district 8 and the north cone has been hoisted this morning in district 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.	Dry.	Wet.	Wind.	Wes.	Sea.		Bar.	Dry.	Wet.	Wind.	Wes.	Sea.
Skudeenæs ...	29.01	42	89	SE 8	0	6	Holyhead ...	29.21	48	45	SW 8	bc qm	4
Sumburgh Head ...	28.74	42	41	20 0	6	5	Valencia ...	29.38	50	46	W 6	cm q/p	6
Stornoway ...	28.71	45	45	8 2	6	2	Scilly ...	29.51	52	48	W 6	c	5
Aberdeen ...	28.79	41	40	SW 8	bc	2	Dungeness ...	29.49	50	50	W 7	r	5
Shields ...	29.02	45	43	W 6	c q/p	2	London ...	29.44	53	49	W 5	bc p	*
Ardrossan ...	28.95	45	42	W 4	0	3	Yarmouth ...	29.84	50	49	W 6	c q	4
Malin Head ...	28.92	45	44	W 4	c	4	Jersey ...	29.65	52	50	W 6	0	5
Mullaghmore ...	29.03	47	46	W 7	cm	6	Rochefort ...	30.05	54	53	W 6	0	3
Beimullet ...	29.11	47	44	W 8	c	0							

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

The reports for yesterday (Friday) morning showed that pressure varied from 30.3 ins: and more both over Russia and N Africa, and from 30.1 ins: and more in another high pressure area over Lapland to 28.7 ins: and less off our extreme NW coast, where there was a deep depression, travelling slowly in a northwesterly direction. SW³ gales and strong winds, with high temperature and equally showery weather prevailed over France, the British Isles and North Sea, while SE² and E² winds and fair cold weather were reported over Norway, and variable breezes and snow showers over the Baltic; in South-eastern Europe the weather was fair. Temperature had risen considerably over the western and northern countries, so that the front line had been pushed still further to the eastward, and embraced only Russia, Lapland and the Gulf of Bothnia and Finland. In Lapland and Northern Russia, however, the front had increased in intensity, so that the lowest individual values reported were -4° F at Hafslunda, 0° at Uleaborg, +6° at Kuopio, 19° at St Petersburg and Moscow, 24° at Hermanstadt, 25° at Rode, 25° at Kiev and also at Jap, 28° at Helsingfors, 29° at Arkhangel, the highest, however, were 60° at Malta, 55° at Oran and 50° at Algiers, 50° at Palma, 55° at Langunaires, 54° at Beiruti, 52° at Jersey and in London, and 51° on our southern coast.

Later in the day the thermometer rose to between 51° and 54° over England, and the weather remained in a rough, equally, showery condition generally, but the barometer began to rise decidedly in the west and south.

General Remarks for the 24 hours ended at 8 am on Friday Dec^r 16th 1897.

The reports for Thursday morning showed that pressure varied from 30.3 ins: and more over Morocco and also over the south of Russia, and from 30.0 ins: and more over Finland and the west of Lapland to about 29.2 ins: over the northeast and northwest of England - where there were two depressions lying within a well marked "hollow". Thus, while over Northern Europe cold E² breezes and snow were reported the wind over France and the British Islands was mainly strong to a gale from the W², and there over Holland and Denmark S², with frequent showers. Temperature decreased in the north, but changed irregularly over the British Isles and France; frost prevailed over the whole of the northern and eastern countries. The lowest thermometer readings at 8 am. were -11° F at Archangel, -5° at Kuopio, 11° at Uleaborg, 17° at Hermanstadt, 18° at Arkhangel and Helsingfors, 20° at St Petersburg, 22° at Moscow, 23° at Nancy, 24° at Helsingfors, 25° at Rode, and 28° at Buda-pesth. The highest were 61° at Malta, 57° at Cagliari, 50° at Livorno and Rome, 55° at Palermo, 54° at Lisbon, and 50° at Rochefort, Jersey and Scilly.

Later in the day the barometer again fell in the northwest, and a new depression advancing from the westward, brought in a strong, warm damp current of air from the S² causing the thermometer to rise to 50° and more at many of the British and French stations.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

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

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

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

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

DAILY WEATHER REPORT.

for Sunday 18th Decr. 1887.
Issued by the Meteorological Office, 116, Victoria Street, London, R. H. SCOTT, Secretary.

Issued by the Meteorological Office, 116, Victoria Street, London, R. H. SCOTT, Secretary.																			
STATIONS.	+ YESTERDAY EVENING.						8 A.M. TO DAY.										PAST 24 HOURS.		
	Barometer at 32° F. and Sea Level.	Temp. in Shade.	WIND.		Weather.	Reading at 32° F. and Sea Level.	BAROMETER.		SHADE TEMP.			WIND.		Weather.	Sea. (0 to 2.)	SHADE TEMP.		Amount of Rainfall.	
			Dir.	Force. (0 to 12.)			Inch.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Dir.	Force. (0 to 12.)			Max.	Min.		
SCANDINAVIA.																			
Haparanda ..	29.58	15	NE	4	S	29.53	- .23	16	16	+ 7	NE	4	0	*	16	9	0.16		
Hernösand ...	29.26	33	ENE	2	S	29.34	- .04	28	27	0	ENE	2	0	*	36	19	0.59		
Stockholm ...	29.22	37	Z	0	0	29.30	- .04	37	36	- 1	SSE	2	0	*	41	30	-		
Wisby ...	29.38	40	SW	4	b	29.36	+ .01	40	37	- 1	WSW	4	b	*	43	36	-		
Bodö ...	29.26	22	E	8	0	29.36	- .08	22	21	+ 5	ENE	7	b	4	?	16	-		
Christiansund...	29.00	37	ESE	3	C	29.11	+ .24	36	35	- 2	ESE	1	C	2	38	34	-		
Skudesnaes ...	29.01	41	SSE	1	0	29.21	+ .20	41	39	- 2	WNW	4	0	5	43	41	-		
Christiania Fjord (Fjorder)	29.10	41	SSW	3	r	29.23	00	37	37	- 5	NNE	3	r	5	43	37	0.59		
Skagen (The Scaw)	29.14	40	WSW	3	0	29.07	- .05	39	39	- 2	W	3	0	3	41	29	0.04		
Fanö ...	29.36	40	WSW	6	0	29.37	+ .12	40	39	- 2	W	6	C	*	43	37	0.35		
BRITISH ISLANDS.																			
Sumburgh Head	29.08	41	NNW	5	r	29.21	+ .42	38	35	- 4	NNW	1	b	4	44	36	0.06		
Stornoway ...	29.34	37	NW	3	b	29.34	+ .22	35	34	- 4	NW	3	C	3	42	32	0.15		
Wick ...	29.28	38	NW	5	C	29.27	+ .37	31	31	- 9	NW	2	C	1	40	30	0.54		
Nairn ...	29.26	37	W	2	b	29.31	+ .25	35	33	- 5	W	2	C	1	41	30	0.02		
Aberdeen...	29.35	39	W	4	b	29.33	+ .35	34	31	- 9	W	1	b	1	43	30	-		
Leith ...	29.46	38	W	3	b	29.41	+ .21	34	33	- 6	W	2	b	*	44	33	-		
Shields ...	29.50	39	W	5	b	29.46	+ .16	35	34	- 5	W	4	C	2	44	34	-		
Spurn Head ...	29.62	40	WSW	6	b	29.58	+ .14	37	36	- 5	SW	4	C	3	43	35	-		
York ...	29.62	40	W	3	b	29.56	+ .07	35	34	- 7	W	4	b	*	46	34	0.03		
Loughborough	29.73	38	SW	2	b	29.70	+ .26	38	35	- 2	WSW	3	0	*	46	35	-		
Ardrossan ...	29.51	40	W	6	b	29.48	+ .10	37	35	- 7	WNW	5	b	4	45	34	0.10		
Malin Head ...	29.53	40	W	5	b	29.52	+ .06	37	36	- 6	NW	5	b	5	44	35	0.34		
Mullaghmore ...	29.68	40	W	6	b	29.67	+ .06	39	38	- 5	NW	7	b	6	45	37	0.39		
Belmullet ...	29.72	41	W	5	C	29.75	+ .06	42	41	- 5	NW	7	0	*	48	38	0.25		
Donaghadee ...	29.63	37	NW	5	b	29.61	+ .08	35	34	- 5	W	5	b	3	41	34	0.08		
Barrow-in-Furness	29.61	42	W	4	b	29.58	+ .07	40	37	- 3	W	5	b	*	44	39	0.01		
Liverpool (Bidston)	29.67	40	WSW	6	C	29.63	+ .05	40	37	- 2	W	8	C	6	45	37	0.15		
Holyhead ...	29.71	42	WSW	6	C	29.70	+ .04	41	39	- 2	W	8	C	7	44	40	-		
Parsonstown ...	29.79	39	W	3	r	29.81	+ .05	40	38	+ 2	WSW	1	C	*	42	33	0.22		
Valencia ...	29.93	44	W	5	b	29.95	+ .11	45	41	+ 1	WNW	6	b	6	47	41	0.24		
Roche's Point...	29.88	42	W	4	C	29.90	+ .06	43	40	0	W	4	b	4	45	40	-		
Pembroke ...	29.80	46	W	4	C	29.87	+ .06	44	43	- 2	W	5	C	4	47	44	0.02		
Scilly ...	29.88	49	WNW	8	r	30.02	+ .05	47	44	- 1	WNW	8	C	6	50	44	0.18		
Prawle Point ...	29.89	44	W	4	r	29.97	+ .01	41	39	- 3	W	5	b	5	49	36	0.44		
Jersey ...	30.01	47	WNW	4	b	30.03	00	46	42	- 1	NW	4	b	4	50	41	0.50		
Hurst Castle ...	29.85	45	W	6	b	29.87	+ .01	42	40	- 2	W	6	b	4	50	38	0.03		
Dungeness ...	29.82	43	W	4	0	29.85	00	38	36	- 4	NW	5	b	4	47	35	-		
London ...	29.81	40	SW	2	b	29.81	+ .03	36	34	- 4	WSW	4	0	*	46	29	-		
Oxford ...	29.79	38	WSW	3	b	29.79	+ .01	36	34	- 2	WSW	3	b	*	45	35	-		
Cambridge ...	29.76	38	SW	2	b	29.77	+ .06	36	34	- 4	SW	2	b	*	46	33	0.02		
Yarmouth ...	29.70	40	W	4	b	29.65	+ .07	35	34	- 5	W	4	b	3	44	33	-		
Cuxhaven ...	29.54	40	WSW	6	r	29.58	+ .15	38	37	- 7	WSW	4	C	*	?	36	0.06		
Berlin ...	29.76	38	WSW	3	C	29.72	+ .06	37	36	- 8	SW	3	0	*	46	36	0.12		
Wiesbaden ...	*	*	*	*	*	29.73	- .02	41	40	- 5	SW	2	r	*	50	39	0.32		
Munich ...	30.05	37	SW	3	b	29.95	+ .04	30	29	- 11	SE	5	C	*	46	30	-		
GERMANY.																			
The Helder ...	29.66	43	WSW	4	b	29.58	+ .08	41	39	- 3	W	5	C	3	45	41	-		
Brussels ...	*	*	*	*	*	29.78	+ .02	37	36	- 5	WSW	4	C	*	46	37	0.12		
Cape Gris Nez...	29.78	45	WNW	9	C	29.82	+ .08	41	40	- 3	NW	8	b	6	48	41	-		
Paris ...	30.06	43	SW	3	b	29.96	00	39	38	- 6	W	4	C	*	48	39	0.08		
Brest ...	30.08	48	W	8	0	30.13	- .02	47	45	- 1	NW	8	b	6	54	41	0.08		
Lorient ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
Rocheport ...	30.29	50	WNW	7	0	30.24	- .02	48	45	- 2	WNW	7	b	3	54	43	0.12		
Belfort ...	30.19	41	WSW	4	*	29.92	- .14	42	41	- 2	W	4	r	*	46	43	0.16		
Lyons ...	30.26	43	WNW	3	b	30.10	- .07	41	39	- 5	SSW	3	r	*	51	39	-		
Nice ...	30.08	46	SSE	1	b	30.01	- .09	44	39	+ 2	E	1	0	3	55	41	-		
Perpignan ...	30.31	52	NW	5	b	30.25	+ .02	50	43	+ 7	NW	4	0	*	57	?	-		
Biarritz ...	30.39	53	W	5	r	30.33	- .01	52	48	- 1	W	8	0	5	61	50	0.12		
Corunna ...	*	*	*	*	*	30.47	+ .06	49	48	- 1	W	4	C	5	57	45	0.04		
Lisbon ...	30.47	55	NW	4	C	30.48	+ .03	50	48	0	N	5	b	5	55	48	-		
FINLAND.																			
SWEDEN.																			

For Explanation of Columns, see p. 4.

WEATHER CHARTS

for 8 a.m. on Sunday 18th December 1887.

BAROMETER, WIND & SEA.

(Explanation of Map)

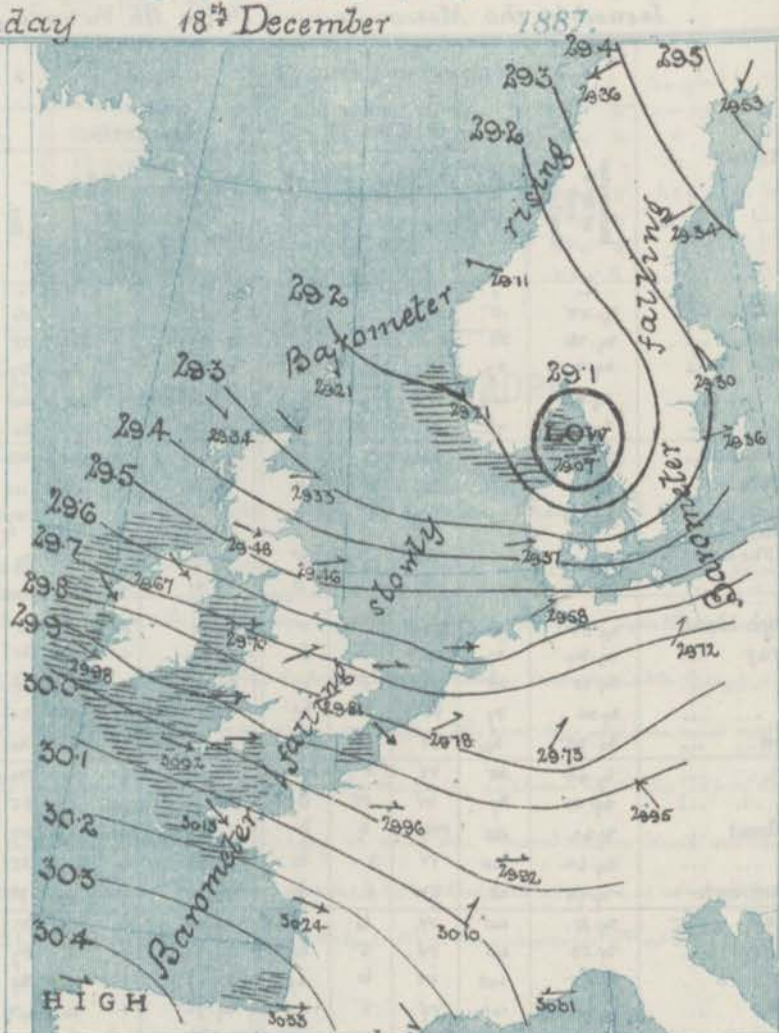
Barometer — Isobars are drawn for each tenth of an inch. Changes since previous morning are stated in words.
Wind — Arrows show the prevalent winds. They fly with the wind and their barbs and feathers refer to force, thus —
 — force above 10; — force 8 to 10;
 — force 5 to 7; — force 1 to 4;
 ○ = dead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

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

MEAN HEIGHT of the BAROMETER

at 8 a.m. for the month of December.
 During the 10 Years 1871—1880.

STATIONS.	MEAN READINGS.
	in.
Sumburgh Head	29.680
Stornoway	29.701
Wick	29.713
Nairn	29.741
Aberdeen	29.750
Leith	29.800
Shields	29.886
York	29.877
Ardrossan	29.810
Donaghadee	29.832
Holyhead	29.858
Liverpool	29.882
Valencia	29.879
Roche's Point	29.889
Pembroke	29.897
Scilly	29.949
Harst Castle	29.938
Dover	29.942
LONDON	29.984
Oxford	29.937
Cambridge	29.926
Yarmouth	29.902



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

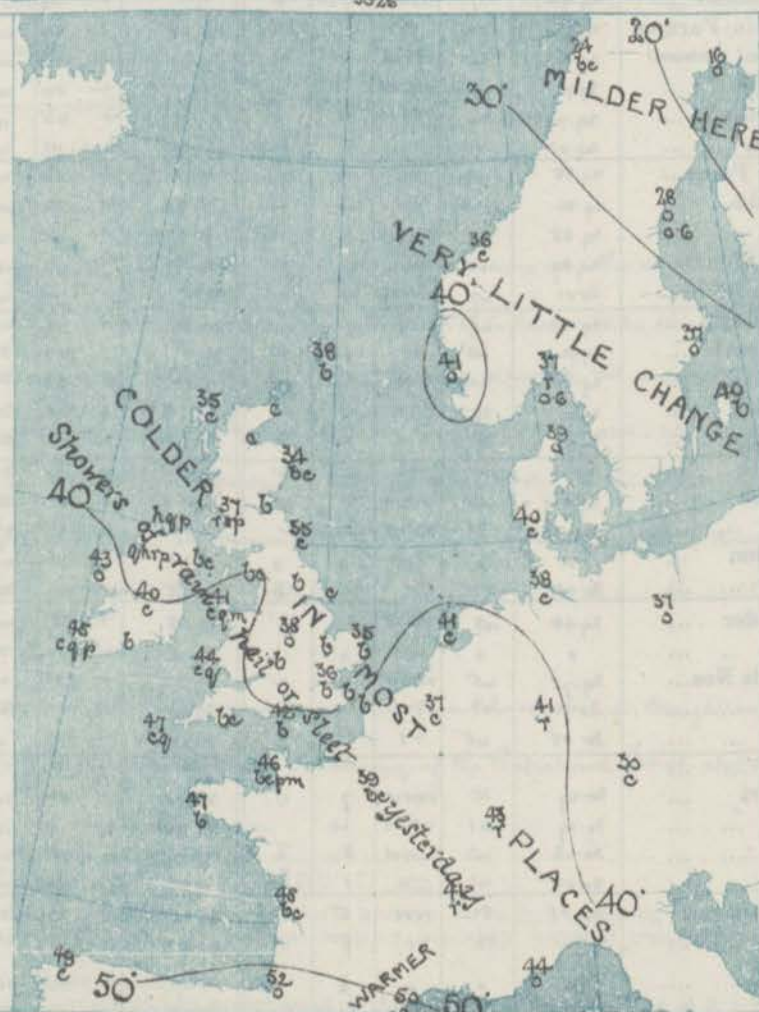
Temperature — Isotherms are drawn for each 10° Changes since previous morning are stated in words.
Weather — is shown by Letters of the Beaufort Scale.
Rainfall — A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted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

MEANS OF TEMPERATURE IN SHADE. AND RAINFALL.

for the month of December

STATIONS.	TEMPERATURE.				RAINFALL (Inches)
	Daily Max.	Daily Min.	Air & 24 Hrs. Dry.	Wet.	
Sumburgh Head	42.0	34.5	39.0	37.6	4.33
Stornoway	44.8	38.5	38.0	37.8	5.66
Wick	42.0	32.1	37.8	36.4	3.18
Nairn	41.5	32.8	35.0	35.4	2.08
Aberdeen	41.8	32.0	36.0	35.3	3.34
Leith	44.3	33.6	38.4	37.0	2.01
Shields	42.8	34.3	39.2	36.0	2.74
York	42.5	31.0	36.2	35.4	2.45
Ardrossan	47.0	30.1	40.1	38.3	4.04
Donaghadee	40.7	30.1	40.1	39.1	2.84
Holyhead	40.8	30.0	42.0	41.1	3.84
Liverpool	43.6	35.7	39.1	37.4	2.70
Valencia	50.0	40.0	44.7	41.8	5.82
Roche's Point	47.7	39.3	42.9	41.4	4.74
Pembroke	47.1	40.4	43.7	42.6	4.06
Scilly	40.8	43.0	47.2	45.3	4.10
Harst Castle	45.5	36.5	40.6	39.0	2.84
Dover	44.2	36.5	40.0	38.8	3.20
LONDON	44.5	38.0	38.1	37.1	2.14
Oxford	43.3	33.5	37.3	36.6	2.13
Cambridge	43.3	31.8	36.3	35.6	1.90
Yarmouth	42.2	33.8	37.9	37.2	2.95

NOTE — The Temperature means are for the 10 years 1871—80, the Rainfall means are mainly those for the 10 years 1866—85.



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30.4 ins: and upwards, over the Iberian Peninsula.

Lowest, 29.1 ins: and less, in a small depression lying over the Skagerrack.

Gradients rather steep over Iceland and France. Barometer rising over the northern parts of our Islands, but falling slightly elsewhere.

TEMPERATURE

Highest, 52° at Biarritz, 51° at Lerpjager and Lisbon, 49° at Fontenay and 48° at Rochefort, and 47° at Sully and Rheims.

Lowest, 16° at Haparanda, 24° at Rode, 28° at Hummels, 31° at Wick and 34° at Aberdeen and Leith.

WIND

W or NW: over our Islands and France, as well as on the eastern shore of the North Sea; strong in force on our western coasts. Moderate SW: over Germany and Belgium: E: over the north of Scandinavia.

WEATHER

Fine over the greater part of our Islands and north of France, but hail showers falling on our extreme northwest coasts. Cloudy or overcast elsewhere, with rain at Faeder, Belfort and Lyons.

Showers fell yesterday in many parts of the Kingdom, and lightning was seen at Hawke Point at night.

SEA

High at Holyhead and rough or rather so on our west and south coasts generally.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The depression which had reached the west of Norway yesterday is now filling up and the barometer is rising at all our northern stations. Elsewhere, however, the mercury is falling slightly and very shallow secondary disturbances are apparently lying over various parts of the United Kingdom.

FORECASTS

for the 24 hours ending at NOON on 19th Dec^r

1887.

DISTRICTS.

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

FORECASTS.

NONE ISSUED.

DISTRICTS.

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

WARNINGS

FORECASTS.

NONE ISSUED.

NONE ISSUED

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

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

YESTERDAY'S 2 P.M. REPORTS.

	Bar.	Dry.	Wet.	Wind.	Wea.	Sea.		Bar.	Dry.	Wet.	Wind.	Wea.	Sea.		
Skudesnaes ...	28.47	42	41	SSE	6	0	5	Holyhead ...	29.70	44	41	W	6	c	6
Sumburgh Head ...	28.48	42	41	NNW	3	0	4	Valencia ...	29.86	44	42	W	3	rm	3
Stornoway ...	29.32	42	42	NW	6	chpq	5	Scilly ...	29.97	48	46	NNW	7	cq	6
Aberdeen ...	29.23	38	36	NNW	7	0	3	Dungeness ...	29.84	46	43	NNW	6	c	5
Shields ...	29.46	44	40	W	6	c	2	London ...	29.84	46	42	W	5	cq	*
Ardrossan ...	29.48	43	40	W	7	bpq	5	Yarmouth ...	29.67	42	39	W	5	bc	3
Malin Head ...	29.53	42	39	W	4	0	5	Jersey ...	30.03	48	44	NNW	5	c	4
Mullagumore ...	29.63	44	42	W	7	chpq	6	Rocheport ...	30.31	50	46	NNW	5	r	2
Belmullet ...	29.70	44	39	NNW	7	c	*								

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

The reports for yesterday morning showed that pressure was still highest, 30.3 in: and upwards, over Algeria and the Iberian Peninsula, but relatively high 30.1 in: and upwards over Eastern and Southern Russia. The depression which lay to the NWth of the British Isles on the previous day had moved eastwards and was situated between the Shetlands and west of the Norway in which locality the barometer was below 28.8 in: Fresh to strong gales from the Wnd or NWth were reported on the northern coasts of our Islands, and strong winds from the same quarter on our southern and the French coast, but over Central Europe the wind was moderate from SW. or S., while in Scandinavia it drew into SE. and E.; over Algeria, Italy, and the extreme south of France it was light and variable. The weather was fine over the greater part of England and Ireland, as well as at the French and Spanish stations, but cloudy elsewhere, with rain in the north of Scotland and also in Belgium and Germany. Temperature had fallen several degrees over England and the south of Ireland, but risen elsewhere, and readings ranged from 50° and upwards in the west of France and north of Spain to 32° or less over the whole of Northern Europe and to 5° or less over the White Sea. The reports from Italy and the south of Spain were all wanting. The highest individual readings were 57° at Algiers, 53° at Barcelona, 53° at Biscaritz and Sanguinaire and 52° at Chauxion and Cap Kern; the lowest were 1° at Archangel, 3° at Haparanda, 12° at Uleaborg, 17° at Kuopio, 19° at Bodø, and 27° at Ruda Keth.

Later in the day the depression in the north began to disperse and the gales on our northern coasts gradually died down. In the evening, however, shallow secondary disturbances appeared over our southern districts, occasioning cold showers in many places.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

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

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

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DAILY WEATHER REPORT.

for

Monday 19th December

1887.

Issued by the Meteorological Office, 116, Victoria Street, London, R. H. SCOTT, Secretary.

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STATIONS.	+ YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
	Barometer at 32° F. and Sea Level.	Temp. in Shade.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Weather.	Sea. (0 to 9.)	SHADE TEMP.		Amount of Rainfall.	
			Dirac.	Force. (0 to 12.)		Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Dirac.	Force. (0 to 12.)			Max.	Min.		
SCANDINAVIA.																		
Haparanda ..	29.66	11	NE	4	6	29.76	+ 23	9	9	- 7	N	4	0	*	16	?	0.04	
Hernösand ...	29.47	24	NNE	4	8	29.55	+ 21	19	19	- 9	NNE	6	8	*	34	?	0.35	
Stockholm ...	29.31	36	2	0	0	29.37	+ 07	34	33	- 3	S	2	0	*	41	32	0.04	
Wisby ...	29.36	38	SW	6	7	29.39	+ 03	36	33	- 4	SSE	2	0	*	41	36	0.08	
Bodö ...	29.50	24	ENE	6	6	29.61	+ 25	12	19	- 2	ENE	6	0	3	25	21	-	
Christiansund...	29.28	36	ESE	2	0	29.36	+ 25	35	34	- 1	E	2	0	3	36	32	-	
Skudesnaes ...	29.23	36	NNW	1	0	29.28	+ 07	35	38	- 6	NNW	1	0	3	41	35	-	
Christiania Fjord (Værder) ...	29.20	36	NNW	3	7	29.22	+ 19	33	32	- 4	N	6	0	1	37	30	0.24	
Skagen (The Snow)	29.23	36	2	0	0	29.20	+ 13	35	35	- 4	W	1	0	1	39	35	0.16	
Fanö ...	29.32	34	S	2	7	29.21	- 16	30	30	- 10	SSE	2	1	*	41	30	0.04	
BRITISH ISLANDS.																		
Sumburgh Head	29.28	38	W	2	0	29.37	+ 16	38	37	0	2	0	0	2	40	34	-	
Stornoway ...	29.41	34	NW	3	6c	29.51	+ 17	39	39	+ 4	NW	7	0	6	39	30	0.27	
Wick ...	29.36	33	NW	2	0	29.44	+ 17	31	31	0	NW	1	6c	1	41	27	0.10	
Nairn ...	29.41	33	W	1	6c	29.45	+ 14	36	35	+ 1	2	0	0	1	35	32	0.31	
Aberdeen...	29.36	34	NW	4	8	29.44	+ 11	34	33	0	NW	1	6	1	36	30	0.17	
Leith ...	29.41	32	W	1	6	29.47	+ 06	35	34	+ 1	NW	1	6c	*	44	30	0.03	
Shields ...	29.39	34	NNW	3	0	29.46	+ 00	30	30	- 5	W	2	0	2	38	29	-	
Spurn Head ...	29.40	36	W	5	0	29.41	- 17	35	34	- 2	NW	6	6csp	3	39	32	0.07	
York ...	29.44	34	NW	1	0	29.48	- 08	31	29	- 4	NNW	1	0	*	40	26	0.04	
Loughborough	29.33	35	SSW	3	6csp	29.51	- 19	29	29	- 9	NNW	2	0	*	43	29	0.19	
Ardrossau ...	29.42	36	NNW	3	0	29.50	+ 02	39	37	+ 2	NW	4	0	3	40	31	0.10	
Malin Head ...	29.50	38	NNW	6	6csp	29.59	+ 07	40	39	+ 3	NNW	8	0	6	42	35	0.07	
Mullaghmore ...	29.63	38	NNW	8	0	29.73	+ 06	39	37	0	NNW	6	6c	5	42	35	0.30	
Belmullet ...	29.73	40	NNW	7	0	29.84	+ 09	40	35	- 3	N	2	6	*	43	38	0.41	
Donaghadee ...	29.49	36	NW	4	6c	29.59	- 02	40	38	+ 5	NW	7	6c	4	41	33	0.23	
Barrow-in-Furness	29.46	36	W	5	7	29.49	- 09	37	36	- 3	NNW	5	spg	*	41	32	0.31	
Liverpool (Bidston)	29.49	36	W	6	0	29.51	- 12	39	38	- 1	W	6	0	5	41	35	0.24	
Holyhead ...	29.56	40	W	7	0	29.58	- 12	41	40	0	NW	9	0	8	43	38	0.03	
Parsonstown ...	29.71	36	WSW	2	6c	29.80	- 01	35	34	- 5	W	1	6c	*	41	33	0.12	
Valencia ...	29.85	43	NW	5	0	29.95	- 03	42	40	- 3	NW	4	0	4	49	39	0.25	
Roches Point...	29.79	42	NNW	5	6csp	29.82	- 08	41	38	- 2	NNW	5	6	4	46	37	0.15	
Pembroke ...	29.68	40	NNW	5	0	29.70	- 17	41	40	- 3	NNW	4	0	3	46	39	0.09	
Scilly ...	29.85	47	NNW	8	0	29.77	- 25	45	43	- 2	NNW	8	0	6	48	42	0.22	
Prawle Point ...	29.75	43	NNW	5	0	29.71	- 26	35	34	- 6	NNW	3	6	4	47	33	0.19	
Jersey ...	29.86	47	NNW	5	6c	29.69	- 34	42	40	- 4	NW	6	6c	5	49	39	0.47	
Hurst Castle ...	29.69	43	W	7	0	29.60	- 27	35	34	- 7	NNW	4	6	3	46	32	0.04	
Dungeness ...	29.66	44	W	6	0	29.46	- 34	33	32	- 5	NW	3	6	2	46	31	0.01	
London ...	29.62	37	NW	2	7	29.51	- 30	32	30	- 4	NW	2	6	*	46	32	0.27	
Oxford ...	29.57	37	WSW	3	0	29.57	- 22	32	31	- 4	WSW	3	6	*	44	32	0.09	
Cambridge ...	29.50	35	W	2	7	29.48	- 24	31	30	- 5	NW	2	6	*	43	30	0.18	
Yarmouth ...	29.49	37	W	3	7	29.37	- 28	34	33	- 1	NW	4	5	4	40	30	0.15	
Cuxhaven ...	29.52	35	WSW	3	0	29.27	- 31	34	34	- 4	NNE	1	5	*	39	33	-	
Berlin ...	29.62	36	SW	3	0	29.35	- 37	38	36	+ 1	SSW	4	0	*	41	34	0.08	
Wiesbaden ...	*	*	*	*	*	29.35	- 38	34	33	- 7	W	1	5	*	43	34	0.32	
Munich ...	29.92	35	W	5	0	29.53	- 42	34	32	+ 4	S	4	0	*	41	28	-	
FRANCE & NETHERLANDS.																		
The Helder ...	29.41	39	SW	4	6	29.20	- 38	35	34	- 6	NNW	1	5	3	41	35	0.20	
Brussels ...	*	*	*	*	*	29.44	- 34	33	33	- 4	WSW	3	0	*	43	33	0.24	
Cape Gris Nez...	29.61	41	W	9	0	29.43	- 39	34	34	- 7	NNW	8	0	6	46	36	-	
Paris ...	29.89	42	SW	5	6c	29.51	- 45	35	34	- 4	NNW	3	0	*	47	33	0.12	
Brest ...	29.98	48	NNW	8	0	29.80	- 33	42	40	- 5	NW	8	6c	6	52	39	-	
Lorient ...	30.00	49	NNW	8	6c	29.82	- 32	43	39	- 2	NW	8	6	7	?	37	0.16	
Roche fort ...	30.17	48	WSW	5	0	29.82	- 32	46	44	- 2	NNW	8	0	4	54	41	0.43	
Belfort ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Nice ...	30.33	39	W	1	6	29.69	- 41	36	35	- 5	S	5	7	*	46	35	0.08	
Perpignan ...	29.96	47	E	3	6	29.81	- 20	41	35	- 3	W	3	6c	3	54	37	-	
Biarritz ...	30.24	47	NW	4	6	29.95	- 30	40	38	- 10	W	3	6	*	54	37	-	
Lisbon ...	30.26	50	W	8	7	29.92	- 41	49	46	- 3	SW	8	7	7	54	46	0.89	
Corunna ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Lisbon ...	30.42	49	N	1	0	30.33	- 15	50	46	0	N	4	0	5	54	46	-	

For Explanation of Columns, see p. 4.

WEATHER CHARTS

for 8 a.m. on Monday, 19th December

1887.

BAROMETER, WIND & SEA.

(Explanation of Map)

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

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

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

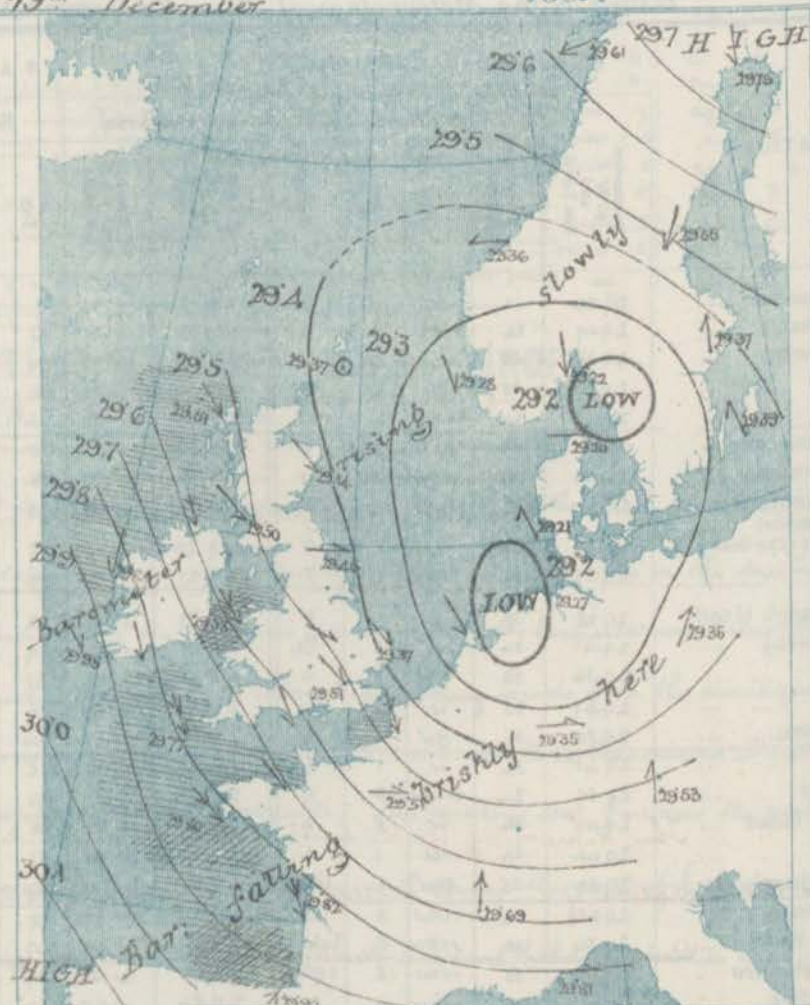
Sea Disturbance — where considerable is shown thus

— Rough. — High.

MEAN HEIGHT of the BAROMETER

at 8 a.m. for the month of December
 During the 10 Years 1871—1880.

STATIONS.	MEAN READINGS.
	in.
Sumburgh Head	29.690
Stormoway	29.701
Wick	29.713
Nairn	29.741
Aberdeen	29.750
Leith	29.800
Shields	29.836
York	29.877
Ardrossan	29.810
Donaghadee	29.832
Holyhead	29.858
Liverpool	29.882
Valencia	29.879
Roche's Point	29.889
Pembroke	29.807
Scilly	29.943
Hurst Castle	29.938
Dover	29.942
LONDON	29.934
Oxford	29.987
Cambridge	29.926
Yarmouth	29.902



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.

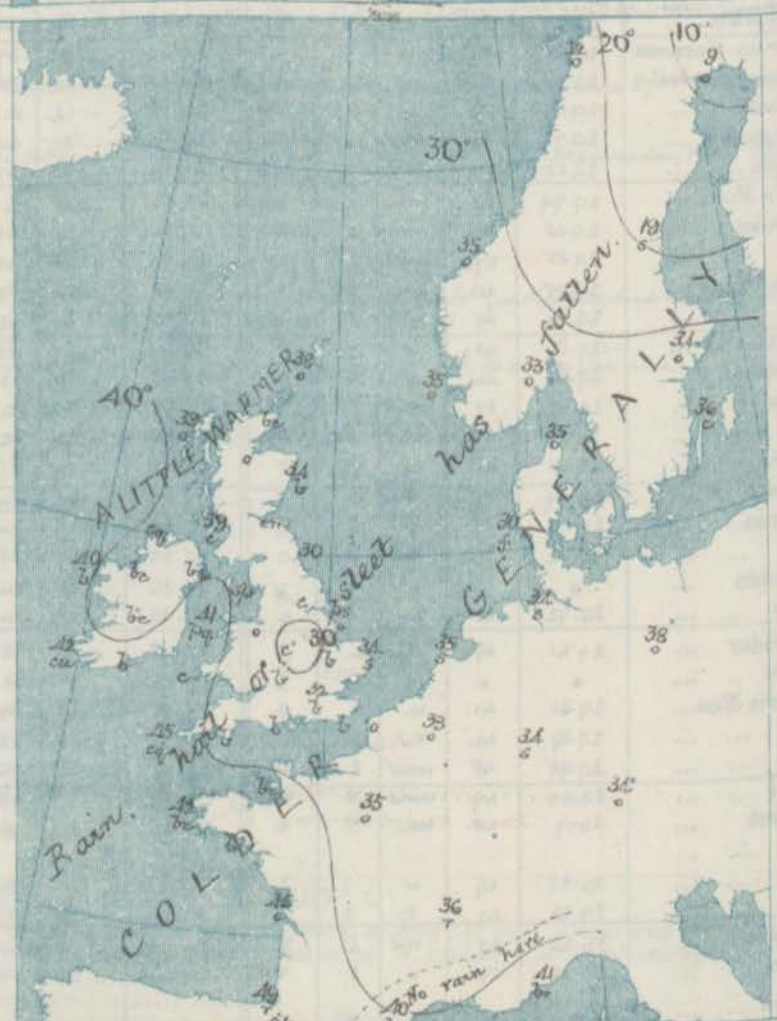
Rainfall — A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE. AND RAINFALL.

for the month of December.

STATIONS	TEMPERATURE				RAINFALL (Inches)
	Daily Max.	Daily Min.	Average Dry.	Average Wet.	
Sumburgh Head	42.0	34.5	39.0	37.6	4.33
Stormoway	44.8	38.5	38.9	37.8	5.66
Wick	42.0	32.1	37.8	36.4	3.18
Nairn	41.5	32.8	38.0	35.4	2.08
Aberdeen	41.8	32.9	36.9	35.3	3.34
Leith	44.3	33.6	38.4	37.0	2.01
Shields	42.8	34.3	39.2	36.9	2.74
York	42.5	31.9	36.2	35.4	2.45
Ardrossan	47.0	36.1	40.1	38.3	4.04
Donaghadee	46.7	36.1	40.1	39.1	2.84
Holyhead	46.8	36.6	42.9	41.3	3.84
Liverpool	43.6	35.7	39.1	37.4	2.70
Valencia	50.0	40.0	44.7	41.8	5.82
Roche's Point	47.7	39.3	42.0	41.4	4.74
Pembroke	47.1	40.4	43.7	42.6	4.06
Scilly	49.8	43.9	47.2	45.3	4.10
Hurst Castle	45.5	36.5	40.0	39.9	2.84
Dover	44.2	36.5	40.0	38.8	3.20
LONDON	44.5	35.9	38.1	37.1	2.14
Oxford	43.3	33.6	37.3	36.6	2.13
Cambridge	43.3	31.8	36.3	35.6	1.99
Yarmouth	42.2	33.8	37.9	37.2	2.95

NOTE — The Temperature means are for the 10 years 1871—80, 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, over Portugal; relatively high 29.7 in. and upwards, over the north of Sweden).
(Lowest, 29.2 in. and less, in two small depressions lying respectively over the south of Sweden and off the north coast of Scotland).
Gradients rather steep over the west coast of our Islands and France. Barometer rising in Scandinavia and the N. and N.E. of our Islands, but falling elsewhere.

TEMPERATURE

(Highest, 50° at Dublin, 48° at Biarritz, 46° at Rochefort, 43° at Bally, 43° at Lorient, and 42° at Tâlemas, Jersey, and Valentia).
(Lowest, 3° at Haparanda, 1° at Helsingfors, 22° at Rode, 23° at Longborough, and 30° at Fiume and Shields).
Frost occurred last night over Great Britain.

WIND

NW² over our Islands, France and the Netherlands, strong to gale at all the more western stations, but light or moderate in the East or moderate from the S² over Germany, Denmark, and the south of Sweden.
Strong from NE. or E. over the northern parts of Scandinavia.

WEATHER

Fine over the greater part of our Islands, but snow showers reported locally.
Bull and unsettled at the Continental stations, with snow at Helsingfors, Hilder, and Cuxhaven, and rain in the south of France.
Rain hail or sleet fell generally yesterday, and thunder was heard at Hilder in the evening.

SEA

Very high at Holyhead, and rough or rather so on all our western and southern coasts.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The depression off the north of Holland seems likely to move southward or southward, but a tendency still exists for the formation of small or shallow disturbances over England.

Strong squally winds or gales from the NW² are therefore likely to continue on our western coasts, with snow showers in many parts of the kingdom.

FORECASTS

for the 24 hours ending at NOON on 20th DEC.

1887.

DISTRICTS.

FORECASTS.

0	SCOTLAND NORTH	N ² winds, freshening; changeable, some snow showers.
1	SCOTLAND EAST	-----D ² -----D ² -----D ² -----
2	ENGLAND N.E.	Same as N ^o 5.
3	ENGLAND EAST	Same as N ^o 5.
4	MIDLAND COUNTIES	Same as N ^o 5.
5	ENGLAND SOUTH	NW ² winds, increasing in force; unsettled, some snow showers.

DISTRICTS.

FORECASTS.

6	SCOTLAND WEST	Same as N ^o 0
7	ENGLAND N.W.	NW ² and N ² strong winds and gales; squally, some cold showers.
8	ENGLAND S.W.	-----D ² -----D ² -----D ² -----
9	IRELAND NORTH	-----D ² -----D ² -----D ² -----
10	IRELAND SOUTH	NW ² winds, fresh or strong; squally, some showers.
WARNINGS		The south cone was hoisted last evening in district 5, and the north cone in districts 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.	Dry.	Wet.	Wind.	Wes.	Sea.		Bar.	Dry.	Wet.	Wind.	Wes.	Sea.
Skudeenæs ...	29.15	40	87	WNW 2	0	4	Holyhead ...	29.63	41	39	WNW 9	om app	8
Sumburgh Head ...							Valencia ...						
Stormway ...	29.39	37	86	NW 3	60	3	Scilly ...						
Aberdeen ...							Dungeness ...	29.73	45	43	WNW 6	e	5
Shields ...							London ...						
Ardrossan ...							Yarmouth ...						
Malin Head ...	29.43	36	86	NW 7	0	6	Jersey ...	29.96	43	41	NW 5	6	4
Mullaghmore ...							Rochefort ...	30.15	47	46	WNW 5	T	2
Belmullet ...	29.71	41	87	WNW 7	6	*							

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

The reports for yesterday morning showed that while the highest pressures were still reported over the Iberian Peninsula, the large depression shown off the Norwegian coasts on the previous day was moving eastward, and quickly dispersing. Shallow disturbances were however, forming over various parts of the United Kingdom, while similar local irregularities in pressure were observed over Germany. The wind was NW. at most of the West stations, but W. or SW. in nearly all other parts of Europe, and E. in the North of Scandinavia. The weather was fine in Italy and Algeria, as well as over the greater part of the United Kingdom, but dull elsewhere with rain in many places. On our extreme western and northwestern coasts hail showers were reported. Temperature had risen a little in Russia and Austria, but fallen elsewhere; readings ranged from 50° and upwards on the Portuguese coasts and the shores of the Mediterranean, to 25° or less over northern Europe generally, and to below zero over the White Sea. The highest individual readings, were 61° at Cagliari, 57° at Malta, 56° at Algiers, 53° at La Calle, and Sanguinaire and 51° at Palermo and Brindisi; the lowest were -3° Fahrenheit at Archangel, 16° at Haparanda and Uleaborg, 21° at Bodö and 28° at Helsingfors, Krasnoyarsk and Tsim. In the course of the day shallow disturbances continued to form over our Islands occasioning cold rain or sleet in many places, with a decided increase of wind on our western and southern coasts - over England and France, the barometer fell steadily but in the North of our Islands it continued to rise.

SUMMARY OF CHANGES IN THE WEATHER OVER THE BRITISH ISLANDS AND THEIR NEIGHBOURHOOD FROM THE 11TH TO THE 17TH DECEMBER 1887.

The weather of the past week has been rough, unsettled and wet; and although temperature has been as a rule considerably above the average the changes from excessive mildness to relative cold have been somewhat frequent and sudden. Barometrical readings have been usually highest over Spain and relatively high over northern Europe, so that the prevailing winds have been W. in the South, and S. in the North and East. Several depressions have appeared over our Islands or their immediate neighbourhood. The first, an exceedingly small and shallow system, advanced eastward over England on the 11th, and occasioned rain or sleet in many places but no serious increase in the force of the wind. The second, a large and deep disturbance, appeared off the southwest of Ireland on the morning of the 12th, and subsequently travelled in a northwesterly direction along our extreme western coasts. Its progress was attended by heavy rain at several of our western stations, and fresh SE. and S. gales were experienced in all parts of the Kingdom. The third, an equally large system, but one of diminishing intensity, appeared off our extreme northwest coasts on the morning of the 14th. Later in the day a well marked secondary disturbance advanced over the St. George's Channel, and in the course of the ensuing 24 hours the two depressions moved eastwards to the North Sea, where they rapidly dispersed; the front of these disturbances 3rd gales were experienced in the West, while in the rear the wind increased from W. and NW. on our West and South coasts. The fourth, also large and somewhat deep - advanced to our northwest coasts on the evening of the 15th and occasioned S. gales on our West coasts. On the 16th it passed East across Scotland, and during the following night the wind in its rear rose to a strong gale from West or north-west over the more northern parts of the Kingdom. The passage of several secondary disturbances across Ireland and England occasioned an extension of rough squally weather to these countries with hail or sleet at many of our western stations. At the close of the week the weather remained in a very unsettled state.

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 20th December 1887.

Issued by the Meteorological Office, 116, Victoria Street, London, R. H. SCOTT, Secretary.

	+ YESTERDAY EVENING.						8 A.M. TO DAY.						PAST 24 HOURS.				
STATIONS.	Barometer at 32° F. and Sea Level.	Temp. in Shade.	WIND.		Weather.	BAROMETER.		SHADE TEMP.		WIND.		Weather.	Sea (0 to 9.)	SHADE TEMP.		Amount of Rainfall.	
			Dir.	Force (0 to 12.)		Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Dir.			Force (0 to 12.)	Max.		Min.
SCANDINAVIA.																	
Haparanda ...	29.95	5	NE	4	b	29.09	+1.33	0	0	-0	NE	4	0	*	12	9	-
Hernösand ...	29.67	18	NE	6	S	29.83	+1.28	17	16	-2	NE	4	0	*	25	14	0.55
Stockholm ...	29.51	31	SE	0	f	29.61	+1.24	33	32	-1	NNE	2	0	*	36	30	-
Visby ...	29.45	35	SE	4	r	29.47	+1.08	36	35	0	SE	4	0	*	37	32	0.04
Bodö ...	29.76	19	ESE	6	0	29.90	+1.29	18	15	-4	ESE	6	0	3	9	16	-
Christiansund ...	29.48	38	ESE	2	0	29.62	+1.26	30	28	-5	ESE	1	0	3	9	28	-
Skudesnaes ...	29.40	38	NNE	2	b	29.52	+1.24	34	30	-1	E	4	bc	3	36	7	-
Christiania Fjord (Fjord)	29.42	29	NNE	6	0	29.52	+1.24	36	34	-7	NNE	6	S	1	34	23	-
Skagen (The Scaw)	29.32	36	ESE	3	0	29.34	+1.14	33	33	-2	ESE	5	0	4	36	32	0.16
Fanö ...	29.28	31	N	2	0	29.28	+0.07	30	30	0	N	2	c	*	32	27	-
BRITISH ISLANDS.																	
Sumburgh Head	29.80	38	NNE	3	0	29.65	+1.29	36	34	-2	NNE	4	0	4	40	33	0.21
Stornoway ...	29.73	39	N	7	rsp	29.82	+1.31	35	34	-4	N	8	0	6	40	32	0.35
Wick ...	29.54	39	N	4	0	29.72	+1.28	38	36	+7	N	7	cu	4	39	29	0.30
Nairn ...	29.61	39	NNE	4	0	29.69	+1.24	37	36	+1	N	6	c	5	40	35	0.22
Aberdeen ...	29.50	38	NW	4	r	29.58	+1.14	36	35	+2	N	5	cp	3	38	31	0.33
Leith ...	29.56	40	W	1	b	29.62	+1.15	37	35	+2	NNE	1	bcu	*	40	34	-
Shields ...	29.54	35	NNE	1	0	29.51	+1.05	36	35	+6	NNE	3	r	2	38	29	0.32
Spurn Head ...	29.53	36	NW	4	b	29.46	+1.05	37	36	+2	NW	5	bc	3	37	32	0.01
York ...	29.56	31	NW	1	b	29.51	+1.03	36	35	+5	N	1	c	*	37	28	0.02
Loughborough	29.59	31	W	1	b	29.54	+1.03	35	34	+6	NW	2	og	*	36	29	0.01
Ardsrassan ...	29.61	40	SW	3	c	29.69	+1.19	35	33	-4	NW	2	b	1	42	33	-
Malin Head ...	29.72	41	N	5	c/p	29.73	+1.14	39	36	-1	NNE	5	cp/rsp	4	43	35	0.04
Mullaghmore ...	29.77	42	NNE	5	c	29.65	+1.12	39	37	0	NNE	6	b	4	44	38	0.17
Belmullet ...	29.69	41	N	9	r	29.91	+1.07	38	37	-2	N	9	0	*	43	36	0.32
Donaghadee ...	29.68	44	NW	6	bc	29.69	+1.10	41	38	+1	NW	6	b	4	45	38	0.03
Barrow-in-Furness	29.58	36	NW	2	bc	29.57	+1.08	37	35	0	NNE	2	c	*	38	35	-
Liverpool (Bidston)	29.61	36	NNE	1	b	29.59	+1.03	38	36	-1	NNE	4	0	3	40	35	0.02
Holyhead ...	29.63	41	NNE	6	cp/p	29.63	+1.05	42	40	+1	NNE	5	cp/r	5	44	38	0.23
Parsonstown ...	29.78	38	NW	2	c	29.80	+1.00	34	33	-1	NW	1	bc	*	40	32	-
Valencia ...	29.93	43	NNE	3	cp	29.89	+1.06	40	38	-2	N	4	cp/r	4	45	38	0.27
Roche's Point ...	29.83	41	NW	4	b	29.80	+1.02	40	37	-1	NNE	5	b	4	43	38	-
Pembroke ...	29.67	41	NW	4	b	29.65	+1.05	41	39	0	NNE	4	bc/p	3	43	38	0.04
Scilly ...	29.78	45	NW	6	bc	29.71	+1.06	45	42	0	N	6	c	6	46	41	0.05
Prawle Point ...	29.71	37	NNE	3	bc	29.65	+1.06	36	35	+1	NNE	3	cu	4	45	33	0.02
Jersey ...	29.71	41	NNE	3	bc	29.63	+1.06	36	35	-6	NNE	3	cp/r	3	46	36	0.09
Harst Castle ...	29.63	39	NW	5	c	29.59	+1.01	35	34	0	NW	3	c	2	43	30	0.01
Dungeness ...	29.56	35	NW	3	c	29.53	+1.07	28	28	-5	NW	2	bc	1	38	26	-
London ...	29.60	37	NW	3	0	29.55	+1.04	38	32	+1	W	1	og	*	37	29	0.01
Oxford ...	29.62	35	W	1	0	29.57	+1.00	35	33	+3	W	2	og/p	*	36	29	0.01
Cambridge ...	29.57	32	NW	1	b	29.52	+1.04	34	33	+3	NW	1	0	*	37	26	-
GERMANY.																	
Yarmouth ...	29.51	33	NW	3	c	29.46	+1.09	32	30	-2	NNE	3	og/r	4	35	26	0.29
Cuxhaven ...	29.27	35	NW	1	r	29.33	+1.06	35	33	+1	NNE	1	S	*	36	33	0.18
Berlin ...	29.22	36	SW	1	0	29.33	+1.02	34	33	-4	NNE	1	0	*	39	32	0.16
Wiesbaden ...	29.22	36	SW	1	0	29.44	+1.14	36	35	+2	W	2	0	*	41	34	0.20
Munich ...	29.32	30	W	7	c	29.55	+1.02	35	33	+1	SW	6	0	*	37	28	0.08
FRANCE & NETHERLANDS.																	
The Helder ...	29.41	32	NW	5	S	29.38	+1.19	37	36	+2	NW	1	c	2	41	35	0.24
Brussels ...	29.54	37	NNE	4	0	29.52	+1.09	35	34	+1	NNE	5	0	*	41	34	-
Cape Gris Nez ...	29.67	36	SW	3	c	29.61	+1.10	35	34	0	SW	1	0	*	39	32	0.16
Paris ...	29.67	36	SW	3	c	29.61	+1.10	35	34	0	SW	1	0	*	39	32	0.16
Brest ...	29.84	43	NW	9	0	29.73	+1.07	42	39	0	N	7	0	5	54	37	-
Lorient ...	29.84	44	NW	5	b	29.71	+1.11	40	39	-3	N	4	b	4	46	37	0.04
Rochefort ...	29.91	45	NW	5	bc	29.78	+1.04	42	40	-4	NW	4	bc	2	50	36	0.16
Belfort ...	29.68	34	W	5	S	29.60	+1.00	33	32	-4	W	4	S	*	39	29	0.28
Lyons ...	29.80	35	NW	1	b	29.75	+1.06	32	30	-4	SE	1	0	*	41	31	0.12
Nice ...	29.69	43	NNE	4	b	29.64	+1.17	38	34	-3	N	5	c	2	46	34	-
Perpignan ...	29.93	44	NW	5	bc	29.79	+1.10	37	36	-3	NW	3	0	*	55	36	-
Biarritz ...	29.96	48	W	5	r	29.78	+1.14	48	43	-1	W	7	0	5	54	45	0.47
Corunna ...	29.99	51	W	4	c	29.94	+1.31	44	43	-1	NE	1	r	4	55	41	1.22
Lisbon ...	30.19	51	W	4	c	29.99	+1.34	53	52	+3	W	5	r	?	55	50	0.04

See Explanation of Columns, Sect. p. 4.

WEATHER CHARTS

for 8 a.m. on *Tuesday* 20th December.

1887.

BAROMETER, WIND & SEA.

(Explanation of Map)

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

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

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

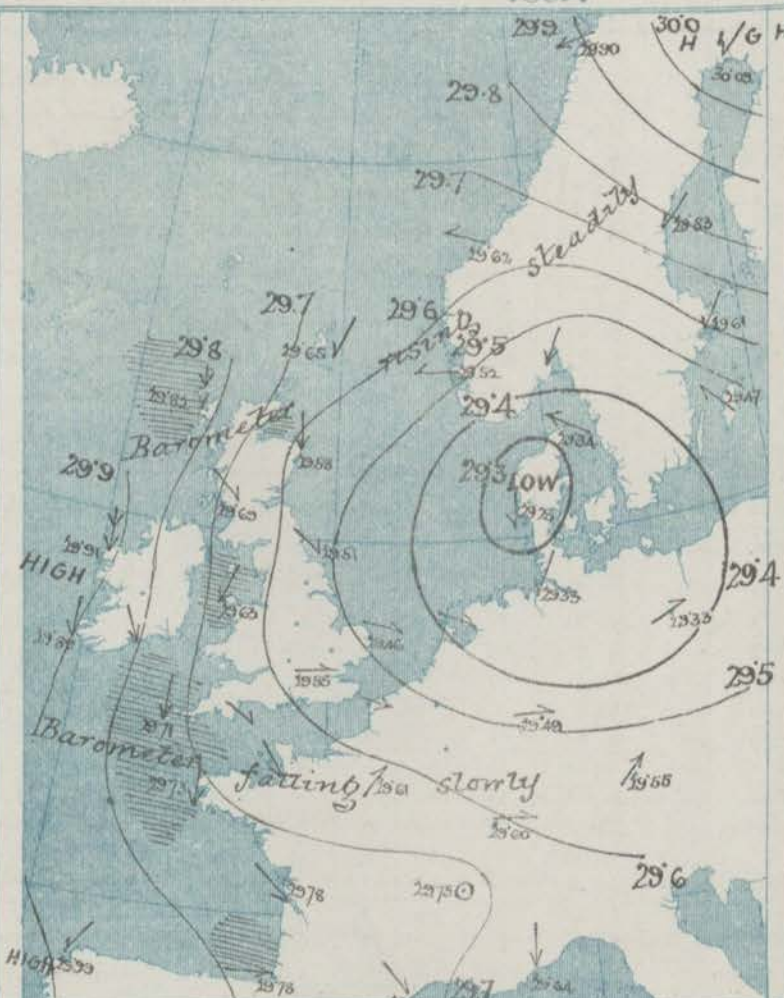
Sea Disturbance — where considerable is shown thus

— Rough. — High.

MEAN HEIGHT of the BAROMETER

at 8 a.m. for the month of December
During the 10 Years 1871–1880.

STATIONS.	MEAN READINGS.
Sumburgh Head	29.680
Stornoway	29.701
Wick	29.713
Nairn	29.741
Aberdeen	29.750
Leith	29.800
Shields	29.836
York	29.877
Ardrossan	29.810
Donaghadee	29.832
Holyhead	29.858
Liverpool	29.882
Valencia	29.879
Roche's Point	29.889
Pembroke	29.897
Scilly	29.943
Hurst Castle	29.938
Dover	29.942
LONDON	29.944
Oxford	29.937
Cambridge	29.926
Yarmouth	29.902



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.

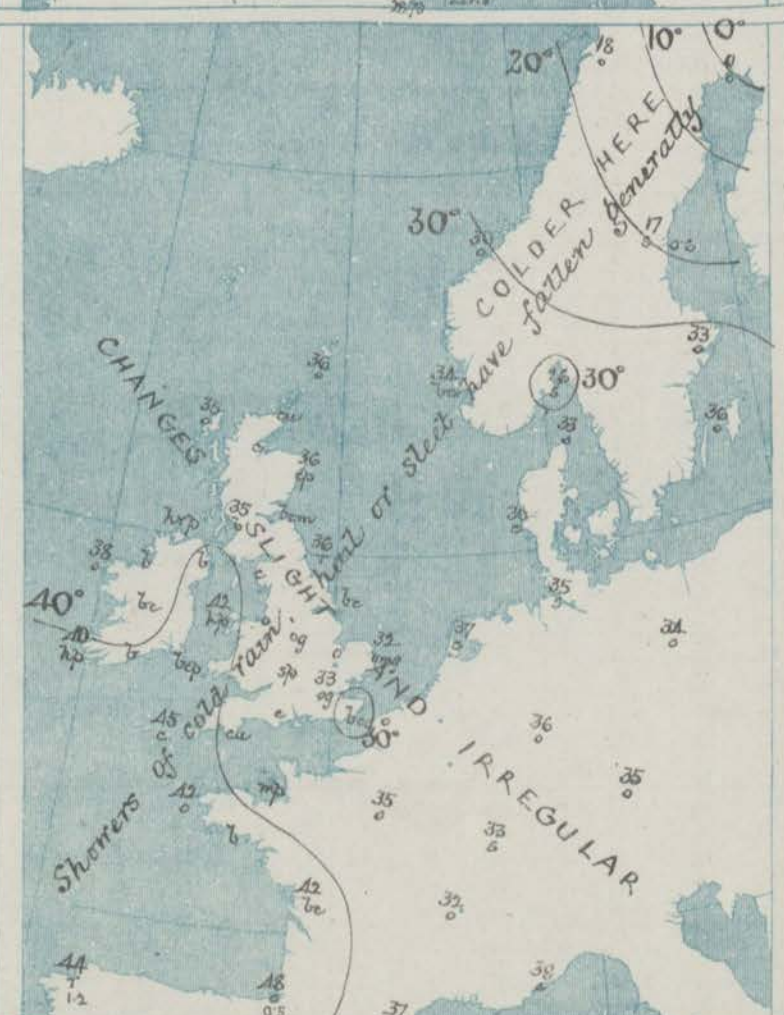
Rainfall — A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

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	42.0	34.5	39.0	37.6	4.33
Stornoway	44.8	33.5	38.9	37.8	5.66
Wick	42.0	32.1	37.8	36.4	3.18
Nairn	41.5	32.8	36.9	35.4	2.08
Aberdeen	41.8	32.9	36.9	35.2	3.34
Leith	44.3	33.8	38.4	37.0	2.01
Shields	42.8	34.3	39.2	36.9	2.74
York	42.5	31.9	36.2	35.4	2.45
Ardrossan	47.0	36.1	40.1	38.3	4.04
Donaghadee	46.7	36.1	40.1	39.1	2.84
Holyhead	46.3	39.6	42.9	41.3	3.84
Liverpool	43.6	35.7	39.1	37.4	2.70
Valencia	50.0	40.0	44.7	41.8	5.82
Roche's Point	47.7	39.3	42.9	41.4	4.74
Pembroke	47.1	40.4	43.7	42.6	4.08
Scilly	49.8	43.9	47.2	45.3	4.10
Hurst Castle	45.5	36.5	40.6	39.9	2.84
Dover	44.2	36.5	40.0	38.8	3.20
LONDON	44.5	33.9	38.1	37.1	2.14
Oxford	43.3	33.6	37.3	36.6	2.13
Cambridge	43.9	31.8	36.3	35.6	1.99
Yarmouth	42.2	33.8	37.9	37.2	2.95

NOTE — The Temperature means are for the 10 years 1871–80, the Rainfall means are mainly those for the 10 years 1866–85.



GENERAL SITUATION AT 8 A.M.

PRESSURE	Highest, 30.0 in: and upwards, over the north of Sweden, relatively high 29.5 in: and upwards, in an area extending from Portugal to the extreme W. of Ireland. Lowest, 29.3 in: and less, in a well defined but somewhat shallow depression lying over Denmark. Gradients moderate. Barometer rising at our extreme northern and the Scandinavian stations, but falling elsewhere.
TEMPERATURE	Highest, 53° at Limerick, 48° at Kinnaird, 45° at Seilly, 42° at Holyhead, Brest and Rochefort, and 41° at Limerick. Lowest, 0° zero at Hafslunda, 17° at Helsingfors, 18° at Luleå, 28° at Dungeness, and 30° at Christiansund and Ålens. Frost occurred over Great Britain last night; in London the thermometer on the grass fell to 22°.
WIND	Strong N ^o on our western and northern coasts, with gales at Stromway and Belmullet. Light or moderate from NW. at our Eastern, southern and many of the French stations. SW ^o over Germany; E ^o or NE ^o in Scandinavia and the north of Denmark.
WEATHER	Fine in some isolated places, but generally cloudy, with showers of hail or sleet in many parts of our Islands. Snow falling at Helsingfors, Faerder, Copenhagen, and Ralport, and rain at Limerick. Showers of hail, sleet, or cold rain fell generally yesterday.
SEA	Rough at Stromway and Holyhead, and rather rough at Kinnaird and Seilly, as well as in the Bay of Biscay, moderate to smooth elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The high pressure system which has recently existed over Spain is now giving way, while a new one is appearing over Northern Europe. The depression over Denmark is therefore likely to move slowly in a westerly direction, and the N^o winds in our Islands will probably increase in force, especially on our western and northern coasts.

FORECASTS

for the 24 hours ending at NOON on 21st DEC^r 1887.

DISTRICTS.	FORECASTS.	DISTRICTS.	FORECASTS.
0 SCOTLAND NORTH	N ^o and NE ^o winds, increasing to a gale; squally, some snow showers.	6 SCOTLAND WEST	Same as No 2
1 SCOTLAND EAST	-----D ^o -----D ^o -----D ^o -----	7 ENGLAND N.W.	Same as No 2
2 ENGLAND N.E.	NW ^o to N ^o winds, increasing in force; squally, some snow showers.	8 ENGLAND S.W.	N ^o winds, strong; fair generally, but some cold showers.
3 ENGLAND EAST	Same as No 5.	9 IRELAND NORTH	Same as No 0
4 MIDLAND COUNTIES	Same as No 5.	10 IRELAND SOUTH	Same as No 8.
5 ENGLAND SOUTH	NW ^o winds, freshening; cloudy, some snow or sleet.	WARNINGS	

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

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

YESTERDAY'S 2 P.M. REPORTS.

	Bar.	Dry.	Wet.	Wind.	Wes.	Sea.		Bar.	Dry.	Wet.	Wind.	Wes.	Sea.
Skudeenæs ...	29.83	35	32	? 1	c	3	Holyhead ...	29.59	42	41	NW 8	o g p m	4
Sumburgh Head ...	29.45	40	39	NNE 2	r	3	Valencia ...	29.91	42	40	NW 4	ch r q	4
Stornoway ...	29.65	39	39	N 7	r q	6	Scilly ...	29.80	45	43	NW 6	c	6
Aberdeen ...	29.48	36	34	NW 2	c	1	Dungeness ...	29.53	37	32	NW 4	c	3
Shields ...	29.50	38	36	NW 1	m	2	London ...	29.56	37	36	NW 4	o	*
Ardrossan ...	29.56	42	40	NW 3	bc	2	Yarmouth ...	29.46	35	34	NW 4	c	4
Malin Head ...	29.63	42	40	NW 5	bc	5	Jersey ...	29.72	46	42	NW 4	bc	4
Mullaghmore ...	29.73	42	40	NW 6	c g p	5	Rochefort ...	29.93	46	41	NW 8	bc	4
Belmullet ...	29.55	41	38	N 4	c	*							

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

Continental Information not to hand

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 21st Decr. 1887.
Issued by the Meteorological Office, 116, Victoria Street, London, R. H. SCOTT, Secretary.

	+ YESTERDAY EVENING.						8 A.M. TO DAY.										PAST 24 HOURS.		
STATIONS.	Barometer at 8 ^h p.m. and Sea Level.	Temp. in Shade.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Weather.	Sea (0 to 9.)	SHADE TEMP.		Amount of Rainfall.		
			Dir.	Force. (0 to 12.)		Reading at 8 ^h a.m. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Dir.	Force. (0 to 12.)			Max.	Min.			
SCANDINAVIA.																			
Haparanda ...	30.15	-5	NE	4	0	30.08	- .01	-5	-5	-5	NE	4	0	*	7	-6	-		
Hernösand ...	30.00	11	N	6	5	30.00	+ .17	8	8	-9	NNW	4	0	*	26	8	0.04		
Stockholm ...	29.69	30	NE	2	0	29.73	+ .12	30	28	-3	NNE	4	0	*	34	30	-		
Wishby ...	29.60	34	SE	2	0	29.63	+ .16	33	32	-3	E	4	0	*	37	22	-		
Bodö ...	30.00	?	ENE	6	6	29.86	- .04	10	7	-8	ENE	6	6	0	18	10	-		
Christiansund...	29.47	29	ESE	2	C	29.70	+ .23	26	25	-4	ESE	1	6	3	?	25	-		
Skudesnæs ...	29.88	35	L	0	0	29.68	+ .16	35	32	+1	ESE	2	C	3	?	?	-		
Christiania Fjord (Færd)	29.66	27	NNE	5	5	29.75	?	25	24	-1	NNE	4	0	1	27	21	0.08		
Skagen (The Scaw)	29.54	34	E	5	0	29.63	+ .29	33	30	0	E	5	0	5	34	30	0.04		
Fanö ...	29.38	33	NE	4	0	29.45	+ .27	33	30	+3	NE	3	C	*	34	30	-		
BRITISH ISLANDS.																			
Sumburgh Head	29.71	33	NNE	4	5	29.75	+ .10	32	31	-4	NNE	3	C	3	36	28	0.07		
Stornoway ...	29.87	34	N	7	0.34	29.91	+ .09	32	32	-3	N	6	S	4	36	27	0.10		
Wick ...	29.72	36	N	4	60	29.83	+ .11	34	33	-4	N	4	C	2	36	31	0.03		
Nairn ...	29.77	36	N	4	60	29.82	+ .13	32	31	-5	NNW	4	C	4	37	32	0.02		
Aberdeen...	29.68	35	N	5	2	29.77	+ .19	32	31	-4	NNW	4	C	4	37	30	0.22		
Leith ...	29.70	35	W	1	6	29.77	+ .15	35	32	-2	N	1	6	*	39	32	-		
Shields ...	29.57	39	N	3	0.0	29.70	+ .19	37	35	+1	NNW	2	C	4	39	33	0.49		
Spurn Head ...	29.81	36	N	4	5	29.62	+ .16	35	34	-2	NNW	5	6	5	38	33	0.07		
York ...	29.84	35	N	1	0	29.67	+ .16	34	33	-2	N	1	C	*	37	31	0.18		
Loughborough	29.66	35	NNW	1	0	29.65	+ .11	34	34	-1	NNW	1	0.0	*	36	33	0.03		
GERMANY.																			
Ardrossan ...	29.74	39	N	3	6	29.82	+ .13	34	31	-1	N	3	6	2	42	32	-		
Malin Head ...	29.82	38	NNE	5	0.34	29.87	+ .14	36	34	-3	NNE	4	0.34	3	40	34	0.01		
Mullaghmore ...	29.85	38	N	6	0	29.89	+ .14	36	34	-3	NE	4	6	3	40	34	0.01		
Belmullet ...	29.92	39	NE	10	0.0	29.96	+ .05	36	34	-2	N	4	0	*	44	35	0.06		
Donaghadee ...	29.77	39	NNE	6	60	29.82	+ .13	38	35	-3	NNE	5	6	4	41	37	-		
Barrow-in-Farner	29.61	37	NNE	2	0	29.71	+ .14	34	32	-3	NE	1	0	*	39	33	-		
Liverpool (Bidston)	29.61	27	N	3	6	29.72	+ .13	34	32	-4	N	3	C	3	39	34	0.02		
Holyhead ...	29.66	41	NNE	5	C	29.75	+ .12	39	37	-3	NNE	5	C	4	42	38	-		
Parsonstown ...	29.81	34	NW	1	6	29.88	+ .08	27	26	-7	L	0	6	*	36	27	-		
Valencia ...	29.88	40	NNE	4	60	29.92	+ .05	38	35	-2	NNE	4	6	4	44	36	0.03		
Roche's Point...	29.77	38	N	5	6	29.82	+ .04	33	32	-7	N	5	6	4	44	31	-		
Pembroke ...	29.65	37	NNW	3	60	29.71	+ .06	36	34	-5	NE	2	6	1	41	35	0.32		
Scilly ...	29.63	40	NNW	6	0.34	29.68	- .05	40	39	-5	NNE	6	0.34	5	45	37	0.16		
Prawle Point ...	29.62	35	NW	3	6	29.68	+ .06	35	34	-1	N	3	0	3	44	32	-		
Jersey ...	29.60	37	NNW	3	0.34	29.63	+ .03	37	35	+1	N	2	0.34	2	47	35	0.40		
Hurst Castle ...	29.87	38	NNE	3	C	29.65	+ .06	35	35	0	NNE	2	0.34	1	42	30	-		
Dungeness ...	29.80	35	NNW	3	0.34	29.55	+ .02	32	32	+4	NNW	3	0.34	2	36	27	-		
London ...	29.55	37	NW	1	0	29.64	+ .09	33	32	0	NW	1	0.34	*	37	32	0.02		
Oxford ...	29.58	35	NW	2	0	29.67	+ .10	36	32	-2	NW	1	0.34	*	38	32	-		
Cambridge ...	29.53	34	NW	1	0	29.63	+ .11	33	33	-1	N	2	0	*	37	29	0.02		
FRANCE & NETHERLANDS.																			
Yarmouth ...	29.47	35	NNW	1	60	29.56	+ .10	35	34	+3	NNW	2	0.34	4	36	31	0.03		
Cuxhaven ...	29.29	32	NE	1	5	29.33	+ .00	32	30	-3	SE	2	5	*	35	30	1.00		
Berlin ...	29.40	34	SW	2	0	29.46	+ .13	32	31	-2	S	2	0	*	36	30	0.04		
Wiesbaden ...	*	*	*	*	*	29.49	+ .00	35	32	-1	SW	1	0	*	37	30	0.04		
Munich ...	29.59	30	W	4	C	29.59	+ .04	27	25	-8	SW	2	0	*	34	23	-		
PORTUGAL.																			
The Helder ...	29.89	36	N	3	0	29.47	+ .09	36	35	-1	NNE	3	C	2	39	34	0.16		
Brussels ...	*	*	*	*	*	29.53	+ .01	34	34	0	WSW	1	C	*	36	33	0.12		
Cape Gris Nez...	29.41	38	W	4	0	29.59	+ .07	37	36	+2	N	7	C	5	45	34	-		
Paris ...	29.58	36	SW	1	0	29.60	+ .01	35	34	0	SW	1	0	*	38	34	0.04		
Brest ...	29.65	41	N	5	0	29.67	- .06	34	33	-8	L	0	0	5	32	32	0.16		
Lorient ...	29.66	41	N	4	6	29.67	- .04	35	34	-5	NE	3	6	2	46	34	-		
Rochefort ...	29.72	42	WSW	3	6	29.69	- .09	38	38	-4	S	4	C	2	48	34	0.04		
Belfort ...	29.63	34	W	1	0	29.54	- .06	33	32	0	W	1	C	*	34	29	0.08		
Lyons ...	29.68	35	E	1	0	29.69	- .06	32	30	0	S	3	C	*	40	31	-		
Nice ...	29.55	39	E	1	6	29.65	+ .05	36	30	-2	ENE	3	6	3	42	34	-		
Perpignan ...	29.75	41	NW	4	6	29.75	- .04	29	28	-8	NW	3	6	*	50	28	-		
Biarritz ...	29.72	44	WSW	7	0	29.66	- .12	45	42	-3	SW	5	0.34	3	48	43	0.55		
SPAIN.																			
Corunna ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
Lisbon ...	29.89	48	WSW	5	0	29.70	- .29	42	41	-11	NE	5	0	2	59	?	0.43		

For Explanation of Columns, see p. 4. † Received too late for

WEATHER CHARTS

for 8 a.m. on Wednesday, 21st December

1887.

BAROMETER, WIND & SEA.

(Explanation of Map)

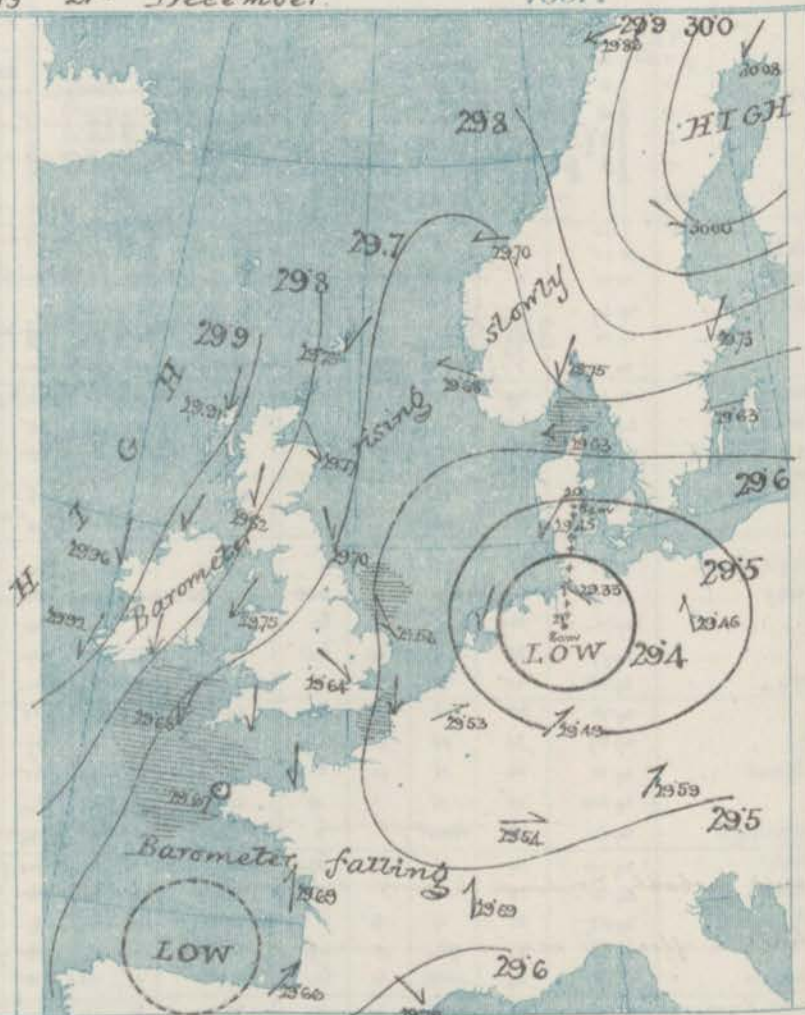
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 — force above 10; — forces 8 to 10;
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 ○ — dead calm.

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

MEAN HEIGHT of the BAROMETER

at 8 a.m. for the month of December
 During the 10 Years 1871—1880.

STATIONS.	MEAN READINGS.
Sumburgh Head	29.680
Stornoway	29.701
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Liverpool	29.882
Valencia	29.870
Koche's Point	29.889
Pembroke	29.897
Scilly	29.943
Hurst Castle	29.938
Dover	29.942
LONDON	29.984
Oxford	29.987
Cambridge	29.926
Yarmouth	29.902



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

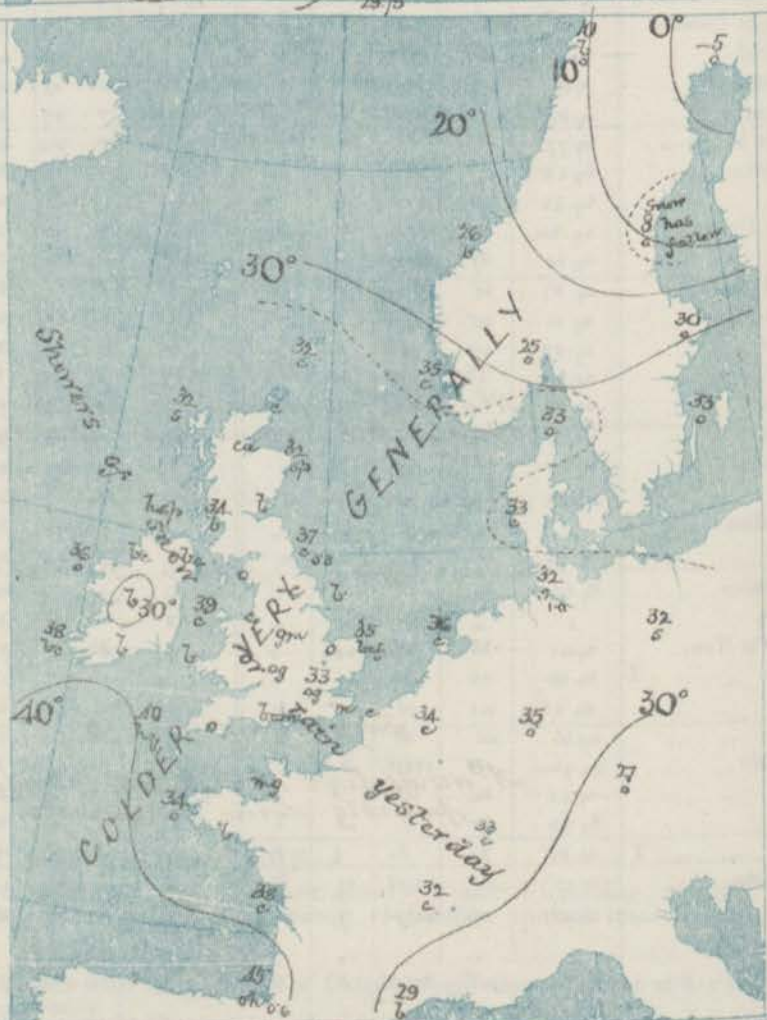
Temperature — Isotherms are drawn for each 10° changes since previous morning are stated in words.
Weather — is shown by Letters of the Beaufort Scale.
Rainfall — A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted 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	42.0	34.5	39.0	37.6	4.33
Stornoway	44.3	38.5	38.0	37.8	5.65
Wick	42.0	32.1	37.8	36.4	3.18
Nairn	41.5	32.8	36.9	35.4	2.08
Aberdeen	41.8	32.9	36.9	35.3	3.34
Leith	44.3	33.6	38.4	37.0	2.01
Shields	42.8	34.3	39.2	36.9	2.74
York	42.5	31.9	36.2	35.4	2.46
Ardrossan	47.0	36.1	40.1	38.3	4.04
Donaghadee	46.7	36.1	40.1	39.1	2.84
Holyhead	46.8	36.6	42.9	41.8	3.84
Liverpool	43.6	35.7	39.1	37.4	2.70
Valencia	50.0	40.0	44.7	41.8	5.82
Koche's Point	47.7	39.3	42.9	41.4	4.74
Pembroke	47.1	40.4	43.7	42.6	4.00
Scilly	49.8	43.9	47.2	45.3	4.10
Hurst Castle	45.5	36.5	40.6	39.0	2.84
Dover	44.2	36.5	40.0	38.8	3.20
LONDON	44.5	38.9	38.1	37.1	2.14
Oxford	43.3	33.6	37.3	36.6	2.13
Cambridge	43.3	31.8	36.3	35.6	1.99
Yarmouth	42.2	33.8	37.9	37.2	2.96

NOTE — The Temperature means are for the 10 years 1871—80, the Rainfall means are mainly those for the 10 years 1866—85.



GENERAL SITUATION AT 8 A.M.

PRESSURE	Highest, 30.0 in. and upwards, over the Gulf of Bothnia; relatively high, 29.9 in. and upwards, in the extreme west of our islands. Lowest, 29.4 in. and less, in a depression lying over the Netherlands and North Germany. Another disturbance is apparently forming over the Bay of Biscay. Gradients moderate. Barometer falling in France and Spain as well as in the north of Scandinavia, but rising elsewhere.
TEMPERATURE	Highest, 45° at Biarritz, 42° at Lisbon, 41° at Lyons, 40° at Scilly, 39° at Holyhead. Lowest, -5° F. at Haparanda, +8° at Hornösand, 16° at Bodø, 25° at Lærdal, 26° at Christiansund, +27° at Rostock and Munich. Frost occurred last night in most parts of Western Europe.
WIND	N ^W over our islands and the north of France, light or moderate over our eastern and southern coast, but fresh in the west. NE ^W or E ^W over Scandinavia and Denmark; SW ^W in Germany. S ^W or SW ^W in the west of France, but NE ^W at Boulogne.
WEATHER	Fine in many isolated parts of the United Kingdom, but snow or hail showers reported at several of our northern stations. Cloudy at most of the Continental stations, with snow at Carlsruhen. Cold showers fell yesterday in many parts of Western Europe.
SEA	Rather rough at the mouth of the Channel as well as at Skagew and Spurn Head, but moderate to smooth elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

No very important change in the weather is indicated at present. The depression over North Germany will probably continue to move southwards, and the new disturbance which is forming over the Bay of Biscay is scarcely likely to affect the weather of our islands just yet. Snow showers are, however, probable in many parts of the Kingdom.

FORECASTS

For the 24 hours ending at NOON on 12th December 1887.

DISTRICTS.

FORECASTS.

0	SCOTLAND NORTH	N ^W winds, moderate or fresh; changeable, some snow showers.
1	SCOTLAND EAST	.....D°.....D°.....D°.....
2	ENGLAND N.E.	.....D°.....D°.....D°.....
3	ENGLAND EAST	.....D°.....D°.....D°.....
4	MIDLAND COUNTIES	Same as N° 5.
5	ENGLAND SOUTH	N ^W winds, light or moderate; cloudy, possibly some snow showers.

DISTRICTS.

FORECASTS.

6	SCOTLAND WEST	N ^W and NE ^W winds, fresh; fair generally but probably some cold showers.
7	ENGLAND N.W.	.....D°.....D°.....D°.....
8	ENGLAND S.W.	.....D°.....D°.....D°.....
9	IRELAND NORTH	N ^W and NE ^W winds, fresh or strong; changeable, some showers.
10	IRELAND SOUTH	Same as N° 6 to 8.
WARNINGS		The NORTH CONE has been lowered this morning in districts 0 and 1.

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

YESTERDAY'S 2 P.M. REPORTS.

	Bar.	Dry.	Wet.	Wind.	Wen.	Sea.		Bar.	Dry.	Wet.	Wind.	Wen.	Sea.
Skudesnæs ...	29.58	33	30	NNE 2	bc	3	Holyhead ...	29.65	41	39	N 5	bc	4
Sumburgh Head ...	29.49	34	34	NNE 4	osp	4	Valencia ...	29.87	42	38	NNE 4	bc	4
Stornoway ...	29.85	36	36	N 6	osp	6	Scilly ...	29.67	41	40	NNW 5	thq	6
Aberdeen ...	29.66	35	34	N 5	osp	4	Dungeness ...	29.50	36	35	NNW 2	r	1
Shields ...	29.54	37	36	NW 2	r	3	London ...	29.53	38	37	NW 2	o	2
Ardrossan ...	29.72	38	36	N 3	bc	2	Yarmouth ...	29.44	36	35	NW 3	bc	4
Malin Head ...	29.78	39	37	NNE 4	cpnr	4	Jersey ...	29.59	45	41	NNW 3	c	3
Mullaghmore ...	29.93	40	38	NNE 6	cpnr	5	Rocheport ...	29.76	46	43	NNW 4	b	2
Belmullet ...	29.91	38	36	NNE 10	ofhs	2							

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

The reports for yesterday morning showed, that pressure varied from about 30.0 ins. over the extreme West of Ireland, Portugal and Algeria, to a little below 29.3 ins. in a small depression which lay over Denmark. Thus, while NE winds prevailed over Scandinavia, N and NW winds were felt over the British Islands, NW and W in France, SW in Germany and S to SE over the Baltic. The weather was dull and unsettled, with snow, sleet and hail showers in many places and cold rain in others. Temperature was rather low generally. It was below the freezing point over the whole of northern and central Europe as well as in some parts of the British Islands, but above it in the West. The lowest individual values were -16.5° at Archangel, 0° at Haparanda, +7° at Uleaborg, 17° at Hernösand, 18° at Bodö, 28° at Dungeness, 29° at St. Petersburg, and Budapesth, 30° at Kiev, 31° at New-Frankenstein, Meusel and Cassel; the highest were 58° at Malta, 56° at Palermo, 54° at Brindisi and Lisbon, 48° at Biarritz, 45° at Scilly, 42° at Holyhead and 40° at Valencia. There was no important change later.

GENERAL REMARKS FOR THE 24 HOURS ENDING ON TUESDAY DEC 20TH 1887

The reports for Monday morning showed, that pressure was at that time highest (30.1 to 30.3 ins) over Spain and Portugal, and (about 30.0 ins) over southern Russia, but that it decreased from those regions to a little below 29.2 ins. in a complex depression, the central area of which lay over the North Sea, Denmark and the southern parts of Norway and Sweden. N and NE winds prevailed over Scandinavia, NW winds and gales over the British Islands, and the Bay of Biscay, W winds in France, SW in Germany, and S over the Baltic. The weather was fair over central and eastern Europe, but very dull with passing showers of snow, sleet or cold rain over the British Islands and France, and the air was cold and raw. Temperature was low generally, the lowest individual values at 8 a.m. being 4.5° at Archangel, 9° at Uleaborg and Haparanda, 18° at Kuopio, 19° at Hernösand, 22° at Bodö, 29° at Budapesth, 31° at Warsaw and at Cambridge, and 32° in London; the highest were 57° at Malta, 54° at Palermo, Sanguinaria and Algiers, 51° at Brindisi, 51° at Cagliari, 51° at Livourne, 49° at Biarritz, 43° at Lorient, 42° at Jersey and Valencia. Later on the frost became still more severe over northern Europe, and pressure gave way over Spain. No important change occurred in our Islands.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

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

• AN ASTERISK is inserted in all places for which information is not usually received.
† The evening observations are taken at 6 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8 p.m. In Sweden and Denmark, the observations are taken at 8 p.m. (Christiania time).

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

DAILY WEATHER REPORT.

for Thursday 22nd December 1887.



Issued by the Meteorological Office, 116, Victoria Street, London, R. H. SCOTT, Secretary.

Issued by the Meteorological Office, 16, Victoria Street, London, W. H. SCOTT, Secretary.																		
STATIONS.	+ YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
	Barometer at 32° F. and Sea Level.	Temp. in Shade.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Weather.	Sea. (0 to 9.)	SHADE TEMP.		Amount of Rainfall.	
			Dir.	Force. (0 to 12.)		Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Dir.	Force. (0 to 12.)			Max.	Min.		
SCANDINAVIA.	In.	°				In.	In.	°	°	°						°	°	In.
Haparanda ..	29.95	-8	NE	2	0	29.80	-1.28	-8	-8	-3	NE	2	0	*	16	-8	0.24	
Hernösand ...	29.94	8	2	0	S	29.78	-1.22	8	8	0	2	0	0	*	12	5	-	
Stockholm ...	29.83	29	NW	4	0	29.66	+1.13	28	22	-7	2	0	0	*	32	?	-	
Wisby ...	29.74	32	ESE	4	S	29.76	+1.13	30	29	-3	SE	2	6	*	37	28	0.16	
Bodö ...	29.74	14	ESE	5	0	29.81	-1.48	20	18	+10	ESE	5	0	3	?	7	-	
Christiansund...	29.74	32	SEW	4	C	29.64	-1.16	34	33	+8	NEW	8	0	4	34	?	-	
Skudesnaes ...	29.82	30	2	0	6	29.83	+1.15	33	32	-2	S	7	0	5	36	30	-	
Christiania Fjord (Fjord)	29.86	23	NNE	5	0	29.86	+1.11	26	24	+1	SW	2	0	1	?	19	-	
Skagen (The Scaw)	29.78	29	E	4	0	29.88	+1.25	28	27	-5	ESE	2	0	2	30	28	-	
Fanö ...	29.68	32	N	4	C	29.85	+1.40	27	27	-6	NE	4	6	*	34	27	-	
BRITISH ISLANDS.																		
Sumburgh Head	29.80	31	NNE	1	6													
Stornoway ...	29.88	33	N	3	0	29.74	-1.17	40	40	+8	SW	3	7	8	40	27	0.05	
Wick ...	29.86	31	N	1	6	29.73	-1.10	35	34	+1	SW	3	0	2	35	23	0.05	
Nairn ...	29.87	31	W	1	C	29.78	-1.04	34	33	+2	W	3	0	2	34	27	-	
Aberdeen...	29.85	31	N	4	6	29.88	+1.11	28	22	-9	WSW	1	0	2	34	22	0.07	
Leith ...	29.86	33	NE	1	6	29.95	+1.18	28	27	-7	W	1	6	*	38	27	-	
Shields ...	29.78	34	NW	3	S	29.94	+1.24	26	26	-11	NW	2	0	3	38	25	0.18	
Spurn Head ...	29.69	37	N	5	C	29.93	+1.31	34	33	-1	NW	3	6	4	37	31	0.12	
York ...	29.75	33	N	3	6	29.97	+1.30	30	29	-4	N	1	0	*	35	28	0.06	
Loughborough	29.75	35	NW	1	C	29.97	+1.32	38	32	-1	NW	1	0	*	36	30	-	
GERMANY.																		
Ardrossan ...	29.89	32	N	3	6	29.99	+1.17	26	24	-8	ESE	1	6	1	42	23	-	
Malin Head ...	29.93	37	NNE	3	6	29.96	+1.09	38	36	+2	SEW	3	0	2	39	34	-	
Mullaghmore ...	29.95	36	N	4	6	30.01	+1.12	35	34	-1	SW	1	0	2	38	31	-	
Belmullet ...	29.99	38	NNE	3	0	30.02	+1.06	38	37	+2	S	3	0	*	40	35	0.02	
Donaghadee ...	29.93	37	NW	5	6	30.02	+1.20	30	29	-8	W	3	6	1	40	29	-	
FRANCE & NETHERLANDS.																		
Barrow-in-Furness	29.81	32	NNE	2	6	29.98	+1.27	28	27	-6	E	1	6	*	38	28	-	
Liverpool (Bidston)	29.83	33	N	2	6	30.00	+1.28	31	30	-3	N	1	6	3	37	31	-	
Holyhead ...	29.84	38	NNE	5	6	30.01	+1.26	37	34	-2	NNE	3	6	3	40	37	-	
Parsonstown ...	29.97	28	2	0	6	30.08	+1.20	22	21	-5	2	0	6	*	35	21	-	
Valencia ...	29.98	38	NNE	3	6	30.10	+1.18	34	32	-4	2	0	6	1	42	30	-	
SPAIN.																		
Roche's Point...	29.91	35	NNE	4	6	30.06	+1.22	31	30	-2	NNE	3	6	3	38	30	-	
Pembroke ...	29.81	37	NE	2	6	29.99	+1.28	34	32	-2	NE	2	6	1	40	32	-	
Scilly ...	29.74	39	NE	5	6	29.93	+1.25	40	37	0	NE	5	0	4	42	37	0.11	
Prawle Point ...	29.68	34	N	3	6	29.94	+1.26	30	29	-5	N	4	6	3	39	29	-	
Jersey ...	29.77	39	2	0	6	29.88	+1.25	39	36	+2	NE	3	6	3	41	36	0.01	
NETHERLANDS.																		
Hurst Castle ...	29.74	33	NE	2	6	29.93	+1.28	33	32	-2	N	3	6	1	38	28	-	
Dungeness ...	29.68	35	N	3	6	29.84	+1.29	33	32	+1	NNE	3	0	2	37	30	-	
London ...	29.73	36	NW	2	6	29.92	+1.28	33	32	0	N	2	0	*	37	32	-	
Oxford ...	29.74	34	NW	2	0	29.96	+1.29	32	31	-1	NW	3	0	*	36	30	-	
Cambridge ...	29.70	34	N	2	0	29.97	+1.34	31	30	-2	N	1	0	*	36	30	0.02	
FRANCE.																		
Yarmouth ...	29.68	34	NW	2	C	29.90	+1.24	31	30	-4	N	1	6	4	37	29	0.10	
Cuxhaven ...	29.55	32	NE	3	0	29.82	+1.49	34	33	+2	NNE	3	0	*	34	31	-	
Berlin ...	29.55	33	2	0	0	29.73	+1.27	31	31	-1	NW	2	0	*	34	30	-	
Wiesbaden ...	*	*	*	*	*	29.84	+1.35	29	27	-6	N	2	6	*	37	28	-	
Munich ...	29.68	29	W	4	6	29.81	+1.22	24	23	-3	SW	2	0	*	32	23	0.04	
FRANCE & NETHERLANDS.																		
The Helder ...	29.64	35	NNE	1	6	29.86	+1.39	35	34	-1	NNE	1	6	1	39	34	-	
Brussels ...	*	*	*	*	*	29.88	+1.35	29	?	-5	2	0	6	*	38	29	-	
Cape Gris Nez...	29.67	37	N	5	6	29.85	+1.26	35	34	-1	E	3	6	3	39	34	0.08	
Paris ...	29.70	36	NW	1	6	29.83	+1.23	31	31	-4	ESE	1	0	*	37	24	-	
Brest ...	?	41	N	5	0	29.80	+1.13	33	30	-1	NE	4	3	4	32	21	0.12	
FRANCE & NETHERLANDS.																		
Lorient ...	29.71	38	NNE	3	6	29.83	+1.16	35	34	0	NE	3	6	2	?	30	-	
Rochefort ...	29.73	36	ESE	3	6	29.82	+1.13	39	32	-5	NE	5	6	2	41	28	-	
Belfort ...	29.71	33	W	1	0	29.80	+1.06	21	21	-12	E	1	6	*	34	14	-	
Lyons ...	29.73	33	S	1	0	29.77	+1.08	29	29	-3	NW	4	3	*	39	27	-	
Nice ...	29.67	39	E	1	6	29.58	-0.07	41	35	+5	NNE	4	7	5	45	36	-	
FRANCE & NETHERLANDS.																		
Perpignan ...	29.68	39	NE	1	0	29.66	-0.09	36	35	+7	N	4	7	*	49	?	0.16	
Biarritz ...	29.66	44	W	7	7	29.66	0.00	39	37	-6	S	3	0	3	50	37	0.32	
PORTUGAL.																		
Corunna ...	*	*	*	*	*	29.85		37	37		ESE	1	0	5	48	34	?	
Lisbon ...	29.66	44	N	5	6	29.50	+1.10	41	39	-1	NNE	1	6	2	48	41	0.05	

For Explanation of Columns, see p. 4. † Received too late for insertion in Charts.

1887.

(Explanation of Map)

Sea Disturbance—where considerable is shown that
 = Rough.  = High.

at 8 a.m. for the month of December.
During the 10 Years 1871—1880.

A hand-drawn weather map of the North Atlantic region, showing isobars, wind directions, and pressure values. The map includes labels for 'Low', 'High', 'Barometer', and 'Considerably'. Isobars are labeled with values like 29.4, 29.5, 29.6, 29.7, 29.8, 29.9, 30.0, and 30.1. Wind directions are indicated by arrows, and some areas are marked with 'decidedly' and 'fairly'.

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

for the month of December.

NOTE—The Temperature means are for the 10 years 1871–80, the Rainfall means are mainly those for the 10 years 1896–85

GENERAL SITUATION AT 8 A.M.

PRESSURE	Highest, 30.0 to 30.1 in: over Ireland and North Wales; and apparently 29.9 in: and more over Zealand. Lowest, 29.4 in: in the northwest of Norway, 29.6 in: in the southeast of France, 29.7 in: over the north of Spain. Gradients moderate in the north, slight elsewhere. Barometer falling in north, rising elsewhere.
TEMPERATURE	Highest, 41° at Kice and Lisbon, 40° at Seilly, and Lonnorway, and 38° at Malin Head and Helmsdale. Lowest, -8° at Haparanda, +8° at Hernand, 21° at Belfast, 22° at Ransomtown, and 23° at Stockholm and Altona. It is rising again in the north of Scotland, falling over Ireland, England, and France.
WIND	S ^W and S ^W ² in the north and northwest—agale in Norway, light to moderate in Scotland. Nearly calm in north of England, and over Central Ireland. N ^W , light, in the Netherlands, NE ² , light to moderate in the Channel, and moderate to fresh over the Bay of Biscay.
WEATHER	(Dull and somewhat showery (snow and cold rain) in the far north and northeast, with threatening appearance at Wick. Dry over Ireland, England, and the north of France—clear at some stations, very gloomy at others. Showery, (rain) over some of the southern parts of France.
SEA	Rather rough at Skudenavia, slight or smooth in most other places, smooth in the Straits of Dover.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The fall of the barometer in the north is the result of a new depression of moderate size which is passing towards Norway from the Atlantic. It will probably spread over Scotland today, causing S^W² gales in the far north, but in England and the southern part of Ireland cold anticyclonic airs are still probable—with sharp frost inland tonight.

FORECASTS

for the 24 hours ending at NOON on 23rd DEC^r 1887.

DISTRICTS.	FORECASTS.	DISTRICTS.	FORECASTS.
1 SCOTLAND NORTH	SW ² and W ² winds, strong to a gale, rainy.	6 SCOTLAND WEST	SW ² breezes, moderate; some showers.
2 SCOTLAND EAST	SW ² winds, moderate; milder.	7 ENGLAND N. W.	Do Do Do
3 ENGLAND N. E.	Same as No 5	8 ENGLAND S. W.	NE ² breezes, light; fair, colder.
4 ENGLAND EAST	Same as No 5	9 IRELAND NORTH	Same as No 6
5 MIDLAND COUNTIES	Same as No 5	10 IRELAND SOUTH	Same as No 5
6 ENGLAND SOUTH	Calms and anticyclonic airs; dry, foggy in places, very cold tonight.	WARNINGS	The S. cone has been hoisted this morning in district 10.

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

YESTERDAY'S 2 P.M. REPORTS.

	Bar.	Dry.	Wet.	Wind.	Wes.	Sea.		Bar.	Dry.	Wet.	Wind.	Wes.	Sea.
Skudeenæs ...	29.74	35	81	ESE 1	c	4	Holyhead ...	29.79	39	37	N 5	c	4
Sumburgh Head ...	29.77	31	80	NNE 1	c	3	Valencia ...	29.93	41	37	N 3	bcw	4
Stornoway ...	29.82	34	34	N 3	bc	3	Scilly ...	29.72	39	39	NE 4	op	4
Aberdeen ...	29.79	32	31	NNE 3	bcsp	4	Dungeness ...	29.61	37	36	NNE 4	c	3
Shields ...	29.71	38	36	NNE 3	c	4	London ...	29.68	36	35	NNE 3	c	*
Ardrossan ...	29.87	36	33	N 3	c	2	Yarmouth ...	29.59	37	36	NW 2	bcw	4
Malin Head ...	29.89	39	34	NNE 3	bc	3	Jersey ...	29.67	41	39	ESE 2	c	2
Mullaghmore ...	29.92	38	36	NNE 4	c	2	Rochefort ...	29.89	37	36	SE 4	m	2
Belmullet ...	29.96	40	36	NNE 3	c	*							

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

The reports for yesterday morning showed that while areas of high pressure were lying respectively over Northern Europe, Algeria, and to the westward of the British Islands large areas of low readings existed over Russia and over North Germany and the Netherlands, while a small shallow depression was found over the Adriatic. With these conditions E² or NE² winds prevailed over Northern Europe and N² breezes over the United Kingdom and north of France, but in all other parts of the Continent the wind was light or moderate in force and circulated round one or other of the low pressure^{area} noticed above. Snow was falling in many parts of Central Europe as well as in the north of our Islands and rain in Portugal, but elsewhere the weather though cloudy was generally fair and dry. Temperatures had fallen over the whole of Europe and readings ranged from 50° and upwards over the north of Algeria and the southern parts of Italy and Spain to several degrees below zero over Northern Russia. A large area of frost covered the whole of Central and Northern Europe, with smaller areas lay over the central part of Ireland and Spain. The highest individual readings were 59° at Malta, 57° at Amour, 55° at San Fernando, 54° at Oran, Algiers, and Rindiri, and 53° at Palermo; the lowest were -11° at Archangel, -5° at Haparanda, +4° at Uleaborg, 7° at Knopio, 8° at Helsingfors, 10° at Rode, 17° at Ruda Reth.

In the course of the day the high pressure area to the westward of our Islands extended eastwards, and the wind shifted to NE. on our extreme southern coasts. Snow showers continued to fall at some of our northern stations.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

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

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

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

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

DAILY WEATHER REPORT.

for Friday 23rd December 1887.

Issued by the Meteorological Office, 116, Victoria Street, London, R. H. SCOTT, Secretary.

STATIONS.	+ YESTERDAY EVENING.						8 A.M. TO DAY.										PAST 24 HOURS.		
	Barometer at 32° F. and Sea Level.	Temp. in Shade.	WIND.		Weather.	Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	SHADE TEMP.		Difference from 8 a.m. yesterday.	WIND.		Weather.	Sea. (0 to 9.)	SHADE TEMP.		Amount of Rainfall.		
			Dir.	Force. (0 to 12.)				Dry.	Wet.		Dir.	Force. (0 to 12.)			Max.	Min.			
SCANDINAVIA.																			
Haparanda ..	29.54	19	NE	2	0	29.40	-1.40	7	7	+1	NE	4	C	*	6	11	0.04		
Hernösand ...	29.32	17	Z	0	0	29.17	-1.61	12	12	+4	NW	2	B	*	16	3	0.04		
Stockholm ...	29.62	25	WSW	2	0	29.19	-1.67	30	29	+7	SEW	2	0	*	?	21	0.04		
Wisby ...	29.77	32	WNW	6	0	29.30	-1.46	33	32	+3	WSW	6	S	*	36	28	-		
Bodö ...	29.08	17	ESE	6	0	29.25	-1.13	?	?	?	ESE	6	C	3	25	10	-		
Christiansund...	29.42	28	WNW	8	0	29.43	-1.17	28	27	-6	WNW	8	0	6	34	23	-		
Skudesnaes ...	29.56	38	WNW	8	C	29.61	-1.22	31	28	-2	WNW	8	C	6	39	?	0.35		
Christiania Fjord (Farder)	29.49	37	WSW	8	0	29.42	-1.44	27	24	+1	WNW	3	B	2	37	23	-		
Skagen (The Scaw)	29.42	30	WSW	5	0	29.42	-1.46	31	29	+3	NNE	5	bc	4	36	?	0.04		
Fanö ...	29.79	35	SW	4	C	29.60	-1.25	34	33	+7	NW	4	C	*	37	27	0.12		
BRITISH ISLANDS.																			
Sumburgh Head	29.77	34	NNE	2	C	29.85	+1.20	34	33	-2	WNW	4	osp	3	42	30	0.07		
Stornoway ...	29.85	40	E	4	0	29.98	+1.24	35	32	-5	SW	2	0	2	45	32	0.07		
Wick ...	29.63	39	N	3	C	29.93	+1.20	34	34	-1	NW	1	C	1	40	31	0.14		
Nairn ...	29.83	46	W	2	0	29.97	+1.19	34	32	0	SW	1	C	1	41	32	0.14		
Aberdeen...	29.77	36	WSW	1	0	29.98	+1.16	34	32	+11	NW	2	C	2	40	22	0.10		
Leith ...	29.54	37	W	3	0	30.00	+1.05	31	30	+3	W	1	f	*	39	27	0.06		
Shields ...	29.88	36	W	2	osp	30.00	+1.06	36	34	+10	NW	1	C	2	38	25	0.06		
Spurn Head ...	29.98	32	W	3	B	29.92	+1.01	39	37	+5	N	4	bc	4	39	31	0.02		
York ...	30.01	32	N	1	B	29.98	+1.01	36	35	+6	N	1	C	*	37	27	0.01		
Loughborough	30.05	30	W	1	B	29.98	+1.01	35	34	+2	NW	1	ogdm	*	35	29	-		
Ardrossan ...	29.96	42	SW	4	T	30.02	+1.03	34	34	+8	ESE	1	bf	0	42	25	0.03		
Malin Head ...	29.89	46	WNW	4	od	30.06	+1.10	43	41	+5	WNW	3	bc	2	46	38	0.16		
Mullaghmore ...	29.98	43	SW	5	T	30.08	+1.07	44	43	+9	N	2	C	2	46	34	0.10		
Belmullet ...	30.04	47	WNW	3	om	30.14	+1.12	44	44	+6	NNE	2	0	*	47	38	0.03		
Donaghadee ...	29.95	39	SW	4	T	30.03	+1.01	41	41	+11	SW	1	C	1	41	30	0.12		
Barrow-in-Furness	29.99	39	WSW	3	C	29.98	+1.00	35	35	+7	NE	2	C	*	41	27	0.08		
Liverpool (Bidston)	30.05	33	WSW	2	0	30.01	+1.01	34	34	+3	W	1	f	3	40	31	0.04		
Holyhead ...	30.03	38	WSW	1	C	30.00	+1.01	44	44	+7	NNE	3	0	2	45	36	0.06		
Parsonstown ...	30.08	34	Z	0	0	30.09	+1.01	41	40	+19	Z	0	0	*	42	21	0.06		
Valencia ...	30.14	42	SE	1	om	30.12	+1.02	47	46	+13	WNW	2	0	2	48	33	0.07		
Roche's Point...	30.11	37	NNE	1	C	30.08	+1.02	43	42	+12	WNW	2	C	3	45	30	0.02		
Pembroke ...	30.09	36	NE	1	C	30.01	+1.02	44	44	+10	NW	2	Tq	1	44	34	0.01		
Scilly ...	30.08	41	NNE	3	C	30.03	+1.10	45	45	+5	WNW	5	0	4	45	39	0.01		
Prawle Point ...	30.10	31	NNE	2	bc	30.03	+1.09	37	36	+7	W	2	0	2	38	28	-		
Jersey ...	30.04	40	NE	3	cm	30.05	+1.17	37	34	-2	WNW	2	bcn	2	42	35	-		
Hurst Castle ...	30.05	33	NNE	3	bm	30.01	+1.08	38	33	0	NW	3	om	0	35	25	-		
Dungeness ...	29.99	33	N	2	C	29.95	+1.11	28	28	-5	NW	3	C	3	37	27	-		
London ...	30.06	32	WNW	2	om	29.98	+1.06	31	30	-2	NW	1	of	*	34	29	-		
Oxford ...	30.07	31	N	1	0	29.99	+1.03	32	31	0	W	1	og	*	33	26	-		
Cambridge ...	30.03	32	NW	1	0	29.97	+1.00	34	32	+3	NW	1	0	*	34	28	-		
Yarmouth ...	29.99	30	NW	3	f	29.99	-1.01	32	31	+1	WNW	3	f	4	36	26	0.01		
Cuxhaven ...	30.12	30	SW	1	0	?	?	33	33	-1	?	6	S	*	35	30	-		
Berlin ...	29.91	31	WNW	2	0	29.82	+1.09	31	30	0	W	3	0	*	32	23	0.04		
Wiesbaden ...	*	*	*	*	*	29.95	+1.11	24	23	-5	Z	0	b	*	36	24	-		
Munich ...	29.86	24	NE	3	0	29.81	-1.00	19	19	-5	NE	3	0	*	30	19	-		
FRANCE & NETHERLANDS.																			
The Helder ...	29.96	34	E	1	B	29.81	-1.05	38	37	+3	W	4	S	3	38	32	0.08		
Brussels ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	-	
Cape Gris Nez...	29.98	35	NNE	3	0	29.95	+1.10	34	34	-1	W	4	bc	3	39	32	-		
Paris ...	29.97	33	NNE	3	bc	30.02	+1.19	26	25	-5	NNE	3	0	*	36	26	-		
Brest ...	29.89	33	NE	3	B	30.12	+1.32	37	34	+4	NW	4	0	3	48	32	-		
Lorient ...	30.01	39	NNE	4	B	30.12	+1.32	36	34	+1	N	3	B	2	?	32	-		
Rocheport ...	29.94	36	NE	7	B	30.00	+1.18	32	31	-1	NE	7	B	2	41	27	-		
Belfort ...	29.80	29	E	1	B	29.83	+1.03	23	21	+2	E	4	B	*	31	18	-		
Lyons ...	29.75	31	N	5	B	29.79	+1.02	26	24	-3	N	7	0	*	31	26	-		
Nice ...	29.49	45	E	1	0	29.35	-1.25	44	37	+3	NW	1	0	3	46	39	-		
Perpignan ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	-	
Biarritz ...	29.79	38	E	4	0	29.99	+1.33	38	32	-6	E	5	C	2	41	32	-		
Corunna ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	-	
Lisbon ...	29.93	45	WNW	3	bc	29.98	+1.18	42	39	+1	N	5	B	2	50	41	-		

For Explanation of Columns, see p. 4.

WEATHER CHARTS

for 8 a.m. on Friday, 23rd December, 1887.

BAROMETER, WIND & SEA.

(Explanation of Map)

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

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

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

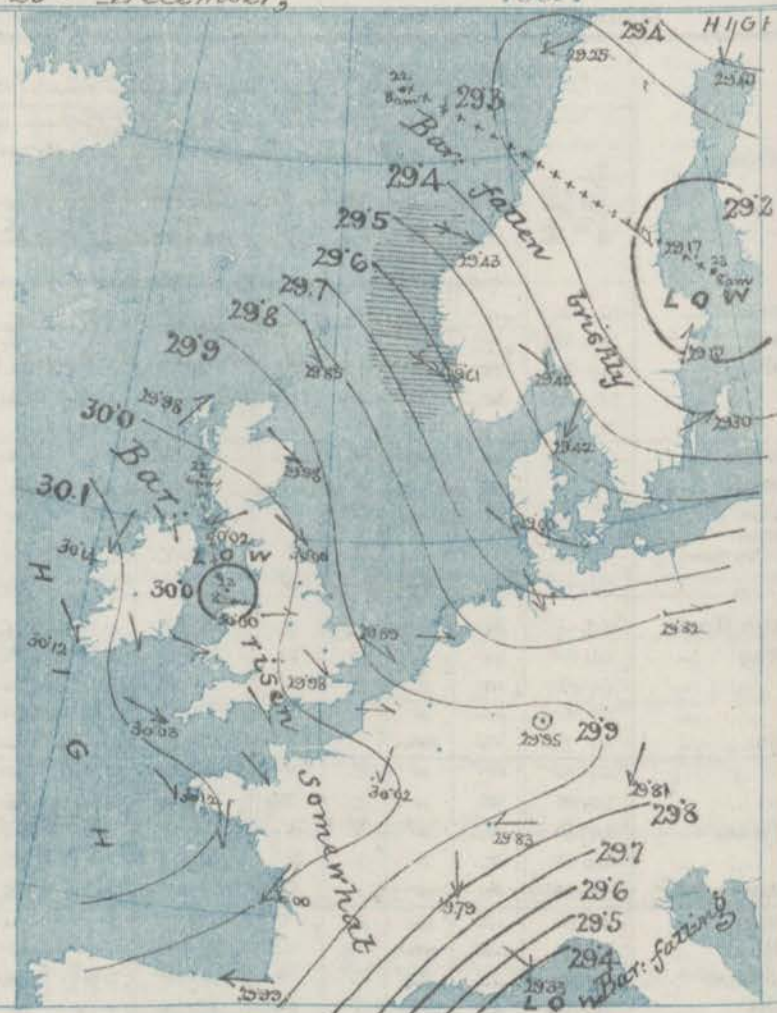
Sea Disturbance — where considerable is shown thus

— Rough. — High.

MEAN HEIGHT of the BAROMETER

at 8 a.m. for the month of December
During the 10 Years 1871—1880.

STATIONS.	MEAN READINGS.
	in.
Sumburgh Head	29.680
Stornoway	29.701
Wick	29.713
Nairn	29.741
Aberdeen	29.750
Leith	29.800
Shields	29.836
York	29.877
Ardrossan	29.810
Doughdudd	29.832
Holyhead	29.858
Liverpool	29.882
Valencia	29.879
Roche's Point	29.889
Pembroke	29.897
Scilly	29.943
Hurst Castle	29.938
Dover	29.942
LONDON	29.934
Oxford	29.937
Cambridge	29.926
Yarmouth	29.902



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.

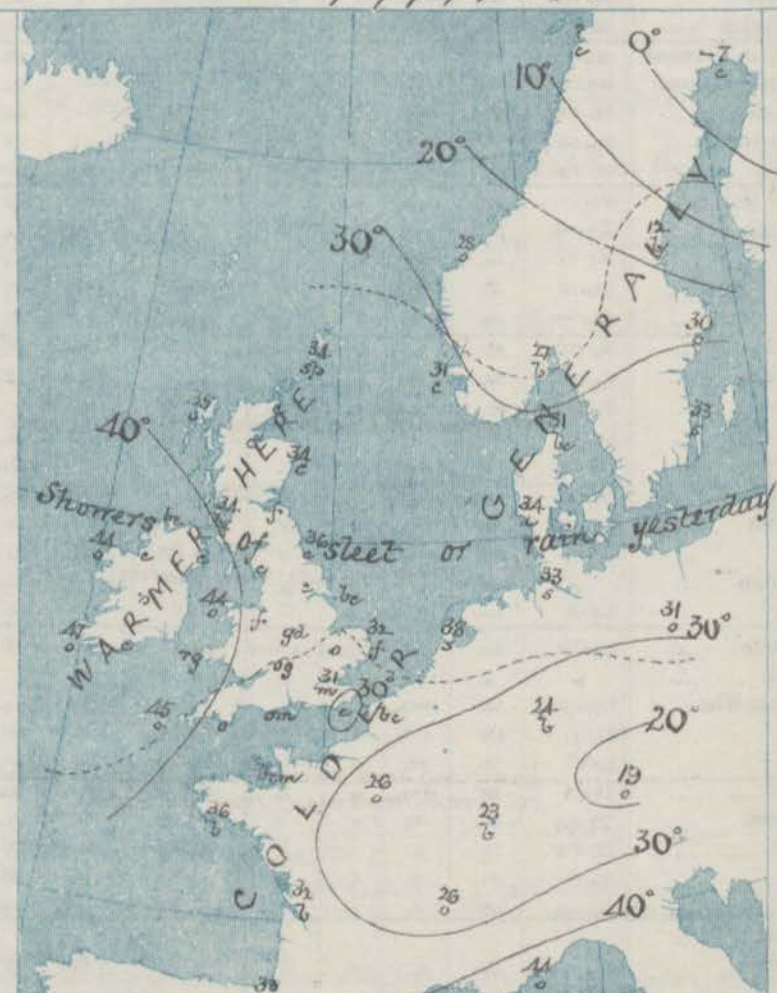
Rainfall — A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

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	42.0	34.5	39.0	37.6	4.33
Stornoway	44.8	33.5	38.9	37.8	5.66
Wick	42.0	32.1	37.8	36.4	3.18
Nairn	41.5	32.8	36.9	35.4	2.08
Aberdeen	41.8	32.9	36.9	35.3	3.34
Leith	44.3	33.8	38.4	37.0	2.01
Shields	42.8	34.3	39.2	36.9	2.74
York	42.5	31.0	36.2	35.4	2.45
Ardrossan	47.0	36.1	40.1	38.3	4.04
Doughdudd	46.7	36.1	40.1	39.1	2.84
Holyhead	46.8	39.6	42.9	41.3	3.84
Liverpool	43.6	35.7	39.1	37.4	2.70
Valencia	50.0	40.0	44.7	41.8	5.82
Roche's Point	47.7	39.3	42.9	41.4	4.74
Pembroke	47.1	40.4	43.7	42.6	4.09
Scilly	49.8	43.9	47.2	45.3	4.10
Hurst Castle	45.5	36.5	40.6	39.9	2.84
Dover	44.2	36.5	40.0	38.8	3.20
LONDON	44.5	33.9	38.1	37.1	2.14
Oxford	43.3	33.6	37.3	36.6	2.13
Cambridge	43.3	31.8	36.3	35.6	1.99
Yarmouth	42.2	33.8	37.9	37.2	2.05

Note — The Temperature means are for the 10 years 1871—80, the Rainfall means are mainly those for the 20 years 1866—85.



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30.00 to 30.15 in: over the western parts of the British Islands—29.8 in: and more in a Col over Central Germany.
Lowest, about 29.10 in: over the Gulf of Bothnia, and 29.3 in: over the Gulf of Genoa.
Gradients slight in our Islands, moderate on the eastern shores of the North Sea. Barometer rather unsteady in our Islands.

TEMPERATURE

Highest, 47° at Valencia, 45° at Sicily, 44° at Malmø, and 42° at Lisbon.
Lowest, 7° at Haparanda, +12° at Helsingfors, 19° at Munich, 23° at Relfat, 24° at Kirsbadon, 26° at Paris, 27° at Christiania, 28° at Christiania and
Danzon, 31° at Berlin and in London.
It has risen considerably in the west of our Islands during the past 24 hours.

WIND

NE in the north of Scandinavia, NW in the south and in Holstein—W in North Germany.
Variable (but chiefly NW) over the British Islands, N and NE over the south of France.
In our Islands it is light; but on the Continent it is strong to gale.

WEATHER

Very dull and cloudy in most countries, with fog, snow or cold rain in several localities.
On our north-east coast, however, and in the Skagerrack it is fair at present.

SEA

Very little disturbed.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

A continuation of cold unsettled, showery weather (snow sleet or cold rain) appears likely, with night frosts over inland districts.

FORECASTS

For the 24 hours ending at NOON on 24th DEC^r 1887.

DISTRICTS.

FORECASTS.

0	SCOTLAND NORTH	W and NW winds, changeable, cold showers.
1	SCOTLAND EAST	Do Do Do
2	ENGLAND N.E.	N and NE winds; snow showers, cold.
3	ENGLAND EAST	Same as No 5
4	MIDLAND COUNTIES	Same as No 5
5	ENGLAND SOUTH	Varying airs and N breezes; dull with cold rain and snow. Frost in night.

DISTRICTS.

FORECASTS.

6	SCOTLAND WEST	Same as No 0
7	ENGLAND N.W.	Same as No 0.
8	ENGLAND S.W.	NW winds; very changeable, becoming colder again.
9	IRELAND NORTH	Do Do Do
10	IRELAND SOUTH	Do Do Do

WARNINGS

NONE ISSUED.

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

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

YESTERDAY'S 2 P.M. REPORTS.

	Bar.	Dry.	Wet.	Wind.	Wea.	Sea.		Bar.	Dry.	Wet.	Wind.	Wea.	Sea.
Skudesnaes ...	29.68	39	85	W 14	0	5	Holyhead ...	30.05	39	36	W 1	c	2
Sumburgh Head ...	29.60	40	40	N 14	2	3	Valencia ...	30.12	41	39	E 1	om	2
Stormoway ...	29.73	45	45	W 4	15	4	Scilly ...	30.02	42	39	NE 4	c	3
Aberdeen ...	29.77	34	82	SW 2	alm	2	Dungeness ...	29.93	36	85	N 4	c	3
Shields ...	29.95	31	30	W 1	m	3	London ...	30.02	34	33	N 1	off	*
Ardrossan ...	29.92	39	38	W 5	5	4	Yarmouth ...	29.95	36	35	N 2	om	4
Malin Head ...	29.91	40	40	WSW 4	0	3	Jersey ...	29.99	42	38	E 3	to	8
Mullaghmore ...	30.00	40	39	SW 5	1m	2	Rochefort ...	29.86	38	37	NE 5	0	2
Belmullet ...	30.05	45	44	W 3	0	*							

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

The reports for yesterday morning showed that pressure was highest, 30.1 in: and upwards, in a small anticyclone lying off the southwest of Ireland, and relatively high, 29.9 in: and upwards, over South-eastern Europe. The lowest pressures, 29.4 in: and less, were found in a depression lying off the northwest of Europe, but other disturbances were lying respectively over Northern Russia, the Danish end of the Baltic, and the western part of the Mediterranean. With these conditions the wind varied greatly in different localities. In the north of our Islands it was moderate from the SW¹ and in the west of Norway strong from the same quarter, but over the Baltic, the Netherlands, the south of England and the greater part of France it varied between NE. and E., in Algeria it was SW¹, and in Italy SE², while in Austria it was chiefly NW¹. The weather was fine over the greater part of our Islands as well as in Germany, France, and Spain, but cloudy or overcast elsewhere, with rain in the extreme north of Scotland as well as in the neighbourhood of the Mediterranean depression. Temperature had risen somewhat in the north of Norway, but fallen elsewhere; readings ranged from 50° and upwards on the shores of the Mediterranean to a few degrees below zero over Lapland and the White Sea. The highest individual readings were 60° at Marse, 58° at Oran, 55° at Algiers and Cagliari, 53° at Palermo and Brindisi and 51° at Sanjuvian; the lowest were -8° at Haparanda, -7° at Kuopio, -5° at Archangel, -3° at Uleaborg, +4° at St. Petersburg, 5° at Helsinki and 8° at Helsingfors.

In the course of the day the depression off the Norwegian coast began to move southwards over Scandinavia, and the barometer rose in the extreme north of our Islands, while the wind there veered to the northward. A small secondary disturbance was, however, formed over the west of Scotland and this occasioned S winds and rain at several of our northwestern stations.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

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

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

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

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DAILY WEATHER REPORT.

for Saturday 24th December 1887.

Issued by the Meteorological Office, 116, Victoria Street, London, R. H. SCOTT, Secretary.

	† YESTERDAY EVENING.						8 A.M. TO DAY.										PAST 24 HOURS.		
STATIONS.	Barometer at 32° F. and Sea Level.	Temp. in Shade.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Sea. (0 to 9.)	Weather.	SHADE TEMP.		Amount of Rainfall.		
			Dir.	Force. (0 to 12.)		Reading at 8 A.M. and Sea Level.	Difference from 8 A.M. yesterday.	Dry.	Wet.	Difference from 8 A.M. yesterday.	Dir.	Force. (0 to 12.)			Max.	Min.			
SCANDINAVIA.																			
Haparanda ..	29.58	-17	N	2	b	29.78	+ .38	-16	-16	-9	N	2	b	*	-7	-18	-		
Hernösand ...	29.27	9	N	6	s	29.62	+ .45	7	7	-5	N	6	0	*	14	1	0.08		
Stockholm ...	29.14	20	NW	4	0	29.25	+ .06	10	9	-20	N	2	c	*	30	?	0.12		
Wisby ...	29.19	27	N	6	0	29.19	- .11	25	25	-8	NNW	4	s	*	26	25	0.20		
Bodö ...	29.15	14	ESE	4	b	29.74	+ .49	12	9	?	ESE	4	b	2	16	10	-		
Christiansund...	29.44	32	NE	3	c	29.72	+ .29	30	29	+2	ESE	2	c	5	32	27	0.47		
Skudesnaes ...	29.60	28	NNW	4	b	29.63	+ .02	31	30	0	NNW	4	b	4	32	27	-		
Christiania Fjord (Ferder)	29.28	28	W	5	bc	29.42	.00	29	25	+2	N	7	b	2	29	25	-		
Skagen (The Scaw)	29.33	30	NW	2	c	29.38	- .04	23	23	-8	NE	4	0	4	32	23	0.04		
Fanö ...	29.53	33	NW	4	c	29.48	- .12	28	24	-6	NNW	4	b	*	36	24	-		
BRITISH ISLANDS.																			
Sumburgh Head	29.80	31	NNE	1	c	29.89	+ .04	33	31	-1	N	2	0	3	34	29	0.05		
Stornoway ...	29.93	45	NW	6	TS	29.99	+ .01	40	39	+5	W	1	0	2	45	35	0.08		
Wick ...	29.81	42	NW	4	0	29.97	+ .04	36	35	+2	N	3	0	2	42	32	0.05		
Nairn ...	29.81	42	W	2	0	29.95	- .02	37	35	+3	W	1	0	2	42	32	0.05		
Aberdeen...	29.79	40	W	4	T	29.92	- .06	36	33	+2	NNW	4	c	2	41	33	0.07		
Leith ...	29.89	39	W	3	c	29.94	- .06	35	35	+4	NW	1	bc	*	42	29	-		
Shields ...	29.87	36	W	1	0	29.91	- .09	36	35	0	NW	1	0	2	40	33	0.06		
Spurn Head ...	29.93	36	NW	4	bc	29.85	- .07	37	36	-2	NNW	5	c	5	40	35	0.03		
York ...	29.94	35	NNW	1	bc	29.91	- .07	37	36	+1	N	2	0	*	40	34	0.01		
Loughborough	30.01	35	NW	1	0	29.90	- .08	38	36	+3	NNW	1	gm	*	42	34	0.02		
GERMANY.																			
Ardrossan ...	29.94	45	NW	3	odm	29.96	- .06	44	41	+10	NNW	3	ow	2	45	32	0.01		
Malin Head ...	30.05	46	NNW	4	0	30.03	- .03	43	43	0	NNW	3	ow	2	46	43	0.02		
Mullaghmore ...	30.11	45	W	2	0	30.08	.00	44	44	0	NNW	4	ow	2	45	42	0.03		
Belmullet ...	30.14	46	NW	3	0	30.13	- .01	43	43	-1	N	1	0	*	46	43	0.05		
Donaghadee ...	30.03	43	NW	4	c	29.99	- .04	44	44	+3	NW	4	c	3	45	39	0.04		
FRANCE & NETHERLANDS.																			
Barrow-in-Furness	29.97	38	NE	2	bc	29.93	- .05	40	39	+5	N	2	c	*	44	35	0.01		
Liverpool (Bidston)	30.00	38	W	3	0	29.95	- .06	41	40	+7	NW	2	0	2	44	32	0.01		
Holyhead ...	30.05	43	NW	3	c	29.96	- .04	45	45	+1	NNW	5	ow	4	46	41	-		
Parsonstown ...	30.14	39	W	0	0	30.09	.00	42	41	+1	W	0	0	*	42	38	0.02		
Valencia ...	30.16	46	NNW	1	0	30.14	+ .02	45	44	-2	WSW	1	c	1	49	41	0.01		
Roche's Point...	30.14	44	N	1	bc	30.10	+ .02	44	43	+1	NNW	3	0	3	46	38	-		
Pembroke ...	30.06	41	N	2	b	30.00	- .01	45	44	+1	NW	3	c	2	46	40	-		
Seilly ...	30.04	47	N	4	op	30.05	+ .02	46	45	+1	NNW	4	0	4	48	44	0.02		
Prawle Point ...	30.04	39	NNE	3	c	30.00	- .03	40	39	+3	NNW	2	c	2	42	34	-		
Jersey ...	30.01	43	NNW	2	odm	29.98	- .07	45	43	+8	NNW	2	ow	2	45	35	0.08		
ITALY.																			
Hurst Castle ...	30.01	38	NNE	2	b	29.91	- .10	40	40	+7	NNW	3	ow	0	40	30	-		
Dungeness ...	29.93	34	NNW	1	m	29.81	- .14	39	38	+11	N	3	c	2	39	27	-		
London ...	30.01	37	N	3	0	29.88	- .10	40	39	+9	NNW	1	0	*	40	31	0.02		
Oxford ...	30.01	34	NNW	1	0	29.91	- .08	40	40	+8	NNW	3	ow	*	40	32	0.02		
Cambridge ...	29.98	35	N	1	0	29.88	- .09	38	37	+4	N	1	c	*	41	32	-		
SPAIN.																			
Yarmouth ...	29.91	36	NW	3	c	29.77	- .12	37	36	+5	NNW	3	c	4	38	31	0.02		
Cuxhaven ...	29.86	32	N	6	0	29.49	?	33	32	0	N	5	b	*	36	31	-		
Berlin ...	29.59	31	NNW	4	0	29.41	- .41	30	29	-1	W	0	0	*	32	28	0.04		
Wiesbaden ...	*	*	*	*	*	29.59	- .36	32	32	+8	SW	4	S	*	34	?	0.04		
Munich ...	29.73	21	W	2	m	29.67	- .14	22	22	+3	W	5	S	*	24	18	0.04		
PORTUGAL.																			
The Helder ...	29.80	40	NW	4	c	29.62	- .19	38	34	0	N	7	c	4	41	37	0.16		
NETHERLANDS.																			
Brussels ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		
Cape Gris Nez...	29.92	40	N	4	0	29.80	- .15	41	39	+7	N	7	c	5	41	34	0.04		
Paris ...	29.96	31	SW	3	0	29.86	- .16	34	33	+8	SW	3	S	*	52	?	0.04		
Brest ...	30.05	44	W	0	T	30.07	- .05	43	38	+6	NNE	4	0	4	48	32	0.12		
AFRICA.																			
Lorient ...	30.07	44	NNW	3	c	30.06	- .06	42	41	+6	N	1	bc	2	45	?	-		
Rockfort ...	30.08	39	NNW	5	b	30.05	+ .05	40	40	+8	NNW	4	0	2	41	?	-		
Belfort ...	29.86	23	ESE	3	b	29.79	- .04	20	20	-3	W	3	c	*	?	12	-		
Lyons ...	29.89	24	N	4	b	29.94	+ .15	28	24	+2	N	1	0	*	30	24	-		
Nice ...	29.42	42	W	1	c	29.51	+ .18	39	34	-5	E	1	b	2	45	34	-		
AMERICA.																			
Perpignan ...	29.80	35	NW	8	b	29.89	+ .23	41	35	+6	NW	7	0	*	?	34	-		
Biarritz ...	30.06	37	E	4	b	30.05	+ .06	40	36	+7	SW	3	0	1	43	30	-		
ITALY.																			
Corunna ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		
Lisbon ...	30.12	42	N	4	b	30.18	+ .20	37	33	-5	N	5	b	2	45	36	-		

For Explanation of Columns, see p. 4.

† Received too late for insertion in Chart.

WEATHER CHARTS

for 8 a.m. on Saturday 24th December, 1887.

BAROMETER, WIND & SEA.

(Explanation of Map)

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

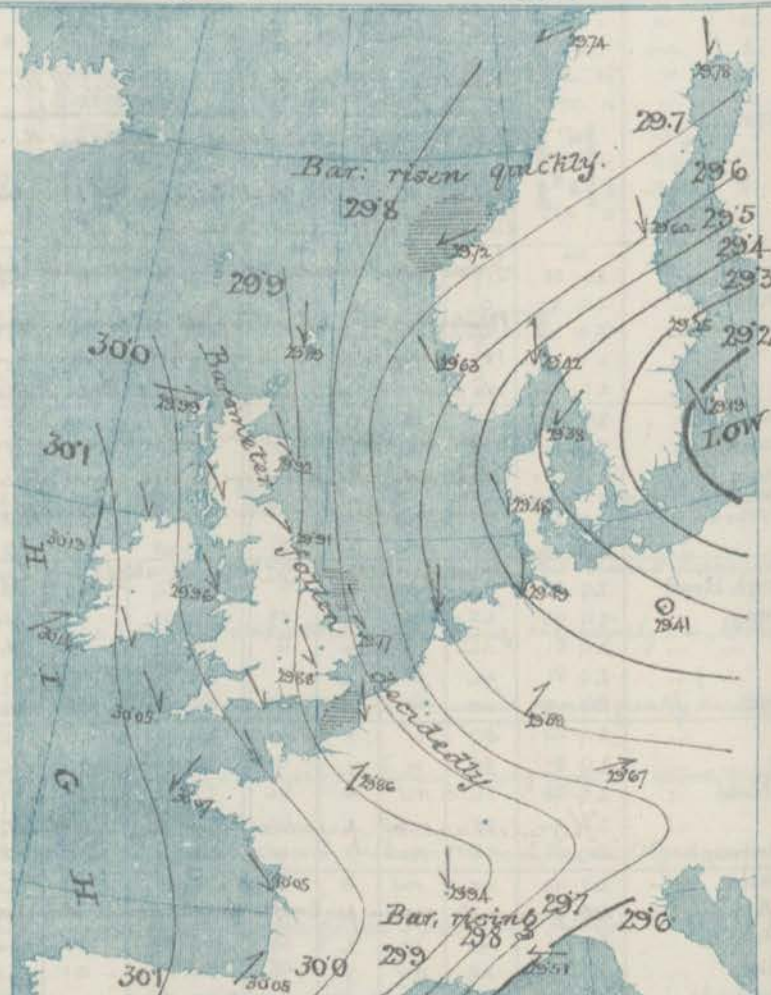
Sea Disturbance—where considerable is shown thus

■ = Rough. ■ = High.

MEAN HEIGHT of the BAROMETER

at 8 a.m. for the month of December.
 During the 10 Years 1871—1880.

STATIONS.	MEAN READINGS.
	in.
Sunburgh Head	29.680
Stornoway	29.701
Wick	29.713
Nairn	29.741
Aberdeen	29.759
Leith	29.800
Shields	29.886
York	29.877
Ardrossan	29.810
Donaghadee	29.832
Holyhead	29.866
Liverpool	29.882
Valencia	29.879
Roche's Point	29.890
Pembroke	29.807
Scilly	29.943
Hurst Castle	29.938
Dover	29.942
LONDON	29.984
Oxford	29.987
Cambridge	29.926
Yarmouth	29.902



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.

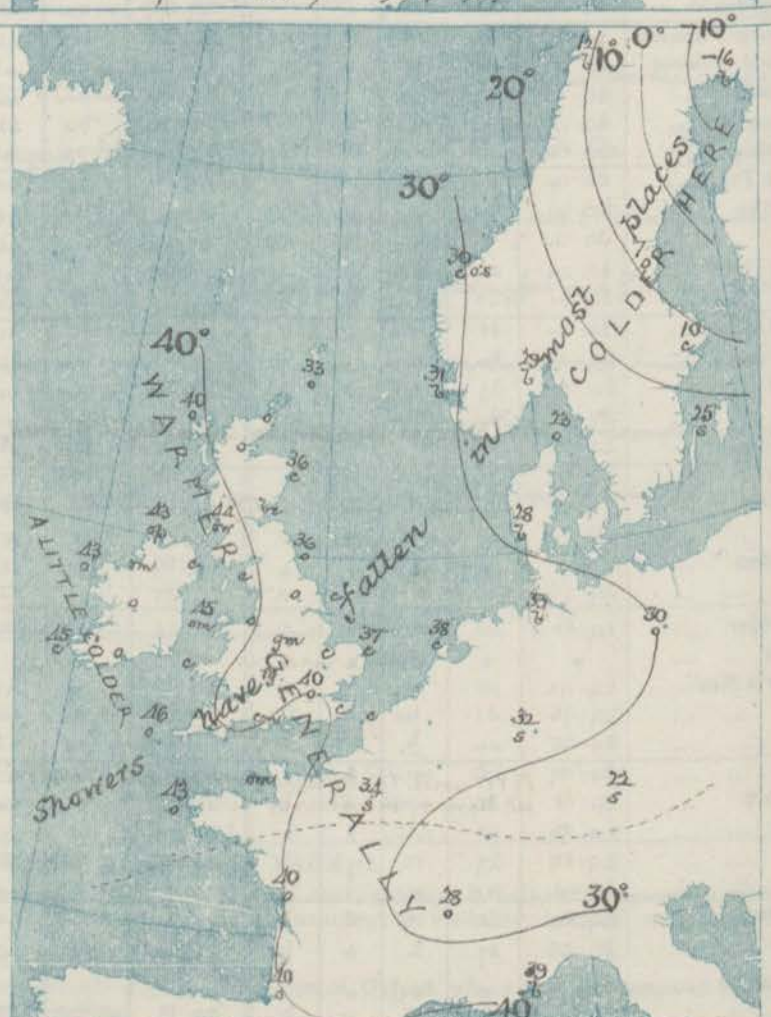
Rainfall. A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE. AND RAINFALL.

for the month of December.

STATIONS	TEMPERATURE				RAINFALL (Inches)
	Daily Max	Daily Min.	Average Dry.	Average Wet.	
Sunburgh Head	42.0	34.5	39.0	37.6	4.33
Stornoway	44.5	38.5	38.0	37.8	5.66
Wick	42.0	32.1	37.8	36.4	3.18
Nairn	41.5	32.8	36.9	35.4	2.08
Aberdeen	41.8	32.9	36.9	35.3	3.34
Leith	44.3	33.6	38.4	37.0	2.01
Shields	42.8	34.3	39.3	36.9	2.74
York	42.5	31.9	36.2	35.4	2.46
Ardrossan	47.0	36.1	40.1	38.3	4.04
Donaghadee	46.7	36.1	40.1	39.1	2.84
Holyhead	46.8	39.6	42.9	41.3	3.84
Liverpool	43.6	35.7	39.1	37.4	2.70
Valencia	50.0	40.0	44.7	41.8	5.82
Roche's Point	47.7	39.3	42.9	41.4	4.74
Pembroke	47.1	40.4	43.7	42.6	4.06
Scilly	40.8	43.9	47.2	45.3	4.10
Hurst Castle	45.5	36.5	40.6	39.9	2.64
Dover	44.2	36.5	40.0	38.8	3.20
LONDON	44.5	33.9	38.1	37.1	2.14
Oxford	43.3	33.6	37.3	36.6	2.13
Cambridge	43.3	31.8	36.3	35.6	1.99
Yarmouth	42.2	33.8	37.9	37.2	2.05

Note—The Temperature means are for the 10 years 1871—80, the Rainfall means are mainly those for the 10 years 1866—85.



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30.0 to 30.14 in.; in the west of the British Isles — 30.18 in. at Lisbon.
 Lowest, 29.2 in. in a depression near Gotland — 28.5 in. at St. Peter.
 Gradients slight in our Islands, moderate over the North Sea. Barometer rising in northwest and north.

TEMPERATURE

Highest, 46° at Seville, 45° at Valencia, 44° at Androssan and Donaghadee.
 Lowest, 35° to 37° on our eastern coast, 22° at Munich, 23° at the Scaur, 10° at Stockholm, — 16° F. at Hafnarfjörður.
 It has risen considerably over several parts of Great Britain since yesterday.

WIND

Moderate NE^{ly} in north of Scandinavia, moderate NW^{ly} and N^{ly} in our Islands.
 N^{ly} strong to gale in the Netherlands and also at Færøer.
 W^{ly} and SW^{ly} over Germany and the east of France.

WEATHER

Clear in north of Scandinavia and in Denmark, very dull and cloudy in most other places.
 Slight cold showers have fallen generally and continue in some localities.
 Snow is falling at Paris and at Wiesbaden.

SEA

Moderate off our east coast, slight or smooth elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The increase of pressure in the north appears to be spreading to our northwest coast, so that a continuation of N^{ly} (NW to NE) winds seems probable with some decrease in temperature.

FORECASTS

For the 24 hours ending at NOON on 25th DEC^r

1887.

DISTRICTS.

FORECASTS.

0	SCOTLAND NORTH	N ^{ly} breezes, moderate; some slight showers, colder.
1	SCOTLAND EAST	— D° — D° — D° —
2	ENGLAND N.E.	— D° — D° — D° —
3	ENGLAND EAST	Same as No 5
4	MIDLAND COUNTIES	Same as No 5
5	ENGLAND SOUTH	NW ^{ly} and N ^{ly} breezes; dull, slight showers at times, becoming colder.

DISTRICTS.

FORECASTS.

6	SCOTLAND WEST	N ^{ly} breezes, moderate; cloudy, fair as a whole. Colder.
7	ENGLAND N.W.	— D° — D° — D° —
8	ENGLAND S.W.	NW ^{ly} and N ^{ly} breezes, moderate or light; fair, colder.
9	IRELAND NORTH	— D° — D° — D° —
10	IRELAND SOUTH	— D° — D° — D° —

WARNINGS

NONE ISSUED.

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

YESTERDAY'S 2 P.M. REPORTS.

	Bar.	Dry.	Wet.	Wind.	Wea.	Sea.		Bar.	Dry.	Wet.	Wind.	Wea.	Sea.
Skudeenæs ...	29.63	27	27	nmw 2	S	4	Holyhead ...	30.05	42	42	25 0	bc	0
Sumburgh Head ...	29.79	33	35	25 0	S	3	Valencia ...	30.15	47	45	N 2	bc	2
Stornoway ...	29.93	36	36	nmw 6	rg	4	Scilly ...	30.02	47	47	N 4	o/p	4
Aberdeen ...	29.89	37	34	W 2	0	1	Dungeness ...	29.92	37	36	nmw 3	m	3
Shields ...	29.98	36	34	W 2	0	2	London ...	29.97	41	38	nmw 2	bm	*
Ardrossan ...	30.00	41	40	nmw 3	c	2	Yarmouth ...	29.92	37	36	nmw 3	c	4
Malin Head ...	30.06	45	44	nmw 2	0	2	Jersey ...	30.02	44	43	N 2	0	2
Mullaghmore ...	30.11	45	44	W 1	om	2	Rocheport ...	30.10	39	36	nc 5	6	2
Belmullet ...	30.15	46	46	N 1	od	*							

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

Continental Information not to hand

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 25th December 1887.
 Issued by the Meteorological Office, 116, Victoria Street, London, R. H. SCOTT, Secretary.

Issued by the Meteorological Office, No. 1, Victoria Street, London, W.

	+ YESTERDAY EVENING.						8 A.M. TO DAY.										PAST 24 HOURS.		
STATIONS.	Barometer at 32° F. and Sea Level.	Temp. in Shade.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Weather.	Sea. (0 to 9.)	SHADE TEMP.		Amount of Rainfall.		
			Dir.	Force. (0 to 12.)		Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Dir.	Force. (0 to 12.)			Max.	Min.			
SCANDINAVIA.																			
Haparanda ...	29.02	-3	2	0	b	29.99	+ .47	-5	-6	+ 9	N	2	b	*	2	-15	—		
Hernösand ...	29.82	6	NNE	8	s	29.99	+ .37	8	7	+ 1	NNW	4	o	*	10	5	—		
Stockholm ...	29.50	16	WNW	6	s	29.61	+ .36	19	18	+ 9	WNW	6	o	*	27	9	0.24		
Visby ...	29.44	27	N	4	bc	29.50	+ .31	30	28	+ 8	N	6	s	*	?	21	0.28		
Bodö ...	29.92	15	ESE	2	b	30.01	+ .29	11	9	- 1	ENE	6	b	3	16	10	—		
Christiansund ...	29.80	29	SE	3	c	29.81	+ .12	22	21	- 8	ESE	3	b	4	?	21	—		
Skudesnaes ...																			
Christiania Fjord (Farder)	29.71	25	NNE	6	b	29.84	+ .42	15	13	- 14	NNE	5	b	2	29	10	—		
Skagen (The Scaw)	29.69	22	NE	4	s	29.72	+ .24	19	18	- 4	ENE	3	o	5	25	8	—		
Fanö ...	29.69	25	N	4	c	29.75	+ .27	21	20	- 7	N	2	c	*	32	21	—		
BRITISH ISLANDS.																			
Sumburgh Head	29.89	38	N	2	o	29.83	- .06	39	39	+ 6	N	1	o	2	40	31	0.20		
Stornoway ...	30.03	43	W	2	c	29.98	- .05	43	43	+ 3	NW	5	o	3	43	36	0.02		
Wick ...	29.99	34	NW	2	c	29.97	- .10	40	40	+ 4	NW	1	o	1	40	32	0.05		
Nairn ...	30.04	24	W	1	b	29.88	- .07	39	37	+ 2	WNW	1	o	1	40	32	—		
Aberdeen ...	30.00	36	NNW	3	b	29.80	- .08	40	38	+ 4	NNW	4	r	2	40	34	0.02		
Leith ...	30.03	35	NE	1	c	29.90	- .04	36	35	+ 1	NW	1	b	*	42	32	—		
Shields ...	29.98	35	NNW	2	o	29.87	- .04	35	33	- 1	W	2	o	3	36	31	0.20		
Spurn Head ...	29.91	36	NW	5	bc	29.88	+ .03	35	33	- 2	WNW	5	bc	6	38	33	0.10		
York ...	29.97	36	N	2	c	29.91	.00	32	31	- 5	N	1	b	*	41	30	—		
Loughborough	29.98	37	WNW	1	o	29.97	+ .07	33	31	- 5	WNW	1	c	*	41	31	—		
Ardrossan ...	30.00	38	2	0	b	29.94	- .02	40	39	- 4	2	0	bc	0	42	31	—		
Malin Head ...	30.06	43	NNW	2	b	30.02	- .01	44	44	+ 1	NW	3	ap	3	44	42	0.02		
Mullaghmore ...	30.13	44	N	2	o	30.09	+ .01	44	42	0	NNW	5	o	3	45	42	0.01		
Belmullet ...	30.17	44	NNE	2	o	30.13	.00	43	41	0	NW	1	o	*	45	41	0.02		
Donaghadee ...	30.10	44	N	4	b	30.08	+ .01	43	41	- 1	NW	4	c	2	45	35	0.01		
Barrow-in-Furness	30.01	40	N	2	o	29.94	+ .01	39	38	- 1	NW	2	om	*	42	36	0.01		
Liverpool (Bidston)	30.02	38	N	1	o	29.96	+ .01	37	35	- 4	W	4	o	3	41	34	—		
Holyhead ...	30.04	42	NNE	3	c	30.02	+ .06	43	41	- 2	WNW	3	c	2	46	36	0.01		
Parsonstown ...	30.12	42	2	0	o	30.11	+ .02	40	39	- 2	2	0	r	*	44	35	—		
Valencia ...	30.15	43	NNE	2	b	30.15	+ .01	34	33	- 11	2	0	b	0	48	32	—		
Roche's Point ...	30.11	44	NNW	3	c	30.12	+ .02	37	35	- 7	NNE	2	b	3	46	30	—		
Pembroke ...	30.02	45	N	3	c	30.06	+ .06	39	38	- 6	NNE	1	c	3	45	38	0.03		
Seilly ...	30.04	47	N	5	o	30.00	+ .01	42	39	- 4	NNE	1	b	2	49	40	—		
Pravle Point ...	30.00	45	NNW	2	c	30.06	+ .06	34	32	- 6	N	3	b	2	44	32	—		
Jersey ...	29.98	46	NW	3	o	30.03	+ .05	41	37	- 4	N	2	om	3	48	40	0.11		
Hurst Castle ...	29.95	44	N	3	bc	30.02	+ .11	33	32	- 7	N	3	m	1	45	25	—		
Dungeness ...	29.89	37	NNW	3	c	29.92	+ .11	30	30	- 9	NNW	3	m	1	42	29	—		
London ...	29.95	40	N	3	o	29.99	+ .11	30	29	- 10	W	1	b	*	41	30	—		
Oxford ...	30.00	37	NNW	2	b	30.00	+ .09	31	30	- 9	NW	1	b	*	40	31	—		
Cambridge ...	29.90	37	N	2	bc	29.95	+ .07	31	31	- 7	NW	1	b	*	40	28	—		
Yarmouth ...	29.80	35	NNW	3	c	29.87	+ .10	34	33	- 6	NW	3	c	4	38	31	0.08		
Cuxhaven ...	29.60	32	N	6	c	29.72	+ .23	28	27	- 5	NE	2	b	*	33	26	—		
Berlin ...	29.46	22	NW	4	s	29.64	+ .23	24	23	- 6	NW	3	o	*	32	21	0.04		
Wiesbaden ...	*	*	*	*	*	29.52	+ .23	32	32	0	SW	1	o	*	36	30	0.16		
Munich ...	29.67	24	W	3	o	29.76	+ .09	24	24	+ 2	N	6	s	*	28	22	0.04		
FRANCE & NETHERLANDS.																			
The Helder ...	29.78	37	N	3	bc	29.76	+ .14	36	35	- 2	N	1	c	1	39	34	0.08		
Brussels ...	*	*	*	*	*														
Cape Gris Nez ...	29.86	33	N	7	c	29.91	+ .11	36	35	- 5	N	7	c	5	45	34	—		
Paris ...	29.91	36	N	1	o	29.97	+ .11	31	?	- 3	ENE	1	c	*	39	30	0.04		
Brest ...	30.06	43	NNW	5	f	30.05	- .02	41	37	- 2	NNE	1	o	3	60	34	0.04		
Lorient ...	30.06	45	NNW	4	o	30.04	- .02	41	40	- 1	NE	3	o	2	46	39	—		
Rocheport ...	30.07	45	NW	5	o	30.05	.00	43	42	+ 3	ENE	4	o	1	46	39	—		
Belfort ...	29.76	26	W	1	o	29.91	+ .12	19	18	- 1	W	1	c	*	29	12	0.28		
Lyons ...	29.90	31	NNW	3	s	29.99	+ .05	30	30	+ 2	NNW	3	c	*	34	28	0.16		
Nice ...	29.50	39	E	3	bc	29.69	+ .18	40	34	+ 1	WSW	1	b	3	60	37	—		
Perpignan ...	29.86	48	NW	7	b	29.94	+ .08	45	41	+ 4	NW	5	c	*	50	44	—		
Biarritz ...	30.06	46	NNE	3	r	29.97	- .08	46	45	+ 6	WSW	5	r	0	50	?	0.32		
GERMANY.																			
Corunna ...	*	*	*	*	*	30.12	- .09	41	39	+ 6	NE	3	o	2	52	36	—		
Lisbon ...	30.18	42	NNE	4	b	30.15	- .03	32	32	- 5	N	4	b	2	46	32	—		

For Explanation of Columns, see p. 4.

WEATHER CHARTS

for 8 a.m. on

Sunday, 25th December

1887.

BAROMETER, WIND & SEA.

(Explanation of Map)

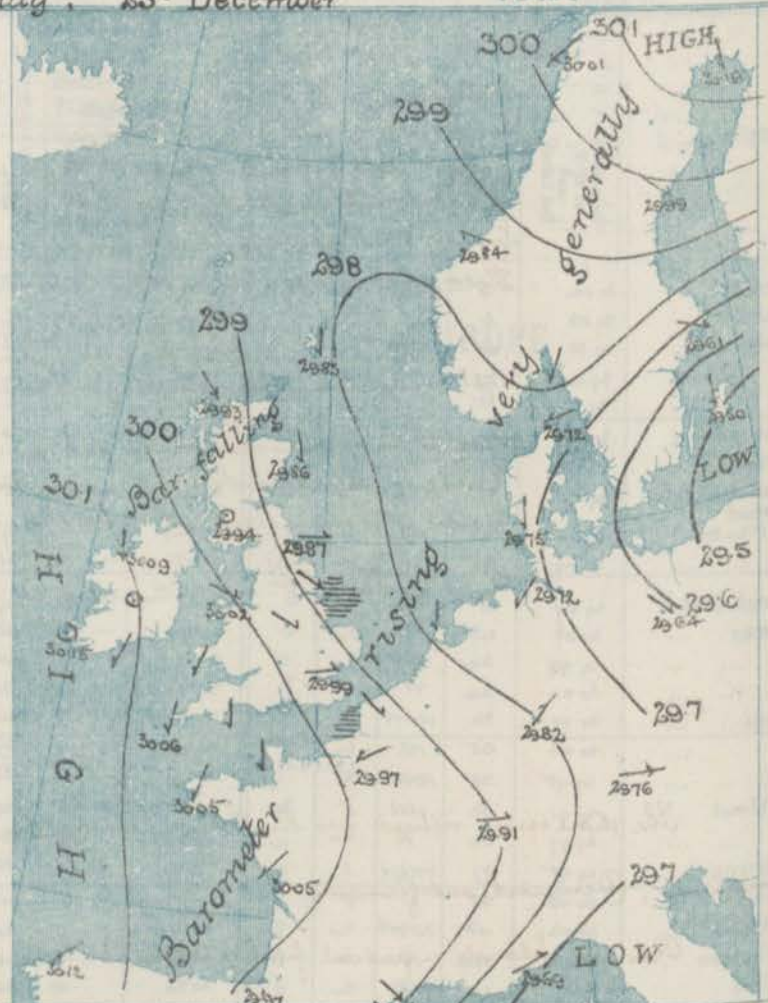
Barometer — Isobars are drawn for each tenth of an inch. Changes since previous morning are stated in words.
Wind — Arrows show the prevalent winds. They fly with the wind and their barbs and feathers refer to force, thus —
 — forces above 10; — forces 8 to 10;
 — forces 5 to 7; — forces 1 to 4;
 ○ =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

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

MEAN HEIGHT of the BAROMETER

at 8 a.m. for the month of December.
 During the 10 Years 1871—1880.

STATIONS.	MEAN HEADINGS.
Edinburgh Head	29.680
Stornoway	29.701
Wick	29.713
Nairn	29.741
Aberdeen	29.759
Leith	29.800
Shields	29.836
York	29.877
Ardrossan	29.810
Donaghadee	29.832
Holyhead	29.855
Liverpool	29.882
Valencia	29.879
Roche's Point	29.889
Pembroke	29.897
Scilly	29.943
Harst Castle	29.933
Dover	29.942
LONDON	29.984
Oxford	29.937
Cambridge	29.926
Yarmouth	29.902



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

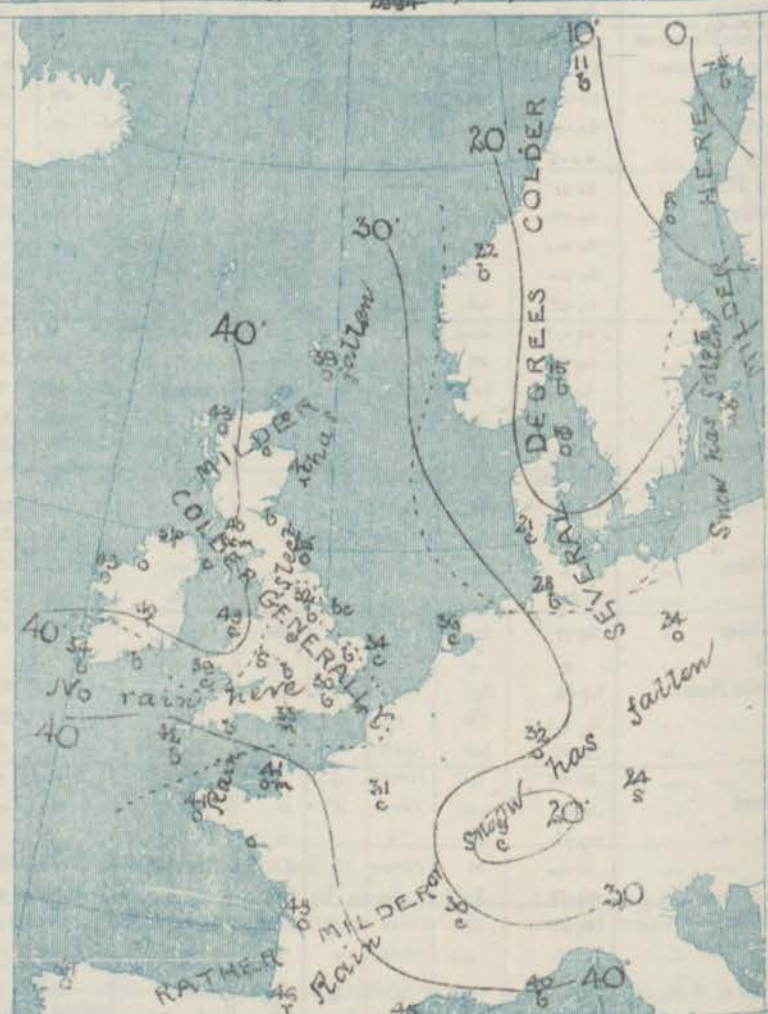
Temperature — Isotherms are drawn for each 10° Changes since previous morning are stated in words.
Weather — is shown by Letters of the Beaufort Scale.
Rainfall — A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted 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.	
Sunburgh Head	42.0	34.5	39.0	37.6	4.33
Stornoway	44.8	38.6	38.0	37.8	5.66
Wick	42.0	32.1	37.8	36.4	3.18
Nairn	41.6	32.8	36.9	35.4	2.08
Aberdeen	41.8	32.0	36.9	35.3	3.34
Leith	44.3	33.0	38.4	37.0	2.01
Shields	42.8	34.3	39.2	36.9	2.74
York	42.5	31.9	36.2	35.4	2.46
Ardrossan	47.0	36.1	40.1	38.3	4.04
Donaghadee	46.7	35.1	40.1	39.1	2.84
Holyhead	46.8	39.6	42.9	41.3	3.84
Liverpool	43.6	35.7	39.1	37.4	2.70
Valencia	50.0	40.0	44.7	41.8	5.82
Roche's Point	47.7	39.3	42.9	41.4	4.74
Pembroke	47.1	40.4	43.7	42.6	4.06
Scilly	49.8	43.9	47.2	45.3	4.10
Hurst Castle	45.5	36.5	40.6	39.9	2.84
Dover	44.2	36.5	40.0	38.8	3.20
LONDON	44.5	33.9	38.1	37.1	2.14
Oxford	43.3	33.6	37.3	36.6	2.13
Cambridge	43.3	31.8	36.3	35.6	1.99
Yarmouth	42.2	33.8	37.9	37.3	2.96

NOTE — The Temperature means are for the 10 years 1871—80, the Rainfall means are mainly those for the 10 years 1866—85



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30.1 ins. and upwards, in the north of Scandinavia and also in a large area extending from Portugal to the W. of Ireland.
Lowest, 29.5 ins. and less, in a shallow depression lying over the Baltic; 29.7 ins. and less in another shallow disturbance lying over the Gulf of Gosh.

Gradients slight and rather irregular. Barometer falling in our Islands and the west of France, but rising elsewhere.

TEMPERATURE

Highest, 46° at Binnit, 45° at Penzance, 44° at Malin H. and Mullaghmore, and 43° at Balmullic and Rockfort.

Lowest, -5° F at Haparanda, +8° at Hunsand, 11° at Hede, 15° at Lander, and 19° at Stockholm, Skagen and Helsing.

Light frost occurred over Great Britain last night.

WIND

NE in Norway and also in the west of France, but N or NW elsewhere.

Light or moderate in force generally, but fresh or strong over the south of Scandinavia.

WEATHER

Fine in the southern and eastern parts of Ireland and England, as well as on the eastern shores of the North Sea.

Cloudy or overcast elsewhere with rain at Aberdeen and Birmm, and mist in the southeast of England.

Showers of snow or sleet fell yesterday at many of our northern and eastern stations.

SEA

Rough at Spurn H. and rather rough at Cape Gris Nez, but moderate to smooth elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The depression noticed over the Baltic yesterday has apparently travelled southwards and the barometer has risen in Scandinavia, Denmark and Germany.

Over our Islands a gradual fall has set in but no decided change in the distribution of pressure has taken place at present.

FORECASTS

for the 24 hours ending at NOON on 26th Decr. 1887.

DISTRICTS.

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

FORECASTS.

NONE ISSUED

DISTRICTS.

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

WARNINGS

FORECASTS.

NONE ISSUED

NONE ISSUED.

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

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

YESTERDAY'S 2 P.M. REPORTS.

	Bar.	Ther.	Wet.	Wind.	Wes.	Sea.		Bar.	Ther.	Wet.	Wind.	Wes.	Sea.
Skudesnaes ...	29.71	31	30	NNE 2	b	3	Holyhead ...	30.00	44	44	NNE 3	c	3
Sumburgh Head ...	29.72	35	35	N 1	c	3	Valencia ...	30.14	48	46	N 3	bc	2
Stornoway ...	30.05	42	42	Z 0	b	2	Scilly ...	30.16	47	46	NNW 4	c	4
Aberdeen ...	29.97	35	34	NNW 4	crsp	11	Dungeness ...	29.95	41	38	NNW 3	c	3
Shields ...	29.93	36	35	NW 3	crsp	3	London ...	29.91	41	38	NNW 3	c	*
Ardrossan ...	30.01	40	39	Z 0	bf	2	Yarmouth ...	29.89	37	36	NNW 4	crsp	3
Malin Head ...	30.06	44	42	NNW 3	bc	3	Jersey ...	29.96	47	45	N 3	om	2
Mullaghmore ...	30.12	45	44	N 2	c	2	Rocheport ...	30.05	44	42	NW 4	b	3
Belmullet ...	30.14	46	46	NNE 1	c	*							

GENERAL REMARKS ON THE WEATHER OVER EUROPE

DURING THE PAST 24 HOURS.

The reports for yesterday morning showed that pressure was highest, 30.2 ins. and upwards, off the northwest of Spain, and lowest, 29.3 ins. and less, in a depression lying over the Baltic, with its centre near the Island of Gotthland. Another depression in which readings were below 29.5 ins. was however, reported over the Gulf of Genoa and northern Italy, while a large shallow area of low readings (29.4 ins. and less), was situated over Central Russia. Moderate or fresh breezes from SW or S, prevailed on the Russian shores of the Baltic, NE winds over Finland, and N or NW wind over the greater part of Scandinavia, the United Kingdom and France. In Italy however, the wind to the southward of the depression noticed above, varied between SW and SE. The weather was cloudy or overcast at all but the Spanish stations with snow, sleet or cold rain in many places, and a thunderstorm at Rome. Snow was falling even as far south as Annale (Algeria). Temperature had risen a few degrees in our Islands and France, as well as at many of the Russian stations, but fallen elsewhere, readings ranged from 50° and upwards in the South of Italy, and 45° and upwards over the extreme western and southern parts of Europe generally, to ten or more degrees below zero in Lapland and North Russia. The highest individual readings were 55° at Tunis and Malta, 54° at Brindisi, 48° at Ajaccio and Palermo, and 47° at Palma and Cagliari; the lowest were -16° at Haparanda, -12° at Archangel, -11° at Uleaborg, +11° at St. Petersburg, 7° at Hernösand, and 9° at Kuopio. In the course of the day the depression over the Baltic moved slowly eastward, but no important change was observed in the wind and weather over western Europe.

GENERAL REMARKS FOR THE 24 HOURS ENDING ON SATURDAY DEC 24TH 1887.

The reports for Friday (23RD) showed that pressure then varied from 30.1 ins. and more both over the West of Ireland and the South of Russia, to about 29.3 ins. in a depression lying over the Gulf of Genoa, and to about 29.2 ins. in another disturbance, which lay over Sweden and the Gulf of Bothnia. In addition to this there were some shallow local disturbances noticed over the British Islands. The winds were consequently variable from between W. and N. over the British Isles the North Sea and France, NE. in Switzerland and Austria, and also in the North of Scandinavia, while over North Germany and the Baltic they were W. and SW. The weather was cold, showery and unsettled, with snow and sleet in many places and a good deal of rain on the Mediterranean shores. Temperature was low everywhere - frost prevailing over nearly the whole of Continental Europe, as well as in some parts of the British Islands; over Lapland and the North of Russia the frost was severe. The lowest individual readings were -8° at Archangel, -7° at Haparanda, -1° at Uleaborg, +2° at St. Petersburg, 4° at Kuopio, 9° at Moscow, 12° at Hernösand, 18° at Rharhove, 19° at Munich, 20° at Loharville, 22° at Lracow, 23° at Prague, 24° at Belfort and Gap, 26° at Lyons and Paris, and 28° at Dungeness; the highest were 62° at Malta, 52° at Ann (Algeria), 50° at Palma, 47° at Valencia (Ireland), 45° at Scilly and 44° at Belmullet and Holyhead. Later in the day temperature rose over the British Islands generally, though the wind remained N. or S. and slight showers fell generally.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

WEATHER.—Beaufort Scale is b. blue sky; c. detached clouds; d. drizzling rain; f. fog; g. dark, gloomy; h. hail; l. lightning; m. misty (hazy); o. overcast; p. passing showers; q. 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 8 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8 p.m. In Sweden and Denmark, the observations are taken at 8 p.m. (Christiania time).

The Subscription for these Reports, forwarded by book post, is 21 per annum, payable in advance.

DAILY WEATHER REPORT

for Monday 26th DEC^r

1887.

Issued by the Meteorological Office, 116, Victoria Street, London, R. H. SCOTT, Secretary.

Issued by the Meteorological Office, 116, Victoria Street, London, R. H. SCOTT, Secretary.																		
STATIONS.	† YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
	Barometer at 35° F. and Sea Level.	Temp. in Shade.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Weather.	Sea. (0 to 9.)	SHADE TEMP.		Amount of Rainfall.	
			Direc.	Force. (0 to 12.)		Reading at 35° 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.	Inch.	°				Inch.	Inch.	°	°	°					°	°	Inch.	
Haparanda ..	30.26	-18	N	2	b	30.41	+ .22	-29	-29	-24	Z	0	b	*	-12	?	—	
Hernösand ...	30.23	9	NNE	4	0	30.32	+ .33	6	6	-2	N	4	0	*	12	5	—	
Stockholm ...	29.86	21	NNE	6	0	30.10	+ .49	19	18	0	N	4	0	*	25	12	0.04	
Wisby ...	29.62	27	ENE	6	c	29.87	+ .37	27	26	-3	E	6	0	*	32	23	0.20	
Bodö ...	30.15	10	ENE	6	b	30.10	+ .09	12	10	+1	ENE	2	b	1	12	7	—	
Christiansund...	29.99	21	ESE	4	b	30.12	+ .28	22	21	0	ESE	2	b	3	9	21	—	
Skudesnaes ...	30.01	26	NNE	1	b	30.11	—	23	21	—	ENE	1	b	2	30	?	—	
Christiania Fjord (Færder)	30.02	18	NNE	5	b	30.14	+ .30	14	13	-1	NNE	6	c	2	18	10	—	
Skagen (The Scaw)	29.93	21	NE	4	0	30.01	+ .29	21	20	+2	NE	6	0	4	23	19	—	
Faño ...	29.87	23	NE	6	c	29.91	+ .16	20	19	-1	N	6	b	2	23	19	—	
BRITISH ISLANDS.																		
Sumburgh Head	29.84	38	N	1	0	29.96	+ .13	38	38	-1	Z	0	r	2	41	35	0.10	
Stornoway ...	29.99	40	N	4	0	30.00	+ .07	29	39	-4	E	3	0	3	43	35	0.04	
Wick ...	29.88	38	NW	1	b	30.01	+ .14	35	35	-5	NW	2	0	1	43	32	0.06	
Nairn ...	29.94	40	W	1	0	29.98	+ .10	35	35	-4	Z	0	0	1	40	34	0.11	
Aberdeen...	29.92	38	NNW	3	0	30.00	+ .14	36	35	-4	Z	0	run	1	40	35	0.14	
Leith ...	29.98	37	W	1	0	29.99	+ .06	37	36	+1	W	1	sm	*	41	34	0.01	
Shields ...	29.87	34	N	2	b	29.95	+ .08	34	32	-1	S	1	0	2	40	32	0.22	
Spurn Head ...	29.87	39	ENE	4	r	30.02	+ .14	35	31	0	NNE	2	b	3	40	31	0.01	
York ...	29.84	37	N	1	b	30.00	+ .15	31	30	-1	NE	1	b	*	39	30	0.03	
Loughborough	29.86	37	W	1	0	30.04	+ .07	27	27	-6	NNW	1	sm	*	39	27	—	
ARDROSSAN.																		
Ardrossan ...	29.92	41	N	1	0	30.01	+ .07	24	33	-6	ENE	1	ofw	1	46	32	0.02	
Malin Head ...	29.98	42	NW	3	0	30.01	— .01	44	42	0	NNE	3	of	2	46	41	0.03	
Mullaghmore ...	30.01	44	N	4	c	30.03	— .06	38	37	-6	ESE	2	0	2	46	37	0.01	
Belmullet ...	30.05	43	NNE	2	0	30.03	— .10	40	39	-3	ENE	1	b	*	45	40	0.05	
Donaghadee ...	29.94	45	NNW	4	b	30.01	+ .01	36	35	-7	NNW	3	b	1	45	34	0.04	
BERMOUTH.																		
Barrow-in-Furness	29.88	39	NW	1	b	30.02	+ .08	35	34	-4	SE	3	0	*	43	35	0.03	
Liverpool (Bidston)	29.89	39	NNW	1	0	30.04	+ .08	34	33	-3	ESE	2	0	2	41	34	0.08	
Holyhead ...	29.92	44	NNW	4	c	30.00	— .02	39	39	-4	Z	0	sm	0	45	37	0.04	
Parsonstown ...	30.01	41	Z	0	0	30.01	— .10	37	36	-3	Z	0	b	*	42	35	—	
Valencia ...	30.04	44	W	2	c	29.99	— .16	40	38	+6	NE	1	0	2	46	32	—	
ROCHE'S POINT.																		
Roche's Point...	30.03	40	N	1	c	29.97	— .15	40	38	+3	ENE	3	b	3	42	37	—	
Pembroke ...	29.93	44	NNW	3	c	29.98	— .08	38	37	-1	ENE	2	cg	1	44	38	0.04	
Seilly ...	29.98	46	NW	5	0	29.89	— .17	43	41	+1	ENE	3	b	2	46	41	0.01	
Prawle Point ...	29.94	42	NNW	2	0	29.96	— .10	38	36	+4	E	4	0	3	49	32	—	
Jersey ...	29.95	38	NW	1	b	29.91	— .04	39	37	-2	E	1	sm	3	44	38	0.02	
FRANCE & NETHERLANDS.																		
Hurst Castle ...	29.88	38	NW	4	c	29.96	— .06	34	33	+1	NE	4	b	1	44	30	—	
Dungeness ...	29.87	38	NW	3	0	29.95	+ .03	31	30	+1	ESE	3	c	2	40	27	—	
London ...	29.99	30	NNW	1	0	29.99	— .00	30	28	0	NE	1	b	*	38	26	—	
Oxford ...	29.88	36	N	2	0	30.03	+ .03	28	27	-3	NE	2	b	*	37	28	—	
Cambridge ...	29.89	35	NW	1	r	30.02	+ .07	27	26	-4	N	1	b	*	38	25	0.02	
Yarmouth ...	29.77	34	NW	4	s	29.98	+ .11	33	31	-1	ENE	4	c	4	36	30	0.09	
Cuxhaven ...	29.78	26	NE	5	c	29.82	+ .16	27	27	-1	N	7	c	*	28	24	—	
Berlin ...	29.72	24	NNW	4	0	29.70	+ .09	24	25	0	NW	1	0	*	27	23	—	
Wiesbaden ...	*	*	*	*	*	29.80	— .02	19	18	-13	NW	3	b	*	30	16	0.20	
Munich ...	29.73	25	W	5	0	29.58	— .18	25	25	+1	W	4	s	*	27	20	0.04	
ITALY.																		
The Helder ...	29.84	31	ENE	2	s	29.93	+ .17	30	28	-6	NNE	3	s	3	37	28	0.12	
Brussels ...	*	*	*	*	*	29.94	— .01	21	21	—	NE	1	b	*	36	19	0.67	
Cape Gris Nez...	29.80	38	NE	7	r	29.90	— .01	27	27	-9	E	1	b	2	41	27	—	
Paris ...	29.89	34	SW	1	c	29.91	— .06	23	21	-8	NNE	7	b	*	39	23	0.08	
Brest ...	30.02	40	N	1	0	29.85	— .20	40	37	-1	NE	3	0	3	48	32	—	
SPAIN.																		
Lorient ...	30.01	41	NE	3	b	29.87	— .17	42	41	+1	N	3	0	2	45	39	—	
Rochefort ...	30.00	41	ENE	4	0	29.93	— .12	39	37	-4	WSW	3	0	2	46	39	—	
Belfort ...	29.79	29	W	3	0	29.91	— .00	30	30	+11	W	3	s	*	31	24	0.35	
Lyons ...	29.99	27	W	1	f	29.85	— .14	21	21	-9	WSW	1	f	*	34	21	—	
Nice ...	29.79	39	ENE	1	b	29.71	+ .02	35	29	-5	E	0	b	3	46	32	—	
PORTUGAL.																		
Perpignan ...	29.93	43	Z	0	0	29.84	— .10	43	41	-2	NE	3	0	*	46	39	0.08	
Biarritz ...	29.97	48	W	5	0	29.89	— .08	43	41	-3	S	4	0	1	52	41	0.32	
GERMANY.																		
Corunna ...	*	*	*	*	*													
Lisbon ...	30.05	43	ENE	3	b	29.82	— .33	43	42	+11	ENE	4	0	4	46	37	—	

For Explanation of Columns, see p. 4.

WEATHER

CHARTS

for 8 a.m. on

Monday, 26th December.

1887.

BAROMETER, WIND & SEA.

(Explanation of Map)

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

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

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

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

○ = dead calm.

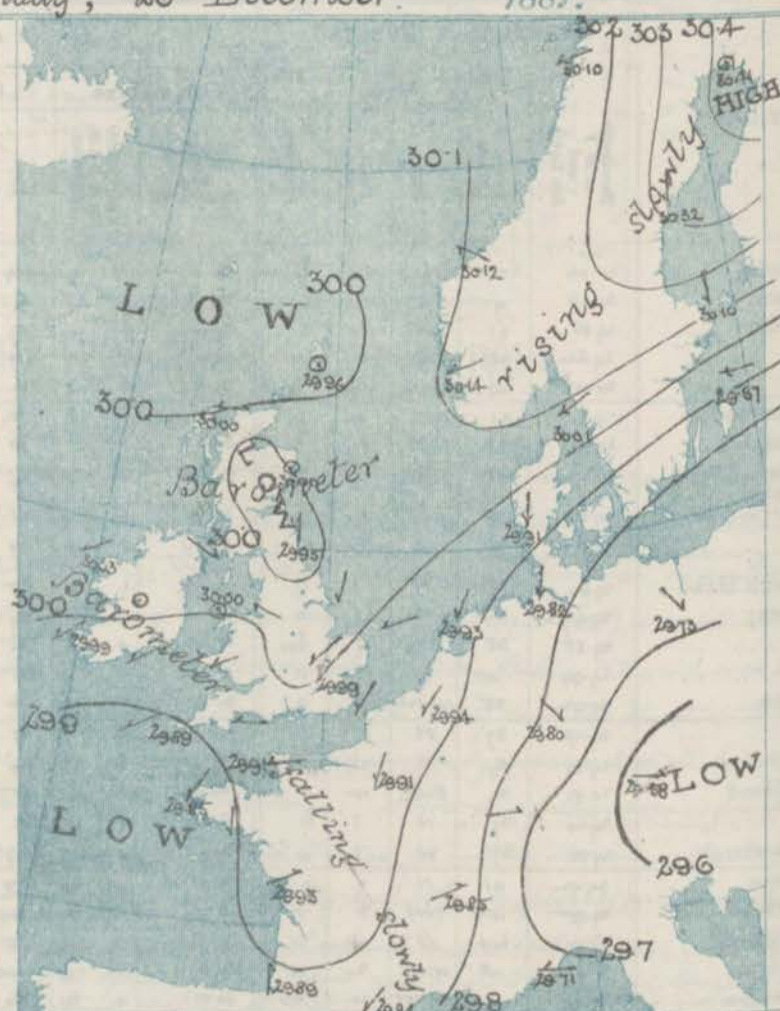
Sea Disturbance — where considerable is shown thus

■ = Rough. ■ = High.

MEAN HEIGHT of the BAROMETER

at 8 a.m. for the month of December
During the 10 Years 1871—1880.

STATIONS.	MEAN READINGS.
	in.
Sumburgh Head	29.690
Stornoway	29.701
Wick	29.713
Nairn	29.741
Aberdeen	29.750
Leith	29.800
Shields	29.836
York	29.877
Ardrossan	29.810
Donaghadee	29.832
Holyhead	29.858
Liverpool	29.882
Valencia	29.879
Roche's Point	29.889
Pembroke	29.897
Scilly	29.943
Hurst Castle	29.938
Dover	29.942
LONDON	29.934
Oxford	29.937
Cambridge	29.926
Yarmouth	29.902



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.

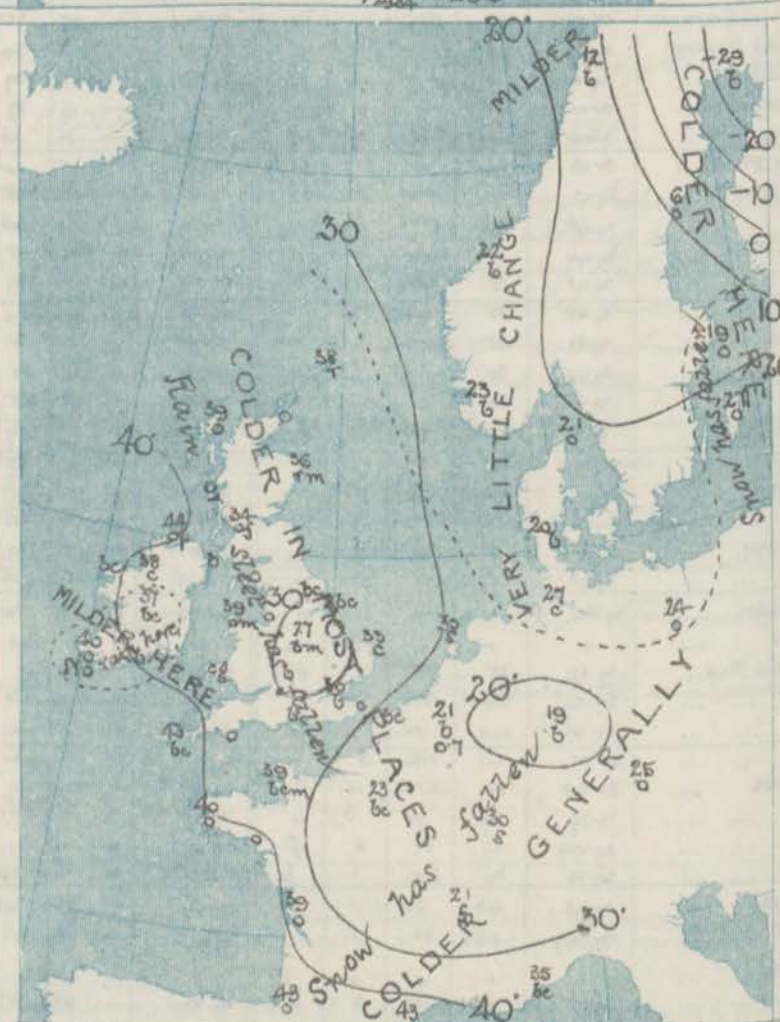
Rainfall A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

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.	W.M.	
Sumburgh Head	42.0	34.5	39.0	37.6	4.33
Stornoway	44.8	33.5	38.9	37.8	5.66
Wick	42.0	32.1	37.8	36.4	3.18
Nairn	41.5	32.8	36.9	35.4	2.08
Aberdeen	41.8	32.9	36.9	35.3	3.34
Leith	44.3	33.6	38.4	37.0	2.01
Shields	42.8	34.3	39.2	36.9	2.74
York	42.5	31.9	36.2	35.4	2.45
Ardrossan	47.0	36.1	40.1	38.3	4.04
Donaghadee	46.7	36.1	40.1	39.1	2.84
Holyhead	46.8	36.0	42.9	41.3	3.84
Liverpool	43.6	35.7	39.1	37.4	2.70
Valencia	50.0	40.0	44.7	41.8	5.82
Roche's Point	47.7	39.3	42.9	41.4	4.74
Pembroke	47.1	40.4	43.7	42.6	4.06
Scilly	49.8	43.9	47.2	45.3	4.19
Hurst Castle	45.5	36.3	40.6	39.9	2.84
Dover	44.2	36.5	40.0	38.8	3.20
LONDON	44.5	33.9	38.1	37.1	2.14
Oxford	43.3	35.6	37.3	36.6	2.13
Cambridge	43.3	31.8	36.3	35.6	1.99
Yarmouth	42.2	33.8	37.9	37.2	2.95

Note — The Temperature means are for the 10 years 1871—80, the Rainfall means are mainly those for the 10 years 1866—85



GENERAL SITUATION AT 8 A.M.

PRESSURE	Highest 30.4 ins. and upwards in the North of Sweden. Lowest 29.6 ins. and less over South Germany. Areas of relatively low pressure are reported over and to the north and of Scotland, and over Spain and the Bay of Biscay. Gradients slight but irregular. Barometer falling over France and our southwest coasts, rising elsewhere.
TEMPERATURE	Highest 54° at Malin Head, 53° at Sully, Biarritz, Puyguyon and Lillom and 52° at Lorient. Lowest 47° at Haparanda, 46° at Hornö, 45° at Bodö, 44° at Åre and 43° at Stockholm and Westbaden. Frost occurred last night over the inland parts of Great Britain.
WIND	Strong from NE. or N. over Denmark and the South of Scandinavia; moderate from NW. or W. in Germany. Variable over the northern parts of our islands; moderate from NE. or E. in the South. Light or moderate from the SW. in the southwest of France.
WEATHER	Fine over the greater part of England and Ireland as well as in Norway, Belgium and the North of France. Drill elsewhere with rain at Lumburgh Head and Aberdeen, and snow at Helder, Munich and Belfast. A little rain or sleet fell yesterday in most parts of the United Kingdom.
SEA	Slight or smooth generally.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT


The depression over Germany is apparently moving southwards, while the low pressure systems over our northern coasts are filling up.


The anticyclone over the North of Sweden seems likely to extend in a southwesterly direction towards our islands and E or NE winds will probably set in over the entire Kingdom. Off our extreme southwest coasts there are some indications of the approach of a depression from the Atlantic, but at present the system is evidently at a considerable distance from our shores.

FORECASTS

For the 24 hours ending at NOON on 27th December 1887.

DISTRICTS.	FORECASTS.	DISTRICTS.	FORECASTS.
0 { SCOTLAND NORTH	E ³ winds, light, dull and unsettled at first, then fair.	6 { SCOTLAND WEST	NE ³ winds, light, fair generally, but some fog.
1 { SCOTLAND EAST	Variable breezes, finally E ³ , dull to fair.	7 { ENGLAND N. W.	E ³ winds, moderate; fair generally.
2 { ENGLAND N. E.	.....D.....D.....D.....	8 { ENGLAND S. W.	E ³ winds, freshening; fair generally.
3 { ENGLAND EAST	Same as N ^o 5.	9 { IRELAND NORTH	Same as N ^o 7.
4 { MIDLAND COUNTIES	Same as N ^o 5.	10 { IRELAND SOUTH	Same as N ^o 7.
5 { ENGLAND SOUTH	NE and E ³ 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.	Day.	Wet.	Wind.	Wes.	Sea.		Bar.	Dry.	Wet.	Wind.	Wes.	Sea.
Skudesnaes ...	29.98	30	18	ESE 3	3	C	2	Holyhead ...	29.98	44	44	NW 5	omp 4
Sumburgh Head ...								Valencia ...					
Stornoway ...	29.96	43	43	NW 5	0		3	Scilly ...					
Aberdeen ...								Dungeness ...	29.97	35	33	NW 3	0
Shields ...								London ...					
Ardrossan ...								Yarmouth ...					
Malin Head ...	29.98	45	44	NW 3	0		2	Jersey ...	29.98	43	38	NNE 2	0
Mullaghmore ...								Rocheport ...	30.01	44	43	ENE 1	0
Belmullet ...	30.06	45	44	NNE 1	0								

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

Continental information not yet arrived.

SUMMARY OF CHANGES IN THE WEATHER OVER THE BRITISH ISLANDS AND THEIR NEIGHBOURHOOD FROM THE 18TH TO THE 24TH DECEMBER 1897.

The weather of this week was of two distinct kinds. In the first part the distribution of pressure was cyclonic, and the gradients (which were somewhat steep), were favourable for W. and NW. winds. A large, but not deep, depression moved slowly in a southerly direction over Scandinavia and the North Sea, causing NW. winds over the whole of the United Kingdom, varying in force from a fresh breeze to a strong gale. These were accompanied by dull weather and frequent showers of cold rain or sleet in most localities.

In the second part, the distribution of pressure became largely anticyclonic, the centre of the system lying off the West of Ireland, while its eastern half spread Eastwards over Ireland, England and the North Sea. Temperature at first fell fast—the temperature at Parsonstown being as low as 22°, at Aberdeen 23° and in London 31° at 8 a.m. on Thursday. Complications set in subsequently, caused by shallow local disturbances in the northwest and North, while a new depression appeared over Norway and Sweden, and began to move south-eastwards and southwards towards Germany. Temperature recovered considerably, but became very unstable, the clouds were heavy and slight showers of cold rain, sleet or snow fell in many parts of the Kingdom. In the southern part of France the weather was very cold.

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, 27th December 1887.

Issued by the Meteorological Office, 116, Victoria Street, London, R. H. SCOTT, Secretary.

Issued by the Meteorological Office, No. 1, Whitehall Court, London, E.C. 4, on a daily basis, except on Sundays and Public Holidays.																		
+ YESTERDAY EVENING.										8 A.M. TO DAY.							PAST 24 HOURS.	
STATIONS.	Barometer at 32° F. and Sea Level.	Temp. in Shade.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Sea. (0 to 9.)	SHADE TEMP.		Amount of Rainfall.		
			Dir.	Force. (0 to 12.)		Reading at 8 A.M. and Sea Level.	Difference from 8 A.M. yesterday.	Dry.	Wet.	Difference from 8 A.M. yesterday.	Dir.	Force. (0 to 12.)		Max.	Min.			
Haparanda ...	30.36	-22	Z	0	b	30.16	-25	-14	-14	+16	Z	0	0	*	?	-29	-	
Hernösand ...	30.36	10	Z	2	0	30.23	-09	-8	-8	-14	NW	2	0	*	10	?	-	
Stockholm ...	30.13	18	N	6	0	30.02	-08	14	14	-5	N	6	0	*	?	14	-	
Wisby ...	29.88	25	E	6	0	29.82	-05	25	25	-2	NNE	4	8	*	30	?	0.20	
Bodo ...	30.02	19	ESE	6	S	29.91	-19	29	28	+17	ESE	2	8	2	?	10	-	
Christiansund...	30.13	29	ESE	3	b	30.01	-11	31	30	+9	ESE	2	0	3	31	?	-	
Skudesnaes ...	30.24	28	N	1	0	30.08	-06	26	26	+3	ESE	4	0	3	23	23	-	
Christiania Fjord (Færder)	30.22	17	NNE	5	c	30.10	-04	7	7	-7	NNE	3	5	1	16	5	-	
Skagen (The Sound)	30.08	20	NE	5	0	29.97	-04	19	19	-2	NE	4	0	4	21	18	-	
Fanö ...	30.07	24	NE	6	0	30.02	+11	20	19	0	NE	5	0	*	27	19	-	
Sumburgh Head	30.13	38	ESE	1	T	30.10	+14	41	40	+3	NW	2	7	3	41	35	0.10	
Stornoway ...	30.06	36	E	3	T	30.20	+20	32	32	-7	E	3	6	3	39	31	-	
Wick ...	30.11	38	S	3	0	30.22	+21	30	29	-5	NW	1	0	1	39	29	-	
Nairn ...	30.09	32	Z	0	c	30.22	+24	29	28	-6	SW	1	0	1	40	28	-	
Aberdeen ...	30.14	36	SSE	1	c	30.21	+21	30	29	-6	WNW	1	0	1	38	29	0.12	
Leith ...	30.12	34	W	1	c	30.20	+21	33	32	-4	W	1	m	*	38	28	-	
Shields ...	30.10	34	W	1	m	30.16	+21	36	33	+2	NE	2	0	2	36	32	-	
Spurn Head ...	30.07	35	ESE	4	b	30.13	+11	33	32	-2	Z	0	6	3	37	30	0.06	
York ...	30.09	31	NW	1	0	30.18	+12	28	28	-3	N	1	6	*	37	27	0.01	
Loughborough	30.08	30	NW	1	b	30.14	+10	27	26	0	NW	1	cm	*	41	26	0.01	
Ardrossan ...	30.07	37	NNE	1	0	30.23	+22	32	30	-2	Z	0	0	0	38	29	-	
Malin Head ...	30.02	42	NE	2	0	30.17	+16	34	35	-10	S	3	cm	2	45	34	0.04	
Mullaghmore ...	30.02	41	SW	1	p	30.13	+10	39	37	+1	ESE	4	cm	3	47	36	0.02	
Belmullet ...	30.03	41	NNE	1	b	30.13	+10	39	38	-1	ESE	1	0	*	45	38	0.10	
Donaghadee ...	30.08	39	S	2	0	30.20	+19	37	35	+1	SE	1	0	0	41	35	0.01	
Barrow-in-Furness	30.09	33	NE	1	c	30.19	+17	30	30	-5	NE	2	6	*	36	28	-	
Liverpool (Bidston)	30.09	33	SE	1	0	30.19	+15	28	26	-6	ESE	1	6	2	35	28	-	
Holyhead ...	30.06	36	SW	1	cm	30.17	+17	34	33	-5	Z	0	cm	0	41	32	0.10	
Parsonstown ...	30.04	35	Z	0	f	30.14	+13	34	33	-3	Z	0	0	*	41	32	-	
Valencia ...	29.99	41	NE	2	cm	30.11	+12	36	34	-4	NE	1	6	1	46	33	-	
Roche's Point...	29.98	43	ESE	4	b	30.09	+12	39	38	-1	ESE	4	0	4	44	36	-	
Pembroke ...	30.05	35	ESE	4	c	30.14	+16	30	29	-8	NNE	2	6	1	39	29	-	
Scilly ...	29.93	40	ESE	6	c	30.02	+13	37	34	-6	ESE	6	0	4	45	35	-	
Prawle Point ...	30.01	34	E	4	b	30.07	+11	32	31	-6	NE	5	6	3	39	31	-	
Jersey ...	30.01	34	E	4	bm	30.04	+13	33	30	-6	E	3	bm	3	39	32	-	
Hurst Castle ...	30.03	30	NE	3	b	30.08	+12	28	28	-6	NNE	3	6	1	38	24	-	
Dungeness ...	29.97	29	NNE	3	c	30.01	+06	25	25	-6	NE	3	0	1	33	21	0.22	
London ...	30.04	31	ESE	2	b	30.08	+09	27	26	-3	NE	1	mg	*	35	26	-	
Oxford ...	30.08	28	NNE	1	b	30.13	+10	25	25	-3	NNE	1	6	*	36	24	-	
Cambridge ...	30.07	28	N	1	b	30.13	+11	21	21	-6	N	1	6	*	36	20	0.02	
Yarmouth ...	30.00	32	ESE	5	c	30.07	+09	33	32	0	ESE	5	6	4	34	30	0.06	
Cuxhaven ...	29.96	27	NNE	6	0	30.01	+19	24	24	-3	NNE	6	0	*	29	23	?	
Berlin ...	29.82	21	SW	1	b	29.73	00	26	25	+2	NW	3	0	*	27	?	0.08	
Wiesbaden ...	*	*	*	*	*	29.91	+11	14	14	-5	NW	1	0	*	32	10	-	
Munich ...	29.75	14	SW	4	0	29.82	+24	10	9	-15	NW	3	5	*	28	7	0.04	
The Helder ...	29.98	31	E	3	c	30.04	+11	29	28	-1	ESE	1	8	1	32	28	0.16	
Brussels ...	*	*	*	*	*	30.02	+08	23	23	+2	NNE	1	6	*	28	?	0.04	
Cape Gris Nez...	29.44	30	NE	7	S	30.02	+12	24	24	-3	E	3	0	2	?	23	0.16	
Paris ...	29.99	24	N	3	b	29.98	+07	19	19	-4	N	1	6	*	28	19	-	
Brest ...	29.93	34	E	5	b	29.95	+10	31	28	-9	E	4	0	3	52	27	-	
Lorient ...	29.90	33	ESE	7	b	29.99	+12	27	25	-15	E	3	6	2	43	25	-	
Rochefort ...	29.84	31	ESE	7	0	29.88	-05	23	22	-16	ESE	8	6	3	46	21	-	
Belfort ...	29.84	19	NE	1	S	29.86	+25	12	12	-18	NE	1	m	*	31	8	0.16	
Lyons ...	29.82	24	NW	4	S	29.89	+04	12	11	-9	N	3	6	*	28	10	0.04	
Nice ...	29.62	37	ESE	1	b	29.49	-22	35	29	0	E	3	0	2	45	30	-	
Perpignan ...	29.76	43	N	3	0	29.64	-20	37	32	-6	NE	3	0	*	50	37	-	
Biarritz ...	29.75	44	ESE	1	0	29.67	-22	33	32	-10	E	4	0	2	50	30	-	
Corunna ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Lisbon ...	?	46	NE	4	T	29.54	-28	47	47	+4	SSE	1	5	?	48	?	1.14	

For Explanation of Columns, see p. 4.

WEATHER CHARTS

for 8 a.m. on Tuesday, 27th December, 1887.

BAROMETER, WIND & SEA.

(Explanation of Map)

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

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

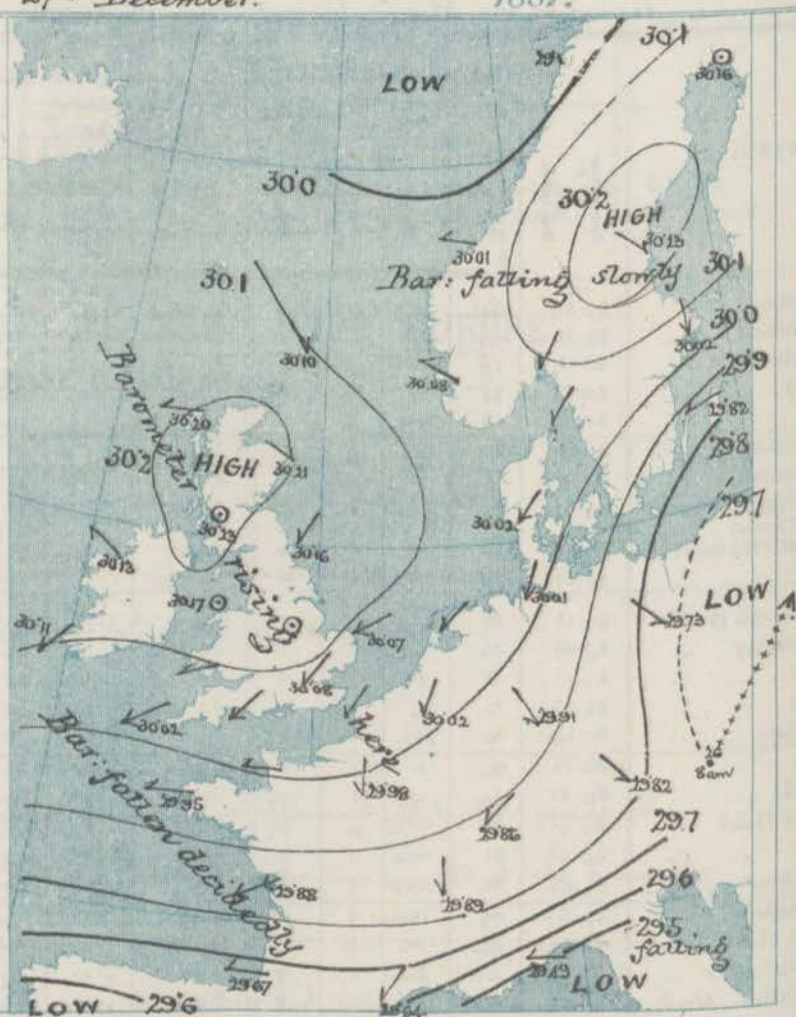
→ = forces above 10, → = forces 8 to 10,
→ = forces 5 to 7, → = forces 1 to 4,
○ = dead calm.

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

MEAN HEIGHT of the BAROMETER

at 8 a.m. for the month of December
During the 10 Years 1871 — 1880.

STATIONS.	MEAN READINGS.
	in.
Sumburgh Head	29.680
Stornoway	29.701
Wick	29.713
Nairn	29.741
Aberdeen	29.750
Leith	29.800
Shields	29.836
York	29.877
Ardrossan	29.810
Donaghadee	29.832
Holyhead	29.858
Liverpool	29.882
Valencia	29.879
Roche's Point	29.889
Pembroke	29.897
Scilly	29.943
Hurst Castle	29.938
Dover	29.942
LONDON	29.944
Oxford	29.937
Cambridge	29.926
Yarmouth	29.902



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.

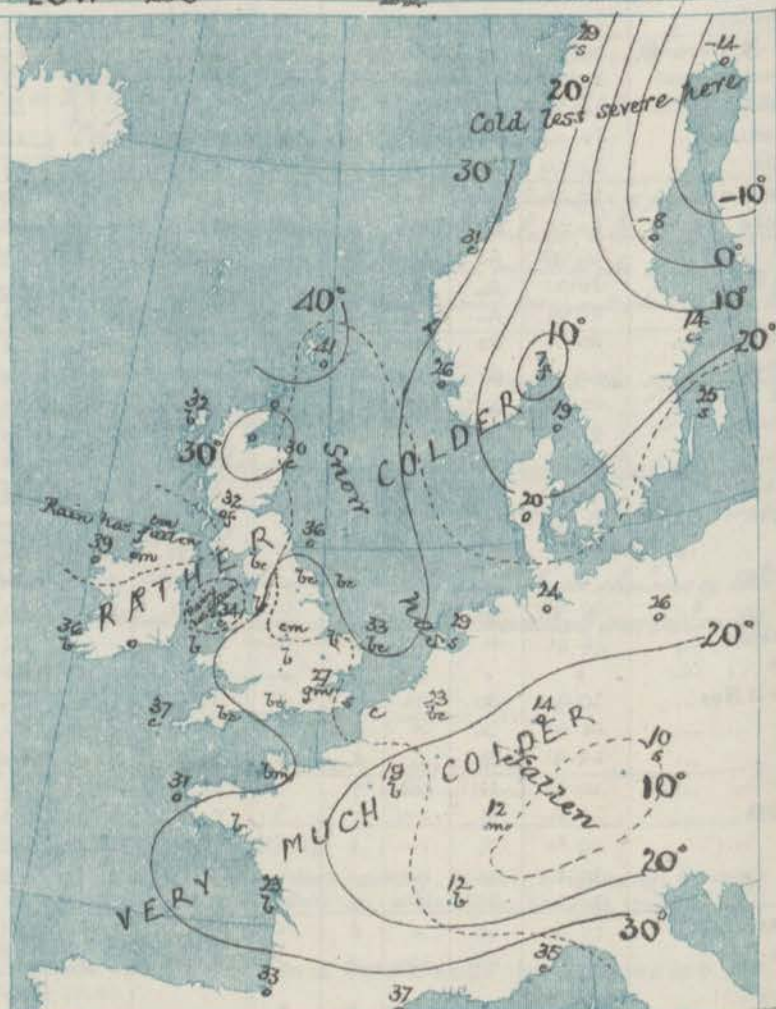
Rainfall A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE. AND RAINFALL.

for the month of December.

STATIONS	TEMPERATURE				RAINFALL (Inches)
	Daily Max.	Daily Min.	Avg. & M.	W.M.	
Sumburgh Head	42.0	34.5	39.0	37.6	4.33
Stornoway	44.8	33.5	38.9	37.8	5.66
Wick	42.0	32.1	37.8	36.4	3.18
Nairn	41.5	32.8	36.9	35.4	2.08
Aberdeen	41.8	32.9	36.9	35.3	3.34
Leith	44.3	33.8	38.4	37.0	2.01
Shields	42.8	34.3	39.2	36.9	2.74
York	42.5	31.9	36.2	35.4	2.45
Ardrossan	47.0	36.1	40.1	38.3	4.04
Donaghadee	46.7	36.1	40.1	39.1	2.84
Holyhead	46.8	39.6	42.9	41.3	3.84
Liverpool	43.6	35.7	39.1	37.4	2.70
Valencia	50.0	40.0	44.7	41.8	5.82
Roche's Point	47.7	39.3	42.9	41.4	4.74
Pembroke	47.1	40.4	43.7	42.6	4.06
Scilly	49.8	43.9	47.2	45.3	4.10
Hurst Castle	45.5	36.5	40.6	39.9	2.84
Dover	44.2	36.5	40.0	38.8	3.20
LONDON	44.5	38.9	38.1	37.1	2.14
Oxford	43.3	33.6	37.3	35.6	2.13
Cambridge	43.3	31.8	36.3	35.6	1.99
Yarmouth	42.2	33.8	37.9	37.2	2.95

NOTE — The Temperature means are for the 10 years 1871 — 80, the Rainfall means are mainly those for the 10 years 1866 — 85



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30.2 in: and more over Scotland, and also over Central Sweden, 30.1 in: and more over Ireland and England.
 Lowest, 29.7 in: and less, over Germany, 29.5 in: near Lisbon, and rather below 29.5 in: over the Gulf of Genoa.
 Gradients slight over our Islands and their neighbourhood—rather steep over the Sound and S. of Sweden and also over the St. Lawrence—moderate elsewhere.
 Barometer rising in our Islands and Germany, falling over Sweden, Norway, and Southern Europe.

TEMPERATURE

Highest, 47° at Lisbon, 44° at Lumburg H., 39° at Kalmakhet and Muttalghmai.
 Lowest, -14° F. at Kapavunda, -8° at Hangoand, +7° at Faeder, 10° at Humide, 12° at Lyons, 13° at Paris, 21° at Cambridge, 22° at Berlin, 27° in London.
 It was falling decidedly over Great Britain, rising in Norway and the north of Sweden.

WIND

Calm and light NW² in Scotland, light SE² in the west of Norway, fresh N² and NE² on the eastern shores of the North Sea, NW² over Germany.
 Moderate NE² over England, and E² to SE² in Ireland.
 Fresh to strong NE² over the Channel and Bay of Biscay—light NE² over Central France.

WEATHER

Dry over nearly the whole of our Islands and France—bright in many places, dull elsewhere.
 Cloudy, more or less, over Scandinavia and Germany, with snow in several places as well as at Hilles and Dingensau.
 A Mock sun is reported at Sittingbourne this morning. In the Shetlands cold rain is falling.

SEA

Moderate on our southeast and southwest coasts, slight or smooth elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

1. The steady fall of the barometer in Spain and the south of France seems likely to produce an increase in the force of the NE² winds over the Channel and our southern coasts, with slight snow showers in some places.
2. The fall of the barometer in the far north is apparently owing to a depression which is likely to produce some snow and sleet in the north of Scotland but not much wind.
3. Over the greater part of Ireland and England NE² and E² winds are probable with sharp frosts, and dry, hazy weather.

FORECASTS

for the 24 hours ending at NOON on 28th DEC^r 1887.

DISTRICTS.

FORECASTS.

0	SCOTLAND NORTH	NW ² and N ² winds, cold, some snow.
1	SCOTLAND EAST	— D° — D° — D° —
2	ENGLAND N.E.	NE ² and N ² breezes, moderate to fresh; fair, very cold.
3	ENGLAND EAST	Same as No 5
4	MIDLAND COUNTIES	NE ² breezes, light; very cold, frosty.
5	ENGLAND SOUTH	NE ² breezes, freshening; fair and cold, snow locally later.



DISTRICTS.

FORECASTS.

6	SCOTLAND WEST	SE ² and E ² winds, light; fine, cold.
7	ENGLAND N.W.	— D° — D° — D° —
8	ENGLAND S.W.	NE ² winds, strong; dry, cold.
9	IRELAND NORTH	Same as No 6
10	IRELAND SOUTH	E ² and NE ² winds, moderate; fine, cold.

WARNINGS

NONE ISSUED

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

YESTERDAY'S 2 P.M. REPORTS.

	Bar.	Dry.	Wet.	Wind.	Wes.	Sea.		Bar.	Dry.	Wet.	Wind.	Wes.	Sea.
Skudeenæs ...	30.17	35	33	E. 1/2 E 1	6	2	Holyhead ...	30.03	40	39	SE 2	cm	2
Sumburgh Head ...	30.08	37	36	SS E 1	0	3	Valencia ...	29.97	45	41	E 1/2 E 2	c	2
Stornoway ...	30.04	39	39	E 3	c	3	Scilly ...	29.93	43	40	E 5	bc	4
Aberdeen ...	30.08	37	36	S 4	cp	2	Dungeness ...	29.97	32	32	N 1/2 E 8	c	2
Shields ...	30.07	35	33	SW 2	c	2	London ...	30.02	35	33	NE 1	bm	*
Ardrossan ...	30.02	38	36	2 0	0	0	Yarmouth ...	29.99	33	32	NE 4	bc	4
Malin Head ...	30.02	42	41	NE 1	bc	1	Jersey ...	29.99	37	33	SE 4	6	4
Mullaghmore ...	30.02	43	42	2 0	c	0	Rochefort ...	29.89	43	41	NW 4	r	2
Belmullet ...	30.04	42	42	N 1/2 E 2	6	*							

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

Yesterday morning's reports showed that pressure varied from between 30.3 ins. and 30.4 ins. over Northern Europe generally, and from 29.3 ins. and more over the British Islands and the southern part of the Mediterranean to 29.7 ins. and less, in the east and south of France, 29.6 ins. over Poland, and 29.5 ins. near Kharkov. Several small shallow minima were observed in various parts of Western and Central Europe. Thus, while as a whole the wind was NE^{1/2} and E^{1/2} over the northern countries it was W^{1/2} and SW^{1/2} over the Mediterranean as well as over Germany, Austria, and Southern Russia. There were, however, many local variations near the baric minima referred to above. Temperature was very low almost everywhere. The lowest individual values were, -35° F at Archangel, -29° at Haparanda, -20° at Ulsaborg, -2° at Helsingfors, 0° (zero) at St. Petersburg, +2° at Hango, 6° at Hernösand, 8° at Luleå, 14° at Humana, 15° at Moscow and Cassel, 21° at Charlottenburg and Breslau, 23° at Paris, and 30° in London; the highest 55° at Malta, 51° at Brindisi, 47° at Cagliari and Algiers, 44° at Malin Head, and 43° at Bismarck and Bally.

Later on the cold became still more severe over the British Isles, France and Germany, but gave way a little over Lapland and Norway.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

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

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

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

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

DAILY WEATHER REPORT.

for Wednesday 28th Dec^r 1887.

Issued by the Meteorological Office, 116, Victoria Street, London. A. H. SCOTT, Secretary.

+ YESTERDAY EVENING.																			8 A.M. TO DAY.																			PAST 24 HOURS.		
STATIONS.	Barometer at 32° F. and Sea Level.	Temp. in Shade.	WIND.			Weather.	BAROMETER.		SHADE TEMP.			WIND.			Weather.	Sea. (0 to 9.)	SHADE TEMP.		Amount of Rainfall.																					
			Dir.	Force. (0 to 12.)			Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Day.	Night.	Difference from 8 a.m. yesterday.	Dir.	Force. (0 to 12.)	Max.			Min.																							
SCANDINAVIA.																																								
Haparanda ...	29.87	-11	S	2	0		30.02	-14	-4	-4	+10	Z	0	bc	*	?	-22	-																						
Hernösand ...	30.04	-23	Z	0	6		29.98	-25	2	1	+10	Z	0	0	*	10	-25	-																						
Stockholm ...	29.96	17	NNW	2	0		30.02	0	144	12	-0	Z	0	0	*	19	12	-																						
Wisby ...	29.86	25	E	4	0		29.90	+08	26	25	+1	ENE	2	0	*	28	19	0.12																						
Bodö ...	29.88	37	SW	6	0		30.08	+17	29	27	0	NNE	1	6	1	37	28	-																						
Christiansund...	29.95	32	ESE	2	bc		30.01	0	29	28	-2	ESE	1	c	2	32	25	-																						
Skudesnaes ...	29.97	22	ENE	1	bc		30.02	-06	25	24	-1	ESE	1	c	3	28	?	-																						
Christiania Fjord (Pierder)	29.97	12	NNE	4	f		30.02	-07	14	14	+7	N	4	f	1	?	?	-																						
Skagen (The Scaw)	29.88	18	E	3	c		29.97	0	22	21	+3	E	2	c	2	22	16	0.04																						
Fanö ...	29.84	18	NE	6	0		29.87	+15	20	19	-0	NE	4	6	*	21	16	-																						
BRITISH ISLANDS.																																								
Sumburgh Head	30.03	41	N	4	0		30.01	-09	36	35	-5	N	1	bc	2	42	34	0.14																						
Stornoway ...	30.23	39	NE	3	0		30.18	-05	44	41	+10	N	3	0	3	42	32	0.07																						
Wick ...	30.11	42	NW	3	0		30.08	-16	38	37	+8	NW	2	0	1	42	29	0.12																						
Nairn ...	30.17	38	SW	1	c		30.08	-14	40	39	+11	Z	0	0	1	41	26	0.02																						
Aberdeen...	30.07	36	NNW	6	6		30.02	-19	39	38	+9	NNW	2	md	2	41	30	0.05																						
Leith ...	30.15	35	NNW	2	c		30.04	-16	40	38	+7	N	1	cm	*	40	32	-																						
Shields ...	30.12	33	SW	2	0		29.99	-17	40	39	+4	NNE	2	d	3	40	31	0.15																						
Spurn Head ...	30.06	32	NNW	5	bc		29.96	-17	36	38	+3	ENE	2	c	3	37	30	0.11																						
York ...	30.13	29	N	1	c		29.98	-20	35	35	+7	E	1	m	*	37	25	0.03																						
Loughborough	30.16	26	NW	1	6		29.98	-16	34	33	+7	NW	2	cd	*	34	25	0.08																						
Ardrossau ...	30.20	36	NW	2	6m		30.08	-15	37	36	+5	NW	2	6	1	38	31	-																						
Malin Head ...	30.25	34	SW	2	6		30.16	-01	44	40	+7	N	4	of	4	41	37	0.01																						
Mullaghmore ...	30.25	35	E	2	6		30.19	+06	42	40	+2	N	2	c	2	42	30	-																						
Belmullet ...	30.24	36	ENE	2	bc		30.24	+11	34	32	-5	NNW	1	0	*	40	29	-																						
Donaghadee ...	30.24	32	NNW	3	6		30.10	-10	44	42	+7	ENE	4	6	4	44	30	-																						
Barrow-in-Furness	30.18	31	NW	1	0		30.02	-17	38	36	+2	NNW	2	cm	*	39	30	-																						
Liverpool (Bidston)	30.19	31	NNE	1	6		30.02	-16	37	36	+9	NW	2	0	3	38	28	0.01																						
Holyhead ...	30.21	36	NNE	2	bc		30.06	-11	42	41	+2	N	4	0	4	43	38	0.01																						
Parsonstown ...	30.26	30	Z	0	6		30.20	+06	27	26	-7	Z	0	0	*	36	21	-																						
Valencia ...	30.27	37	E	2	6		30.22	+11	33	32	-2	NNE	2	6	2	41	30	-																						
Roche's Point...	30.19	35	E	4	c		30.18	+09	32	31	-7	Z	3	6	3	40	30	-																						
Pembroke ...	30.21	31	ENE	2	6		30.08	-06	39	37	+9	NNW	2	c	1	39	30	-																						
Scilly ...	30.13	37	ENE	5	c		30.10	+08	41	37	+4	NNW	2	0	3	41	33	-																						
Prawle Point ...	30.16	29	NE	4	c		30.06	-01	31	29	-1	NNW	4	bc	3	35	25	-																						
Jersey ...	30.13	33	NE	2	6cm		30.04	0	38	32	+2	NNW	2	6cm	2	36	29	-																						
Hurst Castle ...	30.13	29	NNE	4	6		29.98	-10	32	31	+4	NNW	4	cm	1	34	28	0.02																						
Dungeness ...	30.06	19	W	1	6		29.87	-14	31	31	+6	N	3	c	2	32	19	-																						
London ...	30.12	29	NNE	3	6		29.95	-13	34	33	+7	N	3	0	*	34	26	0.01																						
Oxford ...	30.15	25	NNE	2	6		29.99	-14	33	33	+8	NNW	2	cdg	*	33	24	0.01																						
Cambridge ...	30.09	26	N	1	6		29.97	-16	33	33	+12	N	1	0	*	34	20	0.01																						
Yarmouth ...	30.04	28	NNW	4	bc		29.91	-16	33	31	0	NNE	5	c	5	33	26	0.04																						
Cuxhaven ...	29.85	24	NNE	5	c		29.81	-20	26	24	+2	NE	6	6	*	26	23	-																						
Berlin ...	29.65	23	NW	4	3		29.62	-11	19	19	-7	SW	1	c	*	27	18	0.16																						
Wiesbaden ...	*	*	*	*	*		29.65	-26	21	21	+7	NW	2	0	*	28	?	0.12																						
Munich ...	29.80	5	NE	2	m		29.66	-16	11	10	+1	SW	5	m	*	16	3	-																						
FRANCE & NETHERLANDS.																																								
The Helder ...	29.84	34	NNW	4	3		29.84	-20	29	28	0	ENE	4	0	3	34	28	0.22																						
Brussels ...	*	*	*	*	*		*	*	*	*	*	*	*	*	*	*	*	*																						
Cape Gris Nez...	30.01	28	N	7	f		29.84	-18	36	33	+12	N	8	0	6	?	25	0.04																						
Paris ...	30.05	24	N	3	6		29.89	-09	30	27	+11	NNW	4	0	*	30	?	-																						
Brest ...	30.05	24	N	4	0		30.11	+16	32	29	+1	NE	4	0	3	?	?	-																						
Lorient ...	30.12	32	ENE	4	6		30.10	+11	33	32	+6	NNE	1	bc	2	34	25	-																						
Rochefort ...	30.09	28	NE	7	6		30.14	+16	24	23	+1	ESE	3	6	2	32	21	-																						
Belfort ...	*	*	*	*	*		*	*	*	*	*	*	*	*	*	*	*	*																						
Lyons ...	29.90	16	N	7	6		30.06	+17	17	15	+5	NNW	1	c	*	19	?	-																						
Nice ...	29.44	39	ESE	2	5		29.59	+10	29	25	-6	E	1	6	2	46	25	-																						
Perpignan ...	29.79	32	NW	5	6		29.94	+24	29	23	-8	NW	3	6	*	43	24	-																						
Biarritz ...	29.84	32	E	5	6		29.99	+22	23	21	-10	E	5	6	2	39	21	-																						
PORTUGAL.																																								
Corunna ...	*	*	*	*	*		*	*	*	*	*	*	*	*	*	*	*	*																						
Lisbon ...	29.61	50	ENE	4	f		29.24	-26	47	47	0	NNE	7	f	7	53	45	1.89																						

For Explanation of Columns, see p. 4.

WEATHER CHARTS

for 8 a.m. on

WEDNESDAY, 28th December,

1887.

BAROMETER, WIND & SEA.

(Explanation of Map)

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

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

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

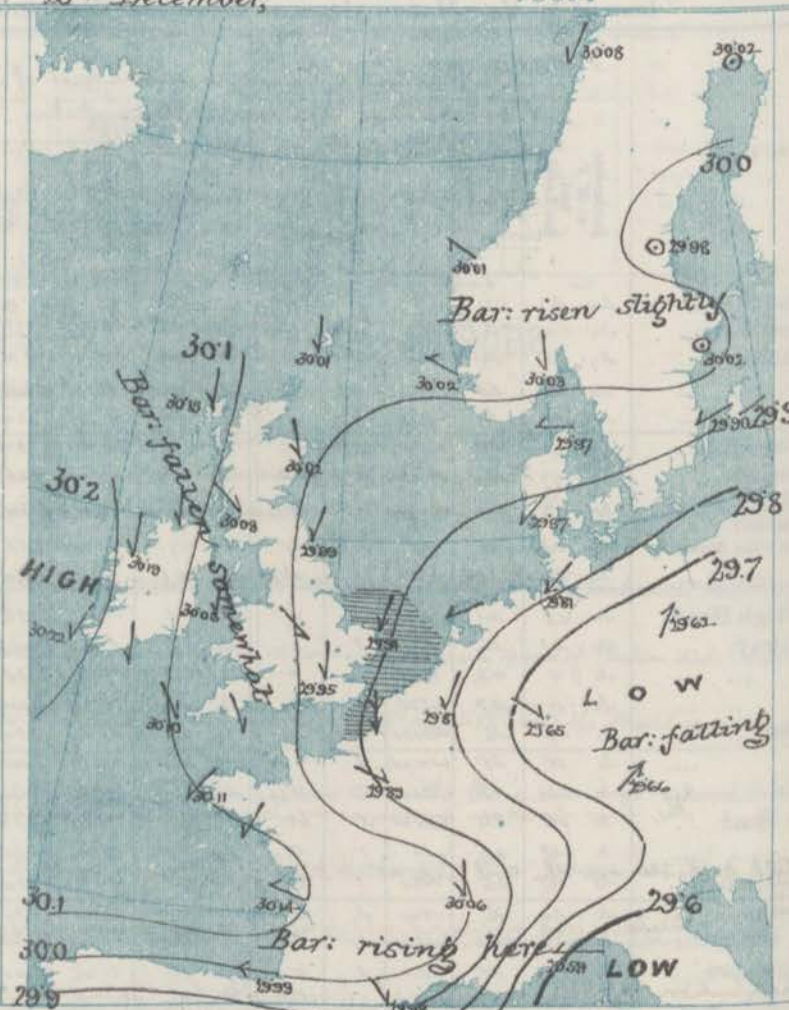
Sea Disturbance — where considerable is shown thus

■ = Rough. ■ = High.

MEAN HEIGHT of the BAROMETER

at 8 a.m. for the month of December.
During the 10 Years 1871—1880.

STATIONS.	MEAN READINGS.
Sumburgh Head	29.680
Stornoway	29.701
Wick	29.713
Nairn	29.741
Aberdeen	29.750
Leith	29.800
Shields	29.830
York	29.877
Ardrossan	29.810
Donaghadee	29.832
Holyhead	29.858
Liverpool	29.882
Valencia	29.879
Roche's Point	29.889
Pembroke	29.897
Scilly	29.948
Hurst Castle	29.938
Dover	29.942
LONDON	29.984
Oxford	29.987
Cambridge	29.926
Yarmouth	29.902



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.

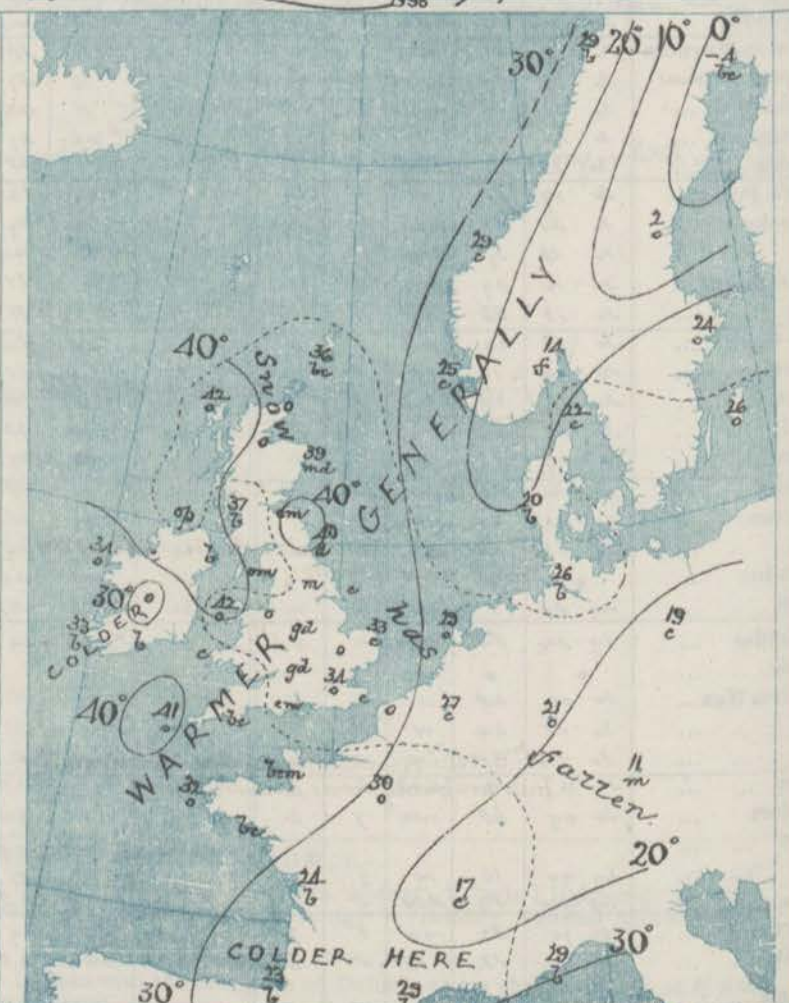
Rainfall — A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

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	42.0	34.5	39.0	37.0	4.33
Stornoway	44.8	38.5	38.0	37.8	5.66
Wick	42.0	32.1	37.8	36.4	3.18
Nairn	41.5	32.8	36.9	35.4	2.08
Aberdeen	41.8	32.9	36.9	35.3	3.34
Leith	44.3	33.6	38.4	37.0	2.01
Shields	42.8	34.3	39.2	36.9	2.74
York	42.5	31.9	36.2	35.4	2.46
Ardrossan	47.0	36.1	40.1	38.3	4.04
Donaghadee	46.7	36.1	40.1	39.1	2.84
Holyhead	46.8	39.6	42.9	41.3	3.84
Liverpool	43.6	35.7	39.1	37.4	2.70
Valencia	50.0	40.0	44.7	41.8	5.82
Roche's Point	47.7	39.3	42.9	41.4	4.74
Pembroke	47.1	40.4	43.7	42.6	4.06
Scilly	40.8	43.9	47.2	45.3	4.10
Hurst Castle	45.5	36.5	40.6	39.9	2.64
Dover	44.2	36.5	40.0	38.8	3.20
LONDON	44.5	33.9	38.1	37.1	2.14
Oxford	43.3	33.6	37.3	36.6	2.13
Cambridge	43.3	31.8	36.3	35.6	1.09
Yarmouth	42.2	33.8	37.9	37.2	2.06

Note — The Temperature means are for the 10 years 1871—80, the Rainfall means are mainly those for the 10 years 1866—85.



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30.2 ins: and upwards over the west of Ireland.

Lowest, 29.28 ins: at Lisbon; 29.59 ins: at Kiev; 29.6 ins: to 29.7 ins: in a large depression lying over Germany.

Gradients steep over Spain and the south of France slight elsewhere. Barometer falling at all but the Scandinavian and French stations.

TEMPERATURE

Highest, 47° at Lisbon, 44° at Donaghadee, 42° at Mullaghmore and Holyhead, and 41° at Malin H. and Lillie.

Lowest, -4° F at Haparanda, +2° at Helsingfors, 11° at Munich, 14° at Stockholm and Jämskö, 17° at Lyons and 19° at Berlin.

Sharp frost occurred over Great Britain during the early part of last night, but the thermometer has since risen quickly.

WIND

Moderate or fresh from the NE. over the North Sea and the adjacent coasts.

Moderate N. or NW. over the greater part of our islands; SW. in Germany.

Light to fresh from E. in the south of France; strong from NNE at Lisbon.

WEATHER

Fine in Denmark, France, the west of our islands and the north of Scandinavia.

Cloudy or overcast elsewhere, with drizzling rain over the Central and eastern parts of Great Britain, and steady rain at Lisbon.

Snow fell yesterday or last night in the south-east, east, and north of our islands and also in Germany.

SEA

Rough at Cape Finkey and rather rough at Yarmouth, but moderate to smooth elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The low pressure system over Germany is apparently moving in a southwesterly direction, and snow showers are still probable over the east and southeast of England.

Depressions of considerable depth are apparently lying over Spain and the western part of the Mediterranean, but the distribution of pressure is not favourable for the advance of these towards our own coasts.

FORECASTS

For the 24 hours ending at NOON on 29th DEC^r

1887.

DISTRICTS.

FORECASTS.

0 { SCOTLAND
NORTH

N^{ly} winds, moderate; fair generally, but snow showers in places.

1 { SCOTLAND
EAST

----- D° ----- D° ----- D° -----

2 { ENGLAND
N.E.

N^{ly} winds, moderate or fresh; changeable, some snow showers.

3 { ENGLAND
EAST

----- D° ----- D° ----- D° -----

4 { MIDLAND
COUNTIES

Same as N°5

5 { ENGLAND
SOUTH

N^{ly} to NE^{ly} winds, moderate; fair generally, but probably some snow showers.

DISTRICTS.

FORECASTS.

6 { SCOTLAND
WEST

NW^{ly} to N^{ly} winds, moderate; fair generally.

7 { ENGLAND
N.W.

----- D° ----- D° ----- D° -----

8 { ENGLAND
S.W.

N^{ly} to NE^{ly} winds, moderate; fair generally.

9 { IRELAND
NORTH

----- D° ----- D° ----- D° -----

10 { IRELAND
SOUTH

----- D° ----- D° ----- D° -----

WARNINGS

NONE ISSUED.

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

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

YESTERDAY'S 2 P.M. REPORTS.

	Bar.	Dry.	Wet.	Wind.	Wrs.	Sea.		Bar.	Dry.	Wet.	Wind.	Wrs.	Sea.
Skudesnaes ...	29.97	28	26	ESE 1	0	2	Holyhead ...	30.21	24	23	ENE 1	6.5 f	2
Sumburgh Head ...	30.06	41	41	N 3	0	3	Valencia ...	30.17	40	37	NE 2	0 m	2
Stornoway ...	30.24	26	25	NE 2	C	3	Sailly ...	30.11	37	34	ENE 4	6 c	3
Aberdeen ...	30.15	24	21	NNW 2	C	1	Dungeness ...	30.05	30	30	S 1	5	1
Shields ...	30.17	25	23	WNW 2	6	3	London ...	30.10	32	32	NNE 2	6 m	*
Ardrossan ...	30.28	26	23	NW 1	0 m	1	Yarmouth ...	30.06	33	31	NNE 4	6.5 f	4
Malin Head ...							Jersey ...	30.09	35	32	ESE 2	6	3
Mullaghmore ...	30.22	32	26	SE 4	0	2	Rocheport ...	29.97	30	28	ENE 2	6	3
Belmullet ...	30.20	40	38	SW 2	0	*							

GENERAL REMARKS ON THE WEATHER OVER EUROPE

DURING THE PAST 24 HOURS.

The reports for yesterday morning showed that pressure varied from 30.10 ins. and 30.25 ins. in Scotland, Finland the North of Russia, and the Black Sea, to rather below 29.7 ins. over North Germany, 29.5 ins. over the Gulf of Genoa, and about the same value off the coast of Portugal. Thus while NE winds prevailed very generally over the northern and western countries, S.E. breezes were reported over the southern and eastern parts of the Mediterranean, very variable winds in Austria and calms in the South of Russia. The weather though temporarily fine and dry over the greater part of the British Islands, was changeable and showery elsewhere, the falls consisting mainly of snow, which was heavy in many localities—especially in the Netherlands and eastern parts of Kent. Temperature was very low over the whole Continent, especially at the inland and northern stations, where the frost was most severe. The lowest individual values were -39° at Archangel, -25° at Uleaborg, -20° at Kuopio, -14° at Haparanda, -10° at Helsinki, -9° at Hangö, -8° at Hernösand, -2° at St. Petersburg, +3° at Pesancon, 11° at Kiev, 10° at Munich, 11° at Breslau and Cassel, 12° at Lyons, Belfast and Madrid, 14° at New Fahrwasser, Wiesbaden and Lirassow, 19° at Vienna, Paris and the Scaw, 20° at Faro, 21° at Cambridge, 26° at Berlin and 27° in London; the highest were 55° at Palermo, Malta and Oran, 53° at Cagliari, 50° at Brindisi and Anagnino, 46° at Rome, 41° at Sumburgh Head, and 34° at Perpignan.

Later on the frost gave way over the British Isles, while over Lapland and the North of Scandinavia the thermometer began to rise rather decidedly; over the Spanish Peninsula the barometer fell fast and the appearance was unsettled.

[The newspapers report that a heavy fall of snow occurred at Madrid yesterday, and even at Nice snow fell at times during the day.]

GENERAL REMARKS FOR THE 24 HOURS ENDING AT 8 A.M. ON MONDAY DEC 26TH 1887.

The reports for the morning of Sunday (25th) showed that pressure then varied from 30 ins. and more both over the extreme northern and western parts of Europe, to rather below 29.5 ins. over western Russia, Poland, Hungary and the Baltic Peninsula, and to rather below 29.8 ins. in a hollow extending in a northwesterly direction from North Germany to the North Sea, NE^{ly} and N^{ly} winds were prevalent over the Baltic, Scandinavia and Denmark and N^{ly} to NW^{ly} over France and the British Islands, accompanied by cold and somewhat variable weather; in many places the sky was clear, but in others snow or sleet fell from time to time and the sky was densely overcast. Temperature was low over the Continent generally, but especially so over Lapland and the North of Russia. The lowest individual readings were -26° at Archangel, -5° at Haparanda, 0° (zero 5) at Uleaborg, 6° at Kuopio, 8° at Hernösand, 11° at Bodö, 14° at Pigea and Faerder, 16° at Helsinki, 17° at New Fahrwasser, Moscow and Breslau, 19° at Wiesbaden, 21° at Brussels, 23° at Paris, 24° at Berlin, 27° at Cambridge, and 30° in London.

The highest were 55° at Malta and Brindisi, 50° at Cagliari, 49° at Cagliari, Palermo and Palermo, 46° at Brindisi, 43° at Stornoway, 42° at Scilly and 41° at Bristol.

Later on the thermometer fell still lower over our Islands and northwestern Europe generally, and over England a steady frost seemed to be setting in gradually.

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

Thursday, 29th December

1887.

Issued by the Meteorological Office, 116, Victoria Street, London, R. H. SCOTT, Secretary.

STATIONS.	+ YESTERDAY EVENING.						8 A.M. TO DAY.										PAST 24 HOURS.		
	Barometer at 32° F. and Sea Level.	Temp. in Shade.	WIND.			Weather.	BAROMETER.		SHADE TEMP.			WIND.			Weather.	Sea (0 to 9.)	SHADE TEMP.		Amount of Rainfall.
			Dir.	Force (0 to 12.)			Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Dir.	Force (0 to 12.)				Max.	Min.	
SCANDINAVIA.																			
Haparanda ...	30.02	-15	Z	0	b		29.94	-0.08	-24	-24	-20	Z	0	b			-4	?	
Hernösand ...	30.15	16	Z	0	o		30.11	+0.13	7	6	+5	Z	0	bc			18	-24	
Stockholm ...	30.03	10	Z	0	bc		30.02	-0.00	19	19	+5	NNE	4	o			19	9	
Wisby ...	29.97	29	E	4	o		29.91	+0.01	29	26	+3	ESE	4	o			30	21	
Bodö ...	30.07	29	ESE	2	o		30.00	-0.08	30	28	+1	N	2	o			29	27	
Christiansund ...	30.11	34	SW	2	c		30.14	+0.13	33	32	+4	SW	2	o			34	?	0.08
Skudesnaes ...	30.12	29	Z	0	o		30.11	+0.09	28	?	+3	Z	0	o			30	25	
Christiania Fjord (Verder)	30.07	16	Z	0	o		30.08	+0.05	26	25	+12	NNE	2	o			?	12	
Skagen (The Scaw)	30.08	25	Z	0	bc		30.04	+0.04	24	24	+2	NE	3	o			27	21	
Fanö ...	30.07	16	N	1	b		30.06	+0.19	27	27	+7	W	1	c			27	16	
BRITISH ISLANDS.																			
Sumburgh Head	30.08	37	N	2	c		30.22	+0.21	37	36	+1	N	1	r			38	34	0.04
Sornoway ...	30.15	36	NE	3	c		30.25	+0.10	41	40	-1	NE	4	o			42	32	0.04
Wick ...	30.12	37	NW	1	b		30.26	+0.20	37	36	-1	N	1	c			39	32	0.05
Nairn ...	30.12	36	N	1	o		30.23	+0.15	34	33	-6	Z	0	o			40	34	0.04
Aberdeen ...	30.09	37	NW	3	b		30.21	+0.19	36	35	-3	NW	3	bc			40	34	0.03
Leith ...	30.11	37	NE	1	o		30.22	+0.18	35	34	-5	W	1	cm			41	32	0.01
Shields ...	30.10	36	SE	2	bc		30.20	+0.21	35	35	-5	W	2	om			41	33	0.04
Spurn Head ...	30.08	35	ESE	2	bc		30.20	+0.24	33	32	-3	N	3	bc			38	32	
York ...	30.10	35	E	1	o		30.23	+0.25	26	26	-9	N	1	c			37	23	0.01
Loughborough	30.09	31	ESE	2	b		30.23	+0.25	30	29	-4	Z	0	og			36	29	
GERMANY.																			
Ardrossan ...	30.10	38	Z	0	bc		30.24	+0.16	37	35	0	Z	0	om			42	33	
Malin Head ...	30.12	44	NNE	3	o		30.21	+0.05	38	38	-3	NW	1	o			44	38	0.03
Mullaghmore ...	30.15	43	NE	3	om		30.22	+0.03	36	36	-6	Z	0	c			44	34	0.02
Belmullet ...	30.17	45	NNE	2	od		30.24	-0.00	39	39	+5	NNE	3	o			45	34	0.02
Donaghadee ...	30.12	42	NNE	3	b		30.24	+0.14	38	37	-6	W	2	b			44	38	
FRANCE & NETHERLANDS.																			
Barrow-in-Farness	30.08	37	E	2	o		30.24	+0.22	34	32	-4	SE	2	om			41	33	
Liverpool (Bidston)	30.08	35	ESE	3	o		30.25	+0.22	30	28	-7	S	1	c			39	28	
Holyhead ...	30.07	42	NE	4	c		30.23	+0.17	30	29	-12	S	1	bm			44	30	
Parsqustown ...	30.13	35	Z	0	c		30.22	+0.02	32	32	+5	Z	0	o			36	26	
Valencia ...	30.10	43	ESE	4	om		30.19	-0.03	40	38	+7	SE	1	og			43	31	0.01
Roche's Point...	30.06	36	NNE	2	b		30.17	-0.01	42	40	+10	SE	4	o			42	31	
Pembroke ...	30.00	41	ESE	3	c		30.21	+0.13	31	29	-8	ESE	2	b			41	31	
Scilly ...	29.96	42	NE	4	o		30.11	+0.01	40	39	-1	E	5	o			44	36	0.05
Prawle Point ...	30.00	39	NE	4	o		30.16	+0.10	36	33	+5	ESE	4	o			40	31	
Jersey ...	29.98	40	NE	3	ogm		30.17	+0.13	32	30	-3	E	4	bm			41	31	
ITALY.																			
Hurst Castle ...	30.02	33	NE	3	b		30.18	+0.20	31	30	-1	NE	4	bc			36	26	0.01
Dungeness ...	29.97	31	N	3	c		30.18	+0.31	31	30	0	SE	4	c			33	29	
London ...	30.03	33	NNE	3	o		30.20	+0.25	31	30	-3	E	1	gf			35	30	
Oxford ...	30.10	30	N	1	o		30.24	+0.25	23	22	-10	NE	1	b			35	22	
Cambridge ...	30.04	32	N	1	o		30.23	+0.26	27	26	-6	N	1	o			35	23	
SPAIN.																			
Yarmouth ...	30.02	34	ESE	5	c		30.17	+0.26	33	32	0	N	1	ogm			34	31	
Cuxhaven ...	29.94	26	N	4	o		30.12	+0.31	27	25	+1	N	2	b			27	24	
Berlin ...	29.89	21	NW	3	o		29.93	+0.31	24	23	+5	NW	4	o			25	16	
Wiesbaden ...	*	*	*	*	*		30.10	+0.45	9	9	-12	N	2	bc			25	9	
Munich ...	29.73	10	W	3	c		29.95	+0.29	7	6	-4	N	1	s			19	7	0.12
PORTUGAL.																			
The Helder ...	30.04	32	ESE	4	b		30.15	+0.31	27	26	-2	S	1	f			32	27	
Brussels ...	*	*	*	*	*		30.20	+0.39	11	?	-16	Z	0	?			27	11	
Cape Gris Nez...	29.98	27	ESE	3	c		30.18	+0.34	19	19	-17	SE	3	b			37	18	
Paris ...	29.98	23	NE	4	bc		30.13	+0.24	17	16	-13	NE	3	b			?	16	0.04
Brest ...	29.98	23	ESE	3	bc		30.09	-0.02	31	30	-1	E	7	o			30	28	
AFRICA.																			
Lorient ...	29.97	37	ESE	1	o		30.10	-0.00	27	25	-6	ESE	5	b			39	25	
Rochefort ...	29.93	30	ESE	3	c		30.00	-0.14	22	21	-2	ESE	7	b			34	19	
Belfort ...	29.82	16	N	1	o		29.95	+0.17	10	9	-8	ESE	3	b			23	?	0.16
Lyons ...	29.91	22	ESE	1	o		29.90	-0.16	13	12	-4	N	7	b			28	12	
Nice ...	29.61	31	ESE	1	o		29.49	-0.10	34	31	+5	ESE	4	o			44	24	0.20
ASIA.																			
Perpignan ...	29.84	32	Z	0	o		29.79	-0.19	32	28	+3	NW	3	o			40	29	
Biarritz ...	29.80	31	E	7	o		29.79	-0.20	30	28	+7	E	7	o			30	19	
AUSTRALIA.																			
Corunna ...	*	*	*	*	*														
Lisbon ...	29.67	58	ESE	5	T		29.15	-0.13	55	55	+8	ESE	7	r			59	?	1.02

For Explanation of Columns, see p. 4. † Received too late for insertion in Charts.

WEATHER CHARTS

for 8 a.m. on *Thursday, 29th December, 1887.*

BAROMETER, WIND & SEA.

(Explanation of Map)

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

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

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

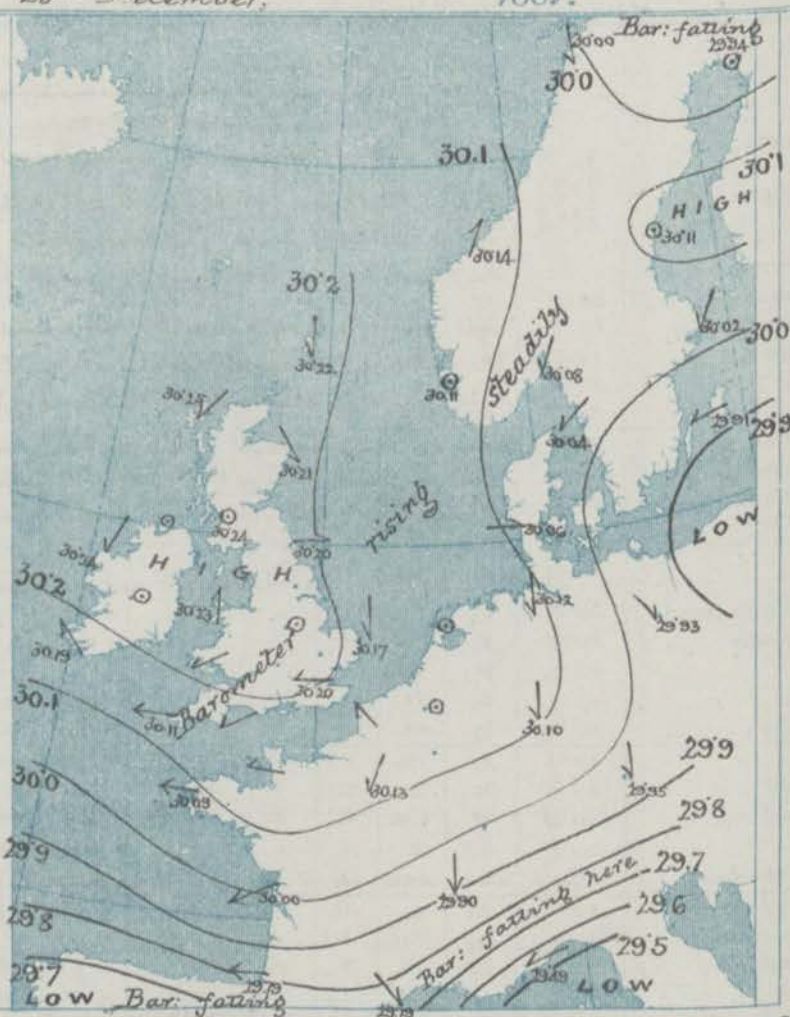
Sea Disturbance — where considerable is shown thus

— Rough. — High.

MEAN HEIGHT of the BAROMETER

at 8 a.m. for the month of December
During the 10 Years 1871—1880.

STATIONS.	MEAN READINGS.
	in.
Sumburgh Head.	29.680
Stornoway.	29.701
Wick.	29.713
Nairn.	29.741
Aberdeen.	29.750
Leith.	29.800
Shields.	29.836
York.	29.877
Ardrossan.	29.810
Donaghadee.	29.832
Holyhead.	29.858
Liverpool.	29.882
Valencia.	29.879
Roche's Point.	29.889
Pembroke.	29.897
Scilly.	29.943
Hurst Castle.	29.938
Dover.	29.942
LONDON.	29.934
Oxford.	29.937
Cambridge.	29.926
Yarmouth.	29.902



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.

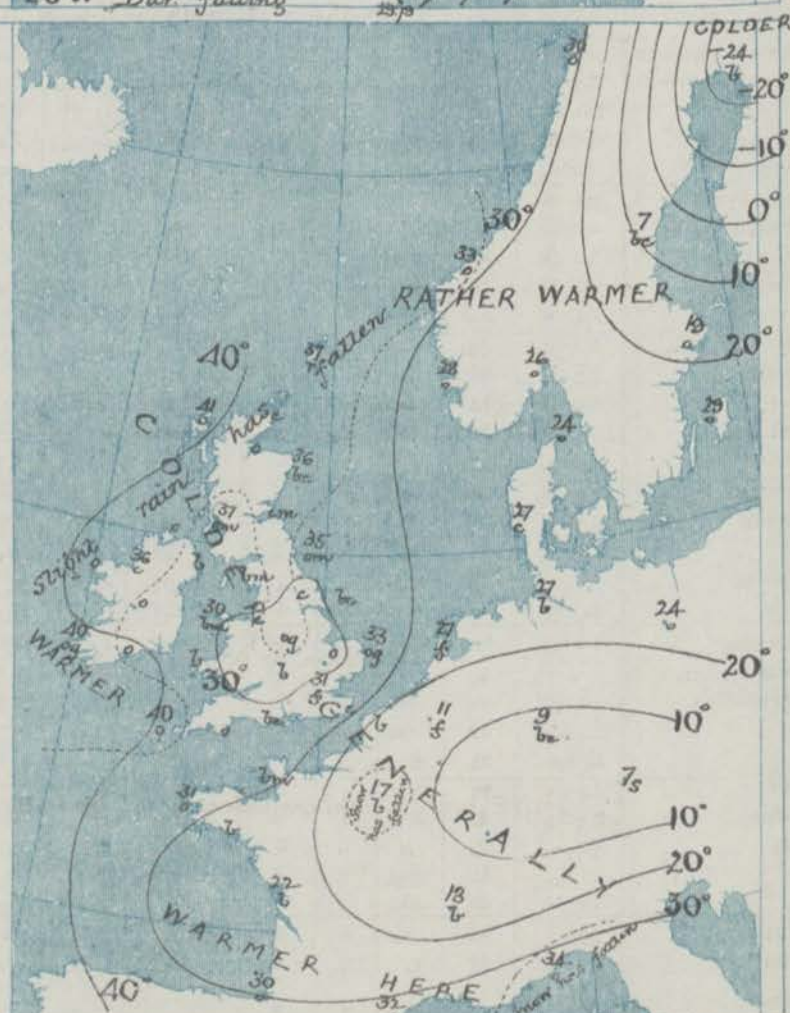
Rainfall A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

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	42.0	34.5	39.0	37.6	4.33
Stornoway	44.8	33.5	38.9	37.8	5.66
Wick	42.0	32.1	37.8	36.4	3.18
Nairn	41.5	32.8	36.9	35.4	2.08
Aberdeen	41.8	32.9	36.9	35.3	3.34
Leith	44.3	33.8	38.4	37.0	2.01
Shields	42.8	34.3	39.2	36.9	2.74
York	42.5	31.0	36.2	35.4	2.45
Ardrossan	47.9	36.1	40.1	38.3	4.04
Donaghadee	46.7	36.1	40.1	39.1	2.84
Holyhead	46.8	39.6	42.9	41.3	3.84
Liverpool	43.6	35.7	39.1	37.4	2.70
Valencia	50.0	40.0	44.7	41.8	5.82
Roche's Point	47.7	39.3	42.0	41.4	4.74
Pembroke	47.1	40.4	43.7	42.6	4.06
Scilly	49.8	43.9	47.2	45.3	4.10
Hurst Castle	45.5	36.5	40.0	39.9	2.84
Dover	44.2	36.5	40.0	38.8	3.20
LONDON	44.5	33.9	38.1	37.1	2.14
Oxford	43.3	33.6	37.3	36.0	2.18
Cambridge	43.3	31.8	36.3	35.6	1.90
Yarmouth	42.2	33.8	37.9	37.2	2.95

NOTE — The Temperature means are for the 10 years 1871—80, 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 anticyclone lying over the greater part of the United Kingdom. Lowest, 29.2 ins: and less, over Portugal; 29.5 ins: and less over the Gulf of Genoa; 29.3 ins: and less over the southern part of the Baltic. Gradients steep over Spain and the south of France, slight elsewhere. Barometer rising at all but the Spanish and Southern French stations.
TEMPERATURE	Highest, 55° at Lisbon, 41° at Rocher Point, 41° at Stornoway, 40° at Valencia and Sicily, and 29° at Balmuccia. Lowest, -24° at Havana, 7° at Helsingfors and Munich, 3° at Wiesbaden, 11° at Brussels, 13° at Lyons and 17° at Paris. Sharp frost occurred last night over Central England, and slight frost in other parts of the Kingdom.
WIND	Light N. in the north and east of our Islands as also in Denmark and Germany. Moderate E. or NE. over the Channel, the south of England and the north of France. Strong from E. in Spain and the southwest of France, and from N. at Lyons.
WEATHER	Fair generally, but dull in the southwest, west, and north of our Islands, and also in the southern parts of Scandinavia, France. Rain is falling at Sunning Head and Lisbon and snow at Munich. Fog prevails over the Netherlands. Rain or sleet fell yesterday at many of our northern and western stations.
SEA	Moderate on our southwest and south-east coasts, but slight or smooth elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT



Anticyclonic conditions seem likely to continue over our Islands for a time, and sharp frosts are therefore probable, with fog or mist over some of our more Central districts.

The depressions over the Iberian Peninsula and the western part of the Mediterranean are likely to occasion a continuance of very unsettled weather over Southern Europe.

FORECASTS

for the 24 hours ending at NOON on 30th DEC^r. 1887.

DISTRICTS.	FORECASTS.	DISTRICTS.	FORECASTS.
0 { SCOTLAND NORTH	Light breezes, chiefly N., fair generally, but possibly some cold showers.	6 { SCOTLAND WEST	Light variable airs; fair generally, but some fog or mist.
1 { SCOTLAND EAST	----- D° ----- D° ----- D° -----	7 { ENGLAND N. W.	----- D° ----- D° ----- D° -----
2 { ENGLAND N. E.	----- D° ----- D° ----- D° -----	8 { ENGLAND S. W.	E ² winds, fresh or strong; fair generally but cloudy.
3 { ENGLAND EAST	Same as N° 5	9 { IRELAND NORTH	Variable or E ² airs; fair generally.
4 { MIDLAND COUNTIES	Same as N° 5	10 { IRELAND SOUTH	E ² winds, moderate; dull, slight rain, locally.
5 { ENGLAND SOUTH	NE ² 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.	Dry.	Wet.	Wind.	Wea.	Sea.		Bar.	Dry.	Wet.	Wind.	Wea.	Sea.
Skudesnaes ...	30.04	30	29	ESE 4	bc	2	Holyhead ...	30.05	44	42	NNE 4	o	4
Sumburgh Head ...	30.03	38	37	NNW 1	o	2	Valencia ...	30.44	39	35	N 2	om	3
Stornoway ...	30.15	40	40	NE 4	o	3	Scilly ...	30.01	42	40	NNE 4	o	3
Aberdeen ...	30.07	39	38	N 3	e	2	Dungeness ...	29.91	32	31	N 4	e	3
Shields ...	30.02	37	37	SE 2	d	3	London ...	29.99	35	31	N 3	bc	*
Ardrossan ...	30.08	42	39	NW 1	e	1	Yarmouth ...	29.96	33	31	ENE 5	cg	5
Malin Head ...	30.13	43	41	NNE 4	o	3	Jersey ...	29.96	41	39	N 2	o	2
Mullaghmore ...	30.15	43	42	N 4	e	3	Rochefort ...	30.00	34	30	ESE 3	b	2
Belmullet ...	30.17	45	42	NNE 2	o	*							

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.

DAILY WEATHER REPORT.

for Friday, 30th December. 1887.

Issued by the Meteorological Office, 116, Victoria Street, London, R. H. SCOTT, Secretary.

Issued by the Meteorological Office, 10, Victoria Street, London, W. 1. 30.11.1901.

STATIONS.	+ YESTERDAY EVENING.						8 A.M. TO DAY.										PAST 24 HOURS.		
	Barometer at 32° F. and Sea Level.	Temp. in Shade.	WIND.		Weather.	Barometer Reading at 32° F. and Sea Level.	BAROMETER.		GRADE TEMP.			WIND.		Weather.	Sea. (0 to 9.)	SHADE TEMP.		Amount of Rainfall.	
			Direc.	Force. (0 to 12.)			Inch.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Direc.	Force. (0 to 12.)			Max.	Min.		
SCANDINAVIA.																			
Haparanda ..	29.88	-18	Z	0	b	29.93	-0.01	-8	-8	+16	N	2	b	*	?	?	Inc.		
Hernösand ...	29.92	13	Z	0	o	30.01	-0.10	10	9	+3	Z	0	c	+	18	5	-		
Stockholm ...	30.06	10	Z	0	c	29.89	-0.13	14	13	-5	WNW	2	b	*	21	9	-		
Visby ...	30.02	21	N	4	c	29.89	-0.02	25	23	-4	WNW	4	o	*	30	16	0.04		
Bodö ...	29.94	28	WN	2	b	30.04	+0.04	20	18	-10	E	1	c	1	30	16	-		
Christiansund...	30.09	33	WN	2	c	30.07	-0.07	32	31	-1	NE	2	c	3	34	30	0.08		
Skudesnes ...	30.15	25	Z	0	b	30.07	-0.04	24	24	-4	Z	0	b	2	30	2	-		
Christiania Fjord (Færder)	30.09	26	Z	0	o	29.97	-0.11	28	25	+2	WNW	2	o	1	?	21	-		
Skagen (The Scaw)	30.08	25	NE	1	b	29.99	-0.05	27	26	+3	SW	1	o	1	27	21	-		
Faßø ...	30.09	26	ENE	3	c	30.10	+0.04	17	17	-10	WNW	1	b	*	30	16	-		
BRITISH ISLANDS.																			
Sumburgh Head	30.25	35	N	1	bc	30.20	-0.02	33	33	-4	Z	0	c	1	40	31	0.01		
Stornoway ...	30.30	37	NE	3	o	30.27	+0.02	35	35	-6	W	3	c	3	41	30	0.04		
Wick ...	30.27	37	N	1	bc	30.25	-0.01	33	33	-4	Z	0	bc	0	40	24	0.02		
Nairn ...	30.27	38	Z	0	o	30.26	+0.03	34	33	0	Z	0	o	1	39	34	0.02		
Aberdeen...	30.25	37	N	3	bc	30.28	+0.04	35	34	-1	WN	3	c	2	39	34	0.01		
Leith ...	30.26	36	W	1	o	30.27	+0.05	37	35	+2	W	1	ew	*	38	31	-		
Shields ...	30.19	37	WN	2	o	30.25	+0.05	36	36	+1	WN	2	o	3	39	34	0.17		
Spurn Head ...	30.13	36	WNW	5	c	30.17	-0.03	37	36	+4	NE	3	bc	3	38	31	0.08		
York ...	30.19	36	N	2	o	30.22	-0.01	35	34	+9	N	1	b	*	36	26	0.02		
Loughborough	30.22	33	WN	3	o	30.22	-0.01	35	35	+5	WN	2	ogm	*	37	29	-		
ARDROSSAN.																			
Ardrossan ...	30.27	35	Z	0	og	30.28	+0.04	35	33	-2	ENE	1	of	1	42	34	-		
Malin Head ...	30.27	38	SW	2	o	30.29	+0.08	39	37	+1	NE	1	cp	1	43	38	0.01		
Mullaghmore ...	30.29	35	E	1	c	30.32	+0.10	37	35	+1	SW	1	om	1	40	31	-		
Belmullet ...	30.30	39	NNE	2	o	30.34	+0.10	38	36	-1	S	1	o	*	42	38	-		
Donaghadee ...	30.29	41	NE	2	b	30.30	+0.06	38	38	0	WN	1	c	0	43	38	-		
Barrow-in-Furness	30.23	36	WN	3	o	30.25	+0.01	37	35	+3	NE	2	f	*	38	34	-		
Liverpool (Bldston)	30.25	34	WNW	2	o	30.26	+0.01	36	34	+6	N	1	o	2	37	30	-		
Holyhead ...	30.27	35	Z	0	om	30.28	+0.05	41	40	+11	NNE	3	om	2	42	29	-		
Parsonstown ...	30.30	33	Z	0	f	30.34	+0.12	32	32	0	Z	0	f	*	35	31	-		
Valencia ...	30.26	44	ESE	1	ogm	30.32	+0.13	30	29	-10	NE	1	b	1	42	28	-		
Roche's Point...	30.25	34	ESE	4	b	30.36	+0.13	37	35	-5	N	3	ew	3	42	31	-		
Pembroke ...	30.26	33	NE	2	b	30.27	+0.06	38	35	+7	NE	1	og	0	39	31	-		
Seilly ...	30.16	40	ESE	5	c	30.24	+0.13	40	38	0	E	2	bc	2	42	35	-		
Prawle Point ...	30.23	34	NE	3	c	30.24	+0.08	34	32	-2	N	2	o	2	37	26	-		
Jersey ...	30.23	34	E	4	bm	30.21	+0.04	39	37	+7	N	2	ogm	2	39	31	-		
Hurst Castle ...	30.22	27	NE	2	b	30.25	+0.02	34	33	+3	NE	3	ogm	1	34	24	-		
Dungeness ...	30.16	20	WNW	3	bc	30.12	-0.06	33	33	+2	WNW	4	f	3	33	20	-		
London ...	30.21	33	NE	2	bm	30.18	-0.02	35	34	+4	WNW	2	om	*	36	30	-		
Oxford ...	30.21	36	WNW	1	o	30.22	-0.02	34	33	+11	N	2	og	*	36	23	-		
Cambridge ...	30.18	32	N	1	o	30.18	-0.05	33	33	+6	N	1	c	*	37	25	0.02		
Yarmouth ...	30.14	32	WN	2	om	30.11	-0.06	36	35	+3	N	3	c	4	30	30	0.02		
Cuxhaven ...	29.77	30	N	4	o	30.08	-0.04	30	29	+3	N	5	o	*	30	27	-		
Berlin ...	29.94	24	WN	3	o	29.98	+0.05	25	24	+1	WN	3	o	*	28	21	-		
Wiesbaden ...	*	*	*	*	*	30.07	-0.03	16	16	+7	N	1	o	*	25	19	-		
Munich ...	29.92	10	W	2	s	29.95	-0.00	11	11	+4	W	4	s	*	16	7	0.12		
FRANCE & NETHERLANDS.																			
The Helder ...	30.07	35	N	1	bc	30.12	-0.03	30	29	+3	E	1	o	1	?	27	-		
Brussels ...	*	*	*	*	*	30.12	-0.08	20	26	+15	WNW	1	s	*	27	?	0.04		
Cape Gris Nez...	30.14	32	W	4	o	30.16	-0.08	37	37	+18	NNE	5	m	4	?	19	-		
Paris ...	30.16	20	NNE	3	bc	30.13	-0.00	24	24	+7	SW	1	o	*	?	17	-		
Brest ...	30.17	30	E	2	o	30.23	+0.14	33	17	+2	Z	0	o	3	?	28	-		
Lorient ...	30.16	30	ENE	5	b	30.23	+0.13	32	30	+5	NE	3	o	2	34	25	-		
Rochefort ...	30.08	24	ENE	7	m	30.24	+0.24	20	20	-2	ENE	5	b	2	28	19	-		
Belfort ...	29.94	12	NE	1	b	30.02	+0.07	11	11	+1	NE	1	o	*	20	5	-		
Lyons ...	30.01	15	*	7	b	30.05	+0.15	15	14	+2	WNW	7	b	*	17	13	-		
Nice ...	29.51	30	ENE	4	b	29.57	+0.08	28	25	-6	E	1	b	*	?	25	-		
Perpignan ...	29.82	29	WNW	5	b	29.85	+0.06	27	22	-5	WN	5	b	*	34	26	-		
Biarritz ...	30.03	27	E	5	b	30.17	+0.38	19	19	-11	E	1	b	0	34	18	-		
PENINSULA.																			
Corunna ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		
Lisbon ...	29.49	34	WNW	5	o	29.79	+0.64	45	44	-10	NNE	5	r	8	57	45	0.12		

For Explanation of Columns, see p. 4.

WEATHER CHARTS

for 8 a.m. on Friday, 30th December.

1887.

BAROMETER, WIND & SEA.

(Explanation of Map)

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

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

→ = forces above 10; →→ = forces 8 to 10;
→→ = forces 5 to 7; →→ = forces 1 to 4;

○ = dead calm.

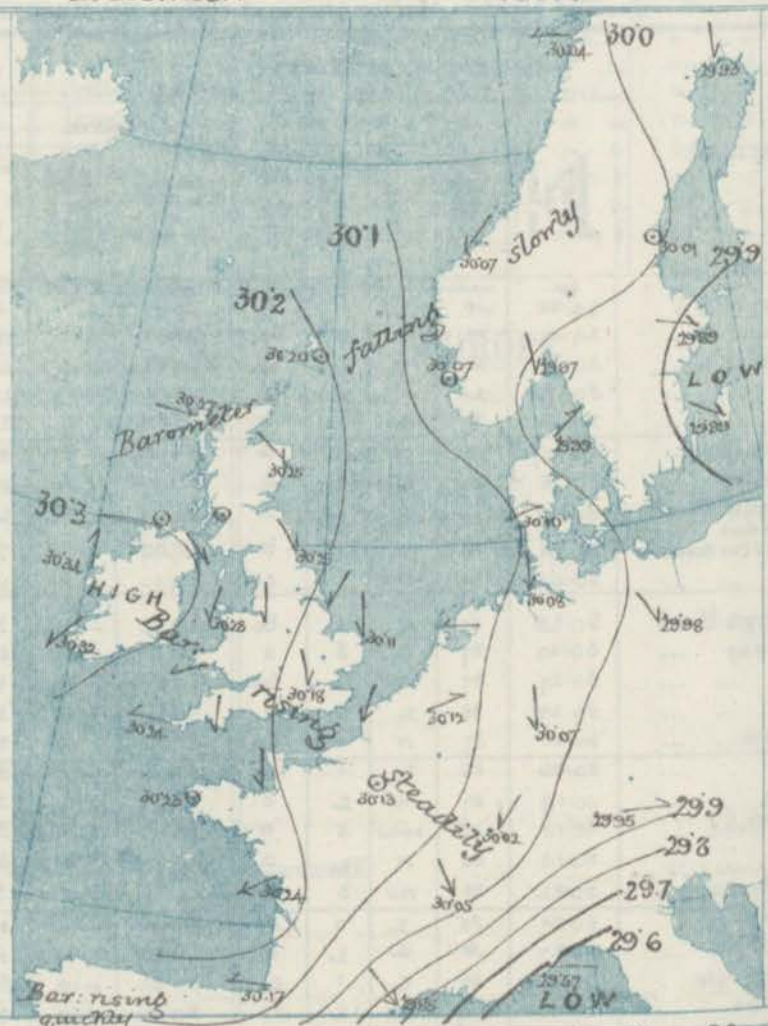
Sea Disturbance — where considerable is shown thus

■ = Rough. ■ = High

MEAN HEIGHT of the BAROMETER

at 8 a.m. for the month of December
During the 10 Years 1871—1880.

STATIONS.	MEAN READINGS.
	in.
Sumburgh Head	29.880
Stornoway	29.701
Wick	29.713
Nairn	29.741
Aberdeen	29.750
Leith	29.800
Shields	29.836
York	29.877
Ardrossan	29.810
Donaghadee	29.832
Holyhead	29.858
Liverpool	29.882
Valencia	29.879
Roche's Point	29.889
Pembroke	29.807
Scilly	29.943
Hurst Castle	29.938
Dover	29.942
LONDON	29.934
Oxford	29.937
Cambridge	29.926
Yarmouth	29.902



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	42.0	34.5	39.0	37.6	4.33
Stornoway	44.8	33.5	38.9	37.8	5.66
Wick	42.0	32.1	37.8	36.4	3.18
Nairn	41.5	32.8	36.9	35.4	2.08
Aberdeen	41.8	32.9	36.9	35.3	3.34
Leith	44.3	33.8	38.4	37.0	2.01
Shields	42.8	34.3	39.2	36.9	2.74
York	42.5	31.9	36.2	35.4	2.35
Ardrossan	47.0	36.1	40.1	38.3	4.04
Donaghadee	46.7	36.1	40.1	39.1	2.84
Holyhead	46.8	39.6	42.9	41.3	3.84
Liverpool	43.6	35.7	39.1	37.4	2.70
Valencia	50.0	40.0	44.7	41.8	5.82
Roche's Point	47.7	39.3	42.9	41.4	4.74
Pembroke	47.1	40.4	43.7	42.6	4.06
Scilly	49.8	43.9	47.2	45.3	1.10
Hurst Castle	45.5	36.5	40.6	39.9	2.84
Dover	44.2	36.5	40.0	38.8	3.20
LONDON	44.5	33.9	38.1	37.1	2.14
Oxford	43.3	33.6	37.3	36.6	2.13
Cambridge	43.3	31.8	36.3	35.6	1.99
Yarmouth	42.2	33.8	37.9	37.2	2.95

Note — The Temperature means are for the 10 years 1871—80, the Rainfall means are mainly those for the 10 years 1866—85



GENERAL SITUATION AT 8 A.M.

PRESSURE	<p>Highest 30.8 in. and upwards over Ireland.</p> <p>Lowest 29.6 in. and less in a depression lying off the Gulf of Genoa; 29.8 in. and less over Portugal, 29.9 in. and less over the Baltic.</p> <p>Gradients steep over the S. of France but slight elsewhere. Barometer rising at all but the Scandinavian and Arctic stations.</p>
TEMPERATURE	<p>Highest 45° at Lisbon, 41° at Holyhead, 40° at Bally, 39° at Malin Head and Jersey and 38° at Belmullet, Donaghadee & Ballyvaughan.</p> <p>Lowest 3° at Kapetanda, 10° at Stockholm, 11° at Munich and Belfast, 14° at Stockholm and 15° at Lyons.</p> <p>The thermometer has risen a few degrees over England, Germany and the north and east of France.</p>
WIND	<p>Calm or light from the Northward in Scotland and the S. of Scandinavia.</p> <p>Moderate from NW over the Baltic and Germany, light from the Northward over England and the S. of Ireland.</p> <p>NE or E over the Bay of Biscay and also at Lisbon.</p>
WEATHER	<p>Fine in Scandinavia, the S. of our Islands and the S. of France.</p> <p>Cloudy or overcast elsewhere with fog or mist in the S.E. of England, snow at Brussels and Munich and rain at Lisbon.</p> <p>Slight rain fell yesterday at many of our northern stations and a little snow was experienced over eastern and central England during the night.</p>
SEA	<p>Moderate off the southcoast of England but slight or smooth elsewhere.</p>

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The anticyclone over our western coasts will probably continue to move away in a southwesterly direction and the W. winds over our northern coasts are likely to become somewhat more decided with a further increase of temperature in many places.

The low pressure system over the Iberian Peninsula is becoming much less deep but a depression of some size and intensity is still lying over the western part of the Mediterranean so that unsettled weather is likely to continue over Southern Europe.

FORECASTS

For the 24 hours ending at NOON on 31st DECEMBER 1887.

DISTRICTS.	FORECASTS.	DISTRICTS.	FORECASTS.
0 SCOTLAND NORTH	W ^{ly} winds, light or moderate; fair to dull and some rain.	6 SCOTLAND WEST	Light variable airs; dull, some mist or fog.
1 SCOTLAND EAST	NW ^{ly} winds, light; fair generally.	7 ENGLAND N. W.	N ^{ly} to NW ^{ly} winds, light; fair generally but cloudy.
2 ENGLAND N. E.	----- D ^o ----- D ^o ----- D ^o -----	8 ENGLAND S. W.	Same as N ^o 5
3 ENGLAND EAST	Same as N ^o 5	9 IRELAND NORTH	W ^{ly} and SW ^{ly} winds, light or moderate; cloudy, local showers.
4 MIDLAND COUNTIES	Same as N ^o 5.	10 IRELAND SOUTH	Same as N ^o 7
5 ENGLAND SOUTH	N ^{ly} 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.	Therm.	W. S.	Wind.	W. S.	Sea.		Bar.	Therm.	W. S.	Wind.	W. S.	Sea.
Skudesnæs ...	30.13	19	28	SE 2	0	2	Holyhead ...	30.26	36	35	SE 0	0 m	0
Sumburgh Head ...	30.24	37	86	N 2	0	2	Valencia ...	30.24	41	39	SE 1	0 m	1
Stormway ...	30.30	40	40	NE 3	0	3	Scilly ...	30.16	41	40	E 4	0	5
Aberdeen ...	30.23	38	37	NW 3	0	2	Dungeness ...	30.19	30	30	NE 2	0	2
Shields ...	30.19	36	37	NW 2	0	2	London ...	30.22	36	34	NE 2	0	2
Ardrossan ...	30.26	39	37	SE 0	0	0	Yarmouth ...	30.16	34	32	NW 2	0 m	3
Malin Head ...	30.25	32	31	SE 1	0	1	Jersey ...	30.21	35	32	E 4	0	3
Mullaghmore ...	30.25	40	39	E 4	0	2	Rochefort ...	30.08	27	26	E 4	0	3
Belmullet ...	30.27	42	41	E 4	0	2							

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

The reports for yesterday showed that pressure varied from between 30.1 ins. and 30.25 ins. over the British Islands, and from about 30.1 ins. in the neighbourhood of Stockholm to about 29.1 ins. in a depression lying near Odessa, to 29.5 ins. over the Gulf of Genoa and to about 29.1 ins. off the west of Portugal. N² and NE² winds consequently prevailed over nearly the whole of Europe, and blew strongly at most of the stations in the south of France though they were light or moderate elsewhere. The weather was cold, and except over Northern Europe chances of snow or sleet were prevalent from time to time separated in many cases by intervals of bright weather. Temperature remained very low generally, but was scarcely so low over Ireland as it had been on the previous day or two. Frost prevailed at almost all the inland stations. The lowest individual values reported were ^{-24° F at Haparanda} -18° F at Archangel, -11° at Kuopio, -8° at Uleaborg, +3° at Carlsrue, 5° at Hango, 7° at St. Petersburg, 7° at Munich, and Helsingfors, 9° at Wiesbaden, 10° at Utrecht, 11° at Moscow and Renssela, 13° at Lyons, 14° at Vienna and Cracow, 17° at Paris, 23° at Oxford, 24° at Berlin, 26° at York, 27° at Cambridge and Copenhagen and 31° in London. The highest were 61° at Oran and Nemours (Algiers), 58° at Algiers, 55° at Lisbon, 51° at Rhindia (the Malta report is not to hand) 47° at Palermo, 43° at Cagliari, 42° at Rome and Rockhampton, 41° at Donnybrook and 40° at Ballyquid and Valencia.

Later on the high pressure area in the extreme northwest showed signs of giving way, and the front yielded over England, and showed signs of breaking at several of the Continental stations. In the southwest of France, however, the thermometer fell.

General Remarks on the Weather for the 24 hours ended at 8 a.m. on Dec^r 29th 1887.

The reports for Wednesday morning showed that pressure then varied from 30.2 ins. and more off the west of Ireland and from 30.0 ins. and more over Scandinavia, the northern and western parts of Great Britain and France as well as the Bay of Biscay to less than 29.7 ins. over Southern and Central Europe and to 29.6 ins. over the Gulf of Genoa. Local disturbances were found over North Germany, and in Portugal, also, pressure was giving way. E² to N² winds prevailed on the coast of all the northern and western countries, variable breezes over Central Europe and W² gales in Italy. The weather was unsettled with snow in places, mist over Central Europe. Thunderstorms occurred at Rome. Temperature was low (but less ^{low} over the British Isles than of late) and over Northern Europe the frosts were very severe. The lowest individual values were -15° F at Kuopio, -11° at Archangel, -4° at Uleaborg and Haparanda, 0° (zero) at Moscow, +2° at Helsingfors, 7° at Munich, 9° at Clermont, 11° at Renssela, Munich and Rome, 14° at Christiania Fjord, 17° at Lyons, 20° at Paris, 21° at Wiesbaden, 27° at Donnybrook and Renssela and 30° at Paris. Over England the readings were nearly all above 32°. The highest values were 54° at Algiers, 47° at Lisbon, 44° at Donnybrook, 42° at Holyhead and Mullaghmore and 41° at Malin H² and Scilly. (The station temperatures appear doubtful).

Later in the day the frost was renewed over the British Islands but was not severe. On the Continent the cold was very sharp and general except at the more western of the coast stations and over the southern parts of the Mediterranean.

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 31st December 1887.

Issued by the Meteorological Office, 116, Victoria Street, London, R. H. SCOTT, Secretary.

STATIONS.	† YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
	Barometer at 3 p.m. and Sea Level.	Temp. in Shade.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Weather.	Sea (0 to 5.)	SHADE TEMP.		Amount of Rainfall.	
			Dir.	Force. (0 to 12.)		Reading at 8 a.m. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Dir.	Force. (0 to 12.)			Max.	Min.		
SCANDINAVIA.																		
Haparanda ..	29.93	-11	Z	0	b	29.57	-36	0	0	-8	SW	2	0	*	-4	-22	-	
Hernösand ...	30.14	-4	Z	0	b	29.99	-02	-10	-10	-20	Z	0	0	*	16	?	-	
Stockholm ...	30.10	14	N	2	c	30.14	+25	2	1	-12	WNW	2	0	*	21	-9	-	
Wishy ...	29.99	24	E	4	c	30.05	+16	17	16	-8	SSE	4	6c	*	28	?	0.08	
Bodö ...	30.01	16	ESE	2	b	29.55	-49	30	29	+10	W	6	5	3	?	14	-	
Christiansund...	30.08	30	ESE	1	bv	29.86	-21	32	29	0	SW	3	0	3	32	27	-	
Skudesnaes ...	30.11	28	Z	0	b	30.02	-05	34	32	+10	SSE	8	0	5	?	23	-	
Christiania Fjord (Færdar)	30.12	26	NNE	2	b	30.10	+13	27	25	-1	SW	2	0	1	32	19	-	
Skagen (The Sound)	30.11	25	E	1	b	30.14	+15	23	22	-4	Z	0	0	1	32	21	-	
Fanö ...	30.06	20	NE	2	c	30.12	+02	19	19	+2	ESE	1	0	*	34	16	-	
BRITISH ISLANDS.																		
Sumburgh Head	30.15	33	Z	0	b	29.92	-28	34	34	+1	Z	0	0	0	36	30	0.03	
Stornoway ...	30.21	35	Z	0	T	29.96	-31	35	35	0	W	3	0	3	37	31	0.02	
Wick ...	30.18	34	NW	1	0	29.96	-29	32	32	-1	NW	1	0	1	35	29	0.06	
Nairn ...	30.21	35	Z	0	c	30.01	-25	35	34	+1	SW	1	0	1	36	31	0.02	
Aberdeen...	30.21	35	NW	3	0	30.04	-21	29	28	-6	W	2	0	1	36	26	-	
Leith ...	30.24	36	W	1	c	30.06	-21	32	32	+5	Z	0	0	*	38	28	0.02	
Shields ...	30.25	36	NW	1	0	30.11	-14	35	33	-1	SW	2	0	2	38	33	0.02	
Spurn Head ...	30.21	36	N	4	c	30.16	-01	35	34	-2	WSW	3	0	3	37	34	0.01	
York ...	30.25	37	N	1	0	30.15	-07	34	32	-1	W	1	0	*	37	32	-	
Loughborough	30.26	36	NW	1	T	30.22	00	35	32	0	WSW	1	0	*	38	32	0.02	
GERMANY.																		
Ardrossan ...	30.25	37	Z	0	0	30.05	-23	40	39	+5	SW	4	0	3	41	34	0.01	
Malin Head ...	30.25	38	SSW	2	0p	30.05	-24	37	35	-2	SW	3	0	2	41	37	0.06	
Mullaghmore ...	30.29	38	SW	3	0m	30.10	-22	37	34	0	SW	2	0	2	40	36	-	
Belmullet ...	30.30	40	SSE	2	0	30.08	-26	40	37	+2	SSW	1	0	*	40	37	-	
Donaghadee ...	30.24	37	WNW	1	0	30.10	-20	35	34	-3	W	3	0	1	39	35	-	
Barrow-in-Furness	30.26	37	NNE	2	0	30.13	-12	35	34	-2	NE	1	0	*	39	35	-	
Liverpool (Bidston)	30.29	39	WNW	1	0	30.15	-11	36	33	0	SW	2	0	2	38	35	-	
Holyhead ...	30.28	40	Z	0	0m	30.15	-13	39	37	-2	WSW	1	0	1	42	38	0.01	
Parsonstown ...	30.33	33	Z	0	0	30.15	-19	32	31	0	Z	0	0	*	34	31	-	
Valencia ...	30.29	40	E	3	0m	30.09	-23	40	38	+10	SE	2	0	2	41	29	-	
Roche's Point...	30.29	38	N	3	0	30.10	-20	40	38	+3	ESE	2	0	3	40	35	-	
Pembroke ...	30.28	39	ESE	2	c	30.15	-12	38	36	0	E	3	0	2	40	38	-	
Scilly ...	30.24	42	E	1	0	30.06	-18	43	42	+3	E	5	0	3	45	38	-	
Prawle Point ...	30.28	35	N	2	0	30.13	-11	38	35	+4	ESE	4	0	4	40	35	-	
Jersey ...	30.25	40	N	2	0g	30.15	-06	40	38	+1	ESE	3	0	3	40	37	-	
Hurst Castle ...	30.24	34	N	2	m	30.20	00	36	34	+2	NE	2	0	1	39	33	-	
Dungeness ...	30.16	35	N	3	b	30.19	+07	34	33	+1	NW	1	0	1	36	33	-	
London ...	30.24	37	N	2	6c	30.22	+04	38	33	-2	SW	1	0	*	39	33	-	
Oxford ...	30.25	35	N	1	0	30.22	00	34	33	0	N	1	0	*	37	33	-	
Cambridge ...	30.26	34	N	1	0	30.21	+03	33	33	0	N	1	0	*	39	32	0.01	
Yarmouth ...	30.20	34	SE	2	c	30.17	+06	34	33	-2	WNW	2	0	4	37	31	0.02	
Cuxhaven ...	30.16	30	NW	1	f	30.08	00	31	31	+1	NW	1	0	*	?	28	-	
Berlin ...	?	26	NW	3	0	30.13	+15	21	21	-4	NW	4	0	*	25	19	0.04	
Wiesbaden ...	*	*	*	*	*	30.28	+21	10	10	-6	N	1	0	*	21	10	-	
Munich ...	20.10	13	W	4	S	?	?	8	8	-3	WNW	1	0	*	18	8	0.04	
FRANCE & NETHERLANDS.																		
The Helder ...	30.17	33	WSW	1	c	30.13	+01	36	35	+6	W	1	0	1	36	28	-	
Brussels ...	*	*	*	*	*	30.26	+14	22	21	+4	SW	1	0	*	28	15	0.04	
Cape Gris Nez...	30.18	35	ESE	4	T	30.20	+10	30	30	-7	S	4	0	2	39	28	-	
Paris ...	30.15	32	NW	1	6c	30.24	+11	22	21	-2	NE	1	0	*	?	20	-	
Brest ...	30.26	36	NE	3	0	30.14	-09	35	34	+4	ESE	3	0	3	?	32	-	
Lorient ...	30.25	37	N	1	0	30.11	-12	36	33	+4	E	4	0	2	37	32	-	
Rochefort ...	30.23	34	NNE	4	b	30.10	-14	28	27	+3	ESE	5	0	2	36	?	-	
Belfort ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	-
Lyons ...	30.17	21	NW	4	6c	30.25	+20	15	14	0	ESE	1	0	*	24	14	-	
Nice ...	29.73	38	E	1	b	29.93	+86	38	33	+5	ESE	3	0	2	45	28	-	
Perpignan ...	30.24	33	NW	3	b	30.05	+20	25	22	-2	Z	0	0	*	39	23	-	
Biarritz ...	30.20	25	E	3	b	29.99	+18	20	17	+1	E	7	0	2	34	16	-	
PORTUGAL.																		
Corunna ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	-
Lisbon ...	29.76	53	ESE	5	T	29.51	-28	59	58	+14	SE	7	0	1	59	?	1.85	

For Explanation of Columns, see p. 4.

† Received too late for insertion in Charts.

WEATHER CHARTS

for 8 a.m. on Saturday, 31st December.

1887.

BAROMETER, WIND & SEA.

(Explanation of Map)

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

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

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

Sea Disturbance — where considerable is shown thus

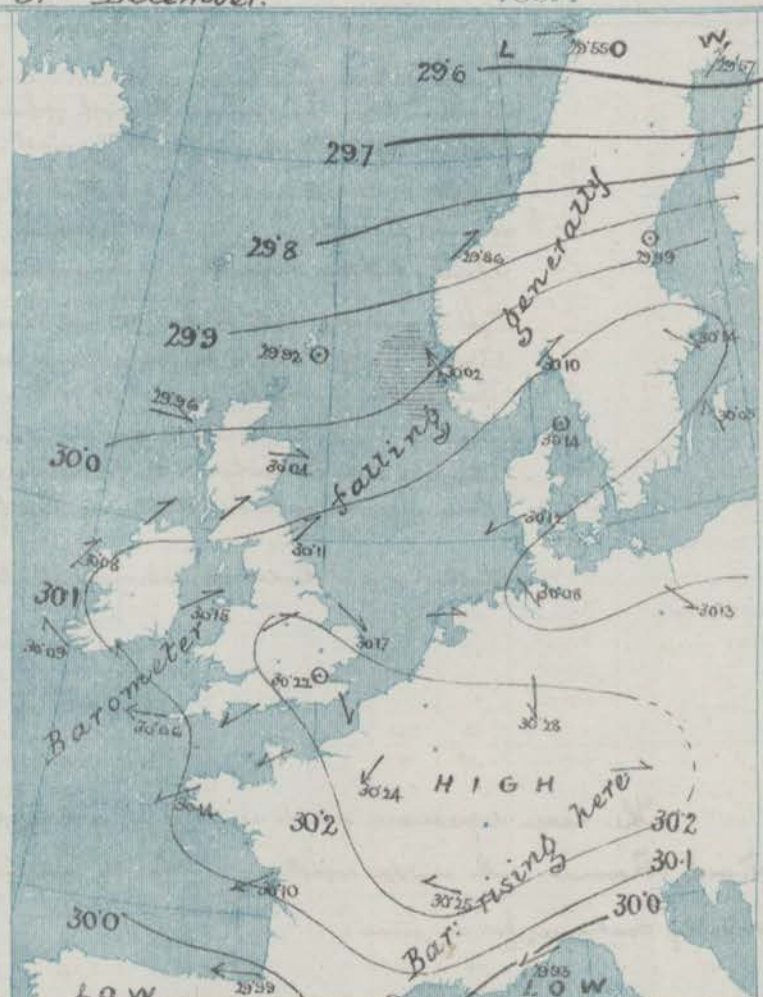
— Rough. — High.

MEAN HEIGHT of the BAROMETER

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

During the 10 Years 1871—1880.

STATIONS.	MEAN READINGS.
Sumburgh Head	29.680
Stornoway	29.701
Wick	29.713
Nairn	29.741
Aberdeen	29.750
Leith	29.800
Shields	29.836
York	29.877
Ardrossan	29.810
Donaghadee	29.832
Holyhead	29.858
Liverpool	29.882
Valencia	29.879
Roche's Point	29.889
Pembroke	29.897
Scilly	29.948
Hurst Castle	29.938
Dover	29.942
LONDON	29.984
Oxford	29.987
Cambridge	29.996
Yarmouth	29.902



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30.2 ins: and upwards, in an extensive zone lying over Belgium, the southeast of England, the west of France, and south of Germany.
Lowest, 29.6 ins: and less, over the north of Scandinavia and also in Portugal.
Gradients slight, but increasing in the far north. Barometer rising in Denmark, Germany and the west of France, but falling elsewhere.

TEMPERATURE

Highest, 59° at Dublin, 43° at Scilly, and 40° at Ardrossan, Belmullet, Valentia, Rochistown and Jersey.
Lowest, -10° at Haparanda, 0° at Haparanda, 2° at Stockholm, 8° at Munich, 10° at Wiesbaden, and 15° at Lyons.
A further fall has taken place in Sweden and Germany, but elsewhere the changes are somewhat irregular.

WIND

Light or moderate from between SW. and W. over the northern part of our Islands and Scandinavia.
E. or NE. over the Channel and Bay of Biscay, strong in force at Biarritz.
Variable over Central England, light NW. or W. in Germany.

WEATHER

Fine at many of the Scotch stations, as well as in Sweden and the west and south of France.
Cloudy or overcast elsewhere, with fog in the southeast of England, and rain at some of our northwestern stations.
Since yesterday morning slight rain has fallen in the north and northwest of our Islands generally.

SEA

Rather rough at Skuasness, and moderate at Howlet and Yarmouth, but slight or smooth elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The large depressions which are beginning to appear in the far north are likely to occasion a gradual extension of SW. and W. winds with milder weather. In the southeast of England, however, light variable airs and local fogs will probably continue for a time.

FORECASTS

for the 24 hours ending at NOON on 1st January

1887.

DISTRICTS.

FORECASTS.

0	SCOTLAND NORTH	W. and SW. winds, moderate; fair to dull and some rain.
1	SCOTLAND EAST	-----D°-----D°-----D°-----
2	ENGLAND N.E.	W. winds, light; fair generally, but some fog or mist.
3	ENGLAND EAST	-----D°-----D°-----D°-----
4	MIDLAND COUNTIES	Same as N°5
5	ENGLAND SOUTH	Light variable airs; cloudy, local fogs.

DISTRICTS.

FORECASTS.

6	SCOTLAND WEST	SW. and W. winds, moderate or fresh; dull, some rain.
7	ENGLAND N.W.	Variable breezes, finally SW.; cloudy, local showers.
8	ENGLAND S.W.	E. to variable breezes; cloudy generally.
9	IRELAND NORTH	Same as N°6.
10	IRELAND SOUTH	Same as N°8.
WARNINGS		NONE ISSUED.

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

YESTERDAY'S 2 P.M. REPORTS.

	Bar.	Dry.	Wet.	Wind.	Wca.	Sea.		Bar.	Dry.	Wet.	Wind.	Wca.	Sea.
Skudesnaes ...	30.09	28	27	NW 1	b	3	Holyhead ...	30.28	41	38	Z 0	0	0
Gumburgh Head ...	30.17	31	33	Z 0	bc	1	Valencia ...	30.31	39	36	Z 0	om	1
Stornoway ...	30.25	37	36	Z 0	c	2	Scilly ...	30.25	42	39	E 2	0	2
Aberdeen ...	30.23	36	34	NW 3	c	1	Dungeness ...	30.44	35	35	NW 3	m	2
Shields ...	30.23	38	37	NW 3	c	3	London ...	30.20	39	37	N 2	b	*
Ardrossan ...	30.26	38	36	Z 0	b	0	Yarmouth ...	30.15	37	36	SE 3	c	4
Malin Head ...	30.28	40	40	W 1	0	1	Jersey ...	30.22	40	38	NW 2	0	2
Mullaghmore ...	30.31	40	37	NW 2	0	2	Rochefort ...	30.21	32	31	ENE 3	bc	2
Belmullet ...	30.32	40	38	S 1	0	*							

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

The reports for yesterday (Friday) morning showed that the distribution of pressure over Europe was of a more simple type than had prevailed for some time past. Over Northern Europe the barometer had fallen, while in the south of Russia it had risen, and readings varied from 30.3 in. and more over Ireland and 30.1 in. and more over the whole of the British Isles and the north and west of France to about 29.5 in. and less, over Russia generally as well as in a depression which lay between Sardinia and the Italian coast. Varying N^W and NE^W breezes of little and decreasing strength were consequently prevalent in most regions, but still blew strongly in the south of France, while in Ireland calms prevailed, and in the extreme west and northwest breezes from S. and SW. had appeared. Cold showers had become less prevalent than of late. Temperatures, though still low showed signs of recovering over England, France and Russia, but had fallen again in the extreme north; the frost had spilled over the British Isles, but still held on the Continent, and was severe in the north. The lowest individual readings were -15° F at Uleaborg, -13° at Archangel, -8° at Haparanda and Moscow, -7° at St. Petersburg, -6° at Kirovsk, +4° at Clermont, 5° at Mennel, 6° at Narva, 7° at Riga, 9° at Japs, 10° at Helsingfors and Rostock, 11° at Belfort and Munich, 13° at Karlsruhe, 15° at Lyons, 24° at Paris, 25° at Berlin and 26° at Brussels. The highest reported were 60° at Nemours and Oran (Algiers) 45° at Tanguinville, 41° at Holyhead, 40° at Scilly, and 38° at Belmullet; the reports from the Austrian and Italian stations were not to hand.

Later on the recovery of temperature in our Islands was continued, but over Germany the thermometer fell still lower.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

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

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

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

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

CORRECTIONS AND ADDITIONS TO THE REPORTS FOR DEC. 1887.

1. REPORTS RECEIVED TOO LATE FOR INSERTION DAILY.

DATE.	STATIONS.	+ YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
		Barometer at 32° F. and Sea Level.	Temp. in Shade.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Weather.	Sea. (0 to 9.)	SHADE TEMP.		Amount of Rainfall.	
				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.		
1	Corunna...	*	*	*	*	*	30.46	+ .06	48	46	+ 4	NNE	5	b	?	54	?	-	
3	Corunna...	*	*	*	*	*	30.19	- .27	47	44	- 1	NE	7	b	6	54	37	-	
4	York.....	29.88	49	8	4	b	29.77	- .29	42	40	- 3	NW	1	c	*	51	43	-	
5	Corunna...	*	*	*	*	*	30.17	+ .16	51	49	+ 11	SSE	1	c	4	57	37	-	
6	Corunna...	*	*	*	*	*	30.06	- .11	53	-	+ 2	WSW	7	r	3	57	48	-	
7	Skudesnaes	29.24	42	SSE	9	c	29.13	- .36	42	-	- 3	SSW	4	o	?	45	?	?	
..	Corunna...	*	*	*	*	*	30.30	+ .24	51	48	- 2	WNW	7	r	6	57	45	0.28	
8	Corunna...	*	*	*	*	*	30.29	- .01	49	48	- 2	ESE	3	o	4	55	43	-	
9	Skagen.....	29.47	34	SW	2	b	28.86	- .63	34	34	+ 1	S	8	o	5	37	32	0.20	
-	Faro.....	29.45	37	S	6	o	28.84	- .70	43	43	+ 9	WSW	6	c	*	43	32	0.28	
..	Corunna...	*	*	*	*	*	30.23	- .06	55	53	+ 6	SSE	5	o	4	57	46	-	
10	Corunna...	*	*	*	*	*	30.22	- .01	57	55	+ 2	SSW	5	o	4	61	54	0.04	
12	Corunna...	*	*	*	*	*	30.14	- .10	53	51	- 2	SSW	3	o	4	61	45	?	
14	Belfast....	?	34	WNW	1	b	29.86	- .15	43	-	+ 11	W	1	T	*	46	30	0.16	
-	Corunna...	*	*	*	*	*	29.95	+ .12	48	46	- 7	SSW	4	r	4	59	45	0.91	
15	Corunna...	*	*	*	*	*	30.05	+ .10	57	56	+ 9	SW	7	c	6	57	43	0.55	
17	Corunna...	*	*	*	*	*	30.41	+ .24	50	?	- 5	W	1	o	7	59	48	0.35	
..	Lisbon....	30.89	53	N	1	b	30.45	+ .11	50	50	- 1	Z	o	m	5	57	50	-	
18	Lorient....	30.14	48	W	7	o	30.13	- .03	48	-	0	WNW	7	bc	6	50	43	0.12	
19	Corunna...	*	*	*	*	*	30.30	- .17	55	54	+ 6	WNW	8	t	5	55	45	0.12	
20	Brussels...	*	*	*	*	*	29.52	+ .08	34	33	+ 1	WSW	3	o	*	37	33	0.20	
21	Corunna...	*	*	*	*	*	29.74	- .15	?	41	?	E	3	r	4	52	39	0.35	
22	Sunderland	-	-	-	-	-	29.65	- .10	36	36	+ 4	SW	4	r	3	36	29	0.04	
23	Brussels...	*	*	*	*	*	29.97	+ .09	29	28	0	WSW	3	o	*	31	26	-	
..	Perpignan	29.67	41	WNW	5	o	29.66	.00	35	31	- 1	NW	9	o	*	41	35	0.20	
-	Corunna...	*	*	*	*	*	30.12	+ .27	37	36	0	EHE	3	bc	4	46	32	0.12	
24	Brussels...	-	-	-	-	-	29.69	- .28	37	35	+ 8	WNW	4	o	*	38	?	0.04	
..	Corunna...	*	*	*	*	*	30.21	+ .09	35	33	- 2	EHE	1	b	2	50	32	-	
25	Skudesnaes	29.77	26	Z	0	b	29.82	+ .19	26	-	- 5	HNE	2	c	1	32	-	-	
..	Brussels...	*	*	*	*	*	29.87	+ .18	33	-	- 4	WSW	1	s	*	39	33	0.04	
26	Corunna...	*	*	*	*	*	29.83	- .29	37	37	- 4	E	1	bc	2	52	34	-	
27	Corunna...	*	*	*	*	*	29.64	- .19	48	-	+ 11	NE	5	b	3	52	36	-	
28	Brussels...	*	*	*	*	*	29.81	- .21	27	26	+ 4	NNE	4	c	*	38	?	0.08	
..	Corunna...	*	*	*	*	*	29.60	- .04	41	37	- 7	NE	8	o	5	52	37	-	
29	Corunna...	*	*	*	*	*	29.53	- .07	44	43	+ 3	EHE	3	r	4	45	?	0.24	
30	Corunna...	*	*	*	*	*	29.66	+ .13	46	42	+ 2	E	4	o	3	52	36	-	
31	Belfast....	30.08	16	NE	1	b	30.17	+ .15	10	9	- 1	NE	1	b	*	18	- 2	-	
..	Corunna...	*	*	*	*	*	?	?	39	35	- 7	EHE	1	b	2	48	34	-	

SUMMARY of the METEOROLOGICAL OBSERVATIONS made at TELEGRAPHIC REPORTING
Observations are made at 8 a.m. daily, but the numbers of days of Rain, Snow, Hail,
(The Stations are grouped in Districts, and then arranged in order of

Names of Districts.	Names of Stations.	Mean height of Barometer (at 32° Fahrenheit and Mean Sea Level) from observations made at 8 a.m.	Air Temperature.								Tension of Vapour
			At 8 a.m.	Means of			Absolute Extremes.				
				Minima	Maxima	Min. and Max. combined	Minimum	Date	Maximum	Date	
		ins.	°	°	°	°	°		°		ins.
0. SCOTLAND, N.	{ Sumburgh Head ...	29.525	37.6	33.3	40.9	37.1	27	9 th + 10 th	51	3 rd	0.209
	{ Wick ...	29.595	36.2	30.0	40.7	35.4	21	10 th	54	2 nd + 3 rd	.201
	{ Stornoway ...	29.635	38.1	32.4	42.2	37.3	24	11 th	51	2 nd + 3 rd	.223
1. SCOTLAND, E.	{ Nairn ...	29.618	37.0	32.5	40.9	36.7	23	10 th	55	3 rd	.187
	{ Aberdeen ...	29.640	36.3	31.5	40.9	36.2	22	22 nd + 23 rd	54	1 st + 3 rd	.185
	{ Leith ...	29.685	37.5	30.2	42.5	37.9	27	12 th , 22 nd + 23 rd	53	1 st	.199
2. ENGLAND, N.E.	{ Shields ...	29.720	37.6	32.9	42.0	37.5	25	22 nd + 23 rd	54	2 nd	.199
	{ York ...	29.781	36.1	31.0	41.8	36.4	22	12 th	52	8 th	.187
	{ Spurn Head ...	29.762	37.8	33.8	41.5	37.7	27	12 th + 13 th	50	16 th	.194
3. ENGLAND, E.	{ Yarmouth ...	29.802	36.2	31.6	40.6	36.1	24	12 th + 13 th	50	8 th + 16 th	.191
	{ Cambridge ...	29.845	35.6	30.4	42.4	36.4	20	27 th + 28 th	55	8 th	.190
4. MIDLAND COUNTIES.	{ Loughborough ...	29.825	36.4	31.8	42.9	37.4	19	20 th	53	2 nd + 8 th	.193
	{ Oxford ...	29.871	36.5	32.5	42.2	37.4	22	20 th	53	8 th	.191
5. ENGLAND, S.	{ London ...	29.869	37.3	33.4	43.3	38.4	26	27 th + 28 th	54	8 th	.192
	{ Dungeness ...	29.851	37.8	33.0	42.7	37.9	20	30 th	51	9 th + 16 th	.206
	{ Hurst Castle ...	29.885	40.0	33.9	44.9	39.4	23	28 th	51	9 th + 13 th	.230
5. SCOTLAND, W.	Ardrossan ...	29.713	39.1	34.6	44.2	39.4	23	22 nd	53	13 th	.213
7. ENGLAND, N.W.	{ *Hawes Junction ...	28.504	33.3	28.3	37.4	32.9	17	27 th	46	13 th , 15 th , 16 th	.188
	{ Barrow-in-Furness ...	29.769	39.0	34.9	42.8	38.9	27	23 rd	49	8 th	.209
	{ Liverpool Obs ^y (Bidston)	29.794	38.5	34.8	43.3	39.1	27	12 th	54	3 rd	.196
	{ Holyhead ...	29.796	41.9	38.1	45.3	41.7	29	30 th	52	8 th	.238
8. ENGLAND, S.W.	{ Pembroke ...	29.849	42.9	39.5	45.9	42.7	29	27 th	52	8 th	.256
	{ Prawle Point ...	29.904	41.2	35.6	46.1	40.9	25	28 th	52	8 th , 10 th , 16 th	.229
9. IRELAND, N.	{ Malin Head ...	29.711	40.5	36.9	44.4	40.7	31	17 th	51	3 rd	.228
	{ Donaghadee ...	29.760	39.4	34.6	43.9	39.3	26	12 th + 13 th	51	1 st , 8 th , 12 th	.216
	{ Mullaghmore ...	29.774	41.1	36.7	45.3	41.0	30	28 th	53	12 th	.226
	{ Belmullet ...	29.811	41.6	38.6	45.0	41.8	29	28 th	51	8 th	.229
10. IRELAND, S.	{ Parsonstown ...	29.840	37.4	32.8	42.8	37.8	21	22 nd , 23 rd , 28 th	53	8 th	.200
	{ Valencia ...	29.901	42.8	38.1	47.6	42.9	28	30 th	54	8 th + 12 th	.228
	{ Roche's Point ...	29.872	42.1	37.5	45.9	41.7	30	22 nd , 23 rd , 28 th	53	8 th	.232
CHANNEL ISLANDS.	{ Scilly (St. Mary's) ..	29.895	45.7	41.7	48.1	44.9	33	28 th	53	2 nd + 8 th	.277
	{ Jersey (Noirmont) ...	29.994	43.5	39.6	46.5	43.1	29	28 th	54	8 th + 9 th	.229

* Hawes Junction is 1185 feet above mean Sea Level and the

* Hawes Junction is 1135 feet above mean Sea Level and the

STATIONS in the BRITISH LANDS during the Month of DECEMBER 1887.

Thunderstorms and Gales are counted irrespective of the hours at which they occurred.

Latitude, beginning in each case with the Station lying furthest North.)

Relative Humidity	Amount of Cloud	Rainfall.			Weather							Wind								
		Total Fall in the month	Maximum Fall in one day	Date	No. of Days of							No. of Observation of								
					Rain	Snow	Hail	Thunderstorms	Clear Sky	Overcast	Gales	North	N.E.	East	S.E.	South	S.W.	West	N.W.	Calms
%		ins.	in.																	
93	86	3.97	0.32	8 th	30	10	1	1	1	20	4	8	1	0	2	2	1	4	5	8
94	76	3.81	0.55	8 th	25	5	0	0	1	14	8	5	0	0	0	3	3	3	10	1
97	81	5.16	0.80	13 th	28	9	2	0	2	18	8	7	1	2	0	3	4	8	3	3
85	73	2.00	0.31	18 th	24	6	0	0	5	14	0	2	0	0	0	2	8	7	1	11
86	60	3.20	0.46	8 th	21	5	0	0	8	9	6	4	0	0	0	3	5	10	8	1
89	64	1.00	0.22	3 rd	19	6	0	0	6	10	0	3	0	0	0	3	2	19	3	1
89	80	2.80	0.49	20 th	20	6	2	0	0	12	5	1	3	0	0	4	8	10	5	0
86	58	1.16	0.23	12 th	20	0	0	0	9	9	0	9	1	1	0	6	2	9	2	1
85	49	1.13	0.12	21 st	19	6	0	0	4	4	6	4	2	1	0	4	10	5	4	1
89	59	1.58	0.29	19 th	21	6	0	0	3	7	1	4	2	1	0	2	6	9	7	0
91	64	1.14	0.22	12 th	18	6	0	0	10	17	0	12	0	0	0	5	8	2	4	0
90	77	1.28	0.19	12 th & 18 th	15	8	0	0	3	19	2	2	0	1	0	4	6	9	8	1
89	67	1.46	0.28	12 th	14	7	1	0	10	18	0	4	4	1	0	6	7	5	4	0
87	74	1.64	0.33	14 th	15	4	3	0	8	21	5	3	3	1	1	4	4	9	6	0
91	70	1.84	0.38	8 th	12	4	0	0	3	9	5	6	2	0	2	0	4	7	10	0
94	61	2.10	0.43	12 th	16	2	3	0	6	7	5	5	6	1	0	2	5	8	4	0
89	66	2.73	0.54	8 th	20	3	1	0	8	16	6	3	5	2	0	4	2	4	6	5
100	89	6.44	0.86	15 th	26	15	2	0	3	27	2	3	2	2	2	8	9	3	1	1
88	84	2.73	0.42	15 th	20	2	1	0	0	18	4	4	7	2	5	1	4	4	4	0
84	74	1.95	0.26	6 th & 14 th	20	3	4	0	6	17	5	4	0	1	6	3	5	9	3	0
90	78	3.77	0.95	14 th	23	1	3	1	2	14	6	4	3	0	2	4	7	6	3	2
93	61	3.00	0.42	12 th	21	1	3	0	5	7	6	2	5	4	0	3	4	8	5	0
89	72	2.78	0.55	8 th	15	3	3	0	4	15	5	6	2	3	0	3	5	9	3	0
91	78	3.54	0.44	8 th	27	2	8	0	2	19	3	6	3	0	0	5	7	2	8	0
90	51	2.11	0.28	8 th	21	1	0	0	10	6	4	1	2	1	2	2	7	8	8	0
88	70	4.70	0.53	15 th	25	5	10	1	1	5	9	4	2	3	2	0	8	3	8	1
88	83	6.14	0.73	12 th	27	2	3	1	4	24	8	6	2	2	2	2	3	7	7	0
90	75	2.52	0.41	5 th	17	3	0	0	3	16	0	1	0	0	1	3	4	3	2	17
89	74	5.08	0.84	7 th	23	0	2	0	3	13	6	4	5	0	3	0	4	6	7	2
86	49	3.54	0.80	12 th	15	3	0	0	12	8	7	7	1	2	2	1	1	11	6	0
89	82	3.12	0.50	7 th	24	0	4	0	1	18	7	4	3	4	0	2	5	6	7	0
80	66	3.92	0.50	17 th	20	3	6	1	5	15	10	7	1	4	1	2	5	4	7	0

Barometric Observations at this Station are not corrected for altitude.

2. CORRECTIONS.

DATE.	STATIONS.	† YESTERDAY EVENING.					8 A.M. TO DAY.								PAST 24 HOURS.			
		Barometer at 32° F. and Sea Level.	Temp. in Shade.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Sec. (0 to 9.)	SHADE TEMP.		Amount of Rainfall.	
				Direc.	Force. (0 to 12.)		Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Direc.	Force. (0 to 12.)		Weather.	Max.		Min.
1	Valencia...	-	-	-	-	-	-	-	-	-	-	-	-	-	-	46	-	
4	Belmullet...	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.35	
-	Pembroke...	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.02	
5	York.....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.08	
-	Holghed...	-	-	-	-	-	-	-	-	-	-	-	-	-	49	-	-	
6	Mullaghmore 2pm	-	-	-	-	-	-	-	-	-	-	-	-	7	-	-	-	
7	Ardrrossan	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.30	
-	Ardrrossan 2pm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
9	Brest.....	-	-	W	-	-	-	-	-	-	-	-	-	-	-	-	-	
10	Barrow-in-Fur.	-	-	-	-	-	29.83	-	-	-	-	-	-	-	-	-	-	
-	Valencia...	-	-	-	-	-	29.94	-	-	-	-	-	-	-	-	-	-	
-	Mullaghmore 2pm	-	-	-	-	-	-	-	-	38	-	-	-	-	-	-	-	
12	Cambridge	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.09	
13	York.....	-	-	-	-	-	29.41	-	-	-	-	-	-	-	-	-	-	
14	Christiansund	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	
-	Donaghadee	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.02	
-	Dungeness...	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.12	
15	Haparanda	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11	-	
-	Malin H.A.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.12	
-	Hurst Castle	-	-	-	-	-	-	-	-	-	-	-	-	0	-	-	-	
16	Prawle Pt.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	45	-	
19	Donaghadee	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.22	
-	Prawle Pt.	-	-	-	-	-	-	-	-	-	-	W	-	-	-	-	-	
-	Jersey.....	-	-	-	-	-	-	-	-	38	-	-	-	-	-	-	-	
20	Loughborough	-	-	-	-	-	-	-	-	-	-	-	-	-	-	19	-	
23	Ardrrossan...	29.66	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	
-	Belmullet...	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.13	
-	Hurst Castle	-	-	-	-	-	-	-	-	-	-	-	-	-	36	-	-	
24	Mullaghmore 2pm	30.11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
25	Loughborough	-	-	-	-	-	-	-	32	-	-6	-	-	-	-	-	-	
27	Ardrrossan...	-	-	W	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	Donaghadee	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.02	
-	Hurst Castle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	24	-	
28	Cape Gris Neg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	?	-	
-	Brest.....	-	28	-	-	-	-	-	-	-	-	-	-	-	-	29	-	
30	Brest.....	-	-	-	-	-	-	-	31	2	0	-	-	-	-	-	-	
31	York.....	-	-	-	-	-	-	-	-	-	-	-	-	-	38	-	-	
-	Loughborough	-	-	-	-	-	30.20	-02	-	-	-	-	-	-	-	-	-	
-	Jersey 2pm	-	-	-	-	-	30.09	-	-	-	-	-	-	-	-	-	-	