

DAILY WEATHER REPORT

METEOROLOGICAL OFFICE,
LONDON.

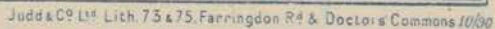
DAILY WEATHER REPORTS.

1ST JANUARY-30TH JUNE,
1890.

Sec. Reg. Lond.

January to June 1890.

January to June 1890.



DAILY WEATHER REPORT.

for WEDNESDAY 1ST JANUARY

1890.

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

STATIONS.	YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
	BAROM. Reading at 32° F. and Sea Level.	TEMP. Dry.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Weather.	Sea. (0 to 2.)	SHADE TEMP.			
			Dirce.	Force. (0 to 12.)		Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Dirce.	Force. (0 to 12.)			Max.	Min.	Amount of Rainfall.	
SCANDINAVIA.	Haparanda ...	30.15	9	2	0	29.87	-0.04	23	23	-3	S	4	0	*	28	9	—	
	Hernösand ...	29.90	10	2	0	29.82	-0.32	33	32	+14	S	4	0	*	29	7	0.04	
	Stockholm ...	30.26	27	SPW	2	30.13	-0.11	35	32	+16	SPW	4	0	*	30	18	—	
	Wisby ...	30.33	30	SPW	2	30.28	+0.02	36	33	+6	W	6	0	*	30	23	—	
	Bodö ...	29.76	25	ENE	4	29.41	-0.62	32	31	+7	ESE	2	0	2	29	19	—	
	Christiansund	29.62	44	SPW	3	29.66	-0.28	42	39	+8	SPW	6	0	4	45	?	0.12	
	Skudesnaes ...	30.00	43	SPW	8	30.06	-0.01	43	42	+1	SPW	4	0	6	43	41	1.06	
	Christiania Fjord (Færder)	30.11	39	SPW	5	30.04	-0.18	40	39	+10	SPW	7	0	4	?	?	?	
	Skagen (The Seaw)	30.23	37	SPW	3	30.17	-0.09	37	37	+4	SPW	3	0	3	37	?	—	
	Fanö ...	30.33	35	SPW	4	30.33	0.00	37	36	0	SPW	4	0	*	37	34	—	
BRITISH ISLANDS.	Sumburgh Head	29.64	45	W	4	29.85	+0.21	45	43	-2	WSPW	4	0	6	48	44	0.35	
	Stornoway ...	29.75	42	W	4	29.93	+0.39	45	44	-4	W	4	0	4	49	40	0.35	
	Wick ...	29.76	43	NW	2	30.10	+0.42	42	40	-6	NW	3	0	2	48	36	0.03	
	Nairn ...	29.82	42	WSPW	2	30.04	+0.33	42	40	-9	SPW	2	0	2	53	38	0.07	
	Aberdeen ...	29.84	47	W	3	30.13	+0.28	39	36	-7	SPW	2	0	3	48	34	—	
	Leith ...	29.83	43	W	1	30.18	+0.25	43	41	-5	WSPW	3	0	*	50	36	0.07	
	Shields ...	30.02	43	SPW	3	30.27	+0.16	38	36	+2	SPW	2	0	2	44	34	0.07	
	Spurn Head ...	30.19	35	SPW	5	30.25	+0.04	38	34	+5	SPW	3	0	3	36	29	—	
	York ...	30.16	34	S	2	30.31	+0.09	38	37	+8	S	1	0	*	38	29	0.04	
	Loughborough	30.24	36	S	3	30.33	+0.04	34	34	+7	SE	1	0	*	36	27	—	
GERMANY & HOLLAND.	Ardrossan ...	29.94	45	W	3	30.19	+0.25	45	43	-2	WSPW	3	0	3	47	43	0.21	
	Malin Head ...	29.95	44	NW	4	30.16	+0.44	42	40	-6	SPW	4	0	3	48	39	0.12	
	Mullaghmore ...	30.03	45	NW	5	30.21	+0.39	42	39	-8	SPW	4	0	3	51	38	0.29	
	Belmullet ...	30.06	44	NW	2	30.21	+0.41	45	43	-4	SPW	1	0	*	49	37	0.17	
	Donaghadee ...	29.95	44	SPW	3	30.25	+0.28	37	37	-10	SPW	2	0	*	48	37	0.10	
	Liverpool (Bidston)	30.13	41	S	3	30.30	+0.10	41	40	+8	SPW	1	0	2	42	33	0.23	
	Holyhead ...	30.08	45	SPW	6	30.27	+0.16	43	42	-3	SPW	1	0	2	47	42	0.25	
	Parsonstown ...	30.08	44	2	0	30.26	+0.29	30	29	-19	2	0	0	50	29	0.06		
	Valencia ...	30.11	47	N	3	30.25	+0.29	36	35	-16	2	0	0	52	33	0.08		
	Roche's Point...	30.09	46	NW	3	30.25	+0.18	47	47	-1	W	3	0	4	49	43	0.45	
FRANCE AND BELGIUM.	Pembroke (St. Ann's Hd.)	30.15	46	S	6	30.33	+0.14	43	42	-3	S	4	0	4	47	43	0.04	
	Scilly ...	30.14	47	S	6	30.29	+0.06	41	40	-4	ESE	4	0	4	49	40	—	
	Prawle Point ...	30.26	42	SE	4	30.34	+0.03	38	36	-4	E	3	0	2	43	36	0.03	
	Jersey (St. Aubin's)	30.3	34	SE	4	30.35	-0.01	34	33	-4	ENE	3	0	3	40	32	—	
	Hurst Castle ...	30.30	40	S	4	30.39	+0.05	36	35	-2	E	2	0	2	43	34	—	
	Dungeness ...	30.31	37	SPW	4	30.35	+0.01	33	32	-7	N	2	0	1	40	32	—	
	London ...	30.33	35	SPW	1	30.39	+0.03	26	24	-2	G	1	0	1	39	26	—	
	Oxford ...	30.30	35	S	3	30.39	+0.05	28	27	-2	SPW	1	0	*	36	26	—	
	Cambridge ...	30.30	32	S	1	30.40	+0.05	22	22	-8	L	0	0	*	35	20	—	
	Yarmouth ...	30.29	35	SPW	2	30.39	+0.05	31	30	-1	SPW	1	0	2	35	28	—	
PENINSULA.	Cuxhaven ...	30.40	33	S	2	30.44	+0.04	36	36	+2	SPW	1	0	*	?	26	—	
	Berlin ...	30.42	22	SE	2	30.42	-0.05	28	27	+5	NW	4	0	*	30	?	—	
	Wiesbaden ...	30.42	22	SE	2	30.36	-0.05	20	20	-1	E	5	0	*	23	19	—	
	Munich ...	30.42	22	SE	2	30.36	-0.05	20	20	-1	E	5	0	*	23	19	—	
	The Helder ...	30.47	31	NW	1	30.47	+0.08	29	28	+2	NW	1	0	*	45	27	—	
	Brussels (9 a.m.)	?	?	NE	1	30.43	+0.01	?	27	?	NE	?	?	*	30	?	—	
	Cape Gris Nez	?	?	NE	1	?	?	?	28	?	E	2	0	2	34	27	—	
	Paris ...	30.39	30	E	1	30.34	-0.07	26	26	-4	NNE	4	0	*	40	25	—	
	Brest ...	?	?	SE	2	?	?	29	28	-10	SE	2	0	3	?	27	0.04	
	Lorient ...	30.28	31	ESE	3	30.28	-0.06	29	28	-6	ENE	3	0	5	37	28	—	
GERMANY & HOLLAND.	Rocheport ...	30.31	31	ESE	3	30.26	-0.10	30	30	+2	NE	5	0	3	34	23	—	
	Belfort ...	30.37	28	N	2	30.22	-0.19	26	?	-2	N	2	0	*	33	26	—	
	Lyons ...	30.18	30	E	4	30.05	-0.19	44	42	+1	ENE	7	0	6	52	43	0.35	
	Nice ...	30.18	30	E	4	30.05	-0.19	44	42	+1	ENE	7	0	6	52	43	0.35	
	Perpignan ...	30.19	29	ESE	4	30.12	-0.16	31	29	+3	ESE	3	0	3	36	27	—	
PENINSULA.	Corunna ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
	Lisbon ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	

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

* at Rotterdam the max. temperature was 41°

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

WEATHER CHARTS

for 8 a.m. on

Wednesday, 1st January

1890.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP.

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

Changes since previous morning are stated in words.

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

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

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

⊙ = dead calm.

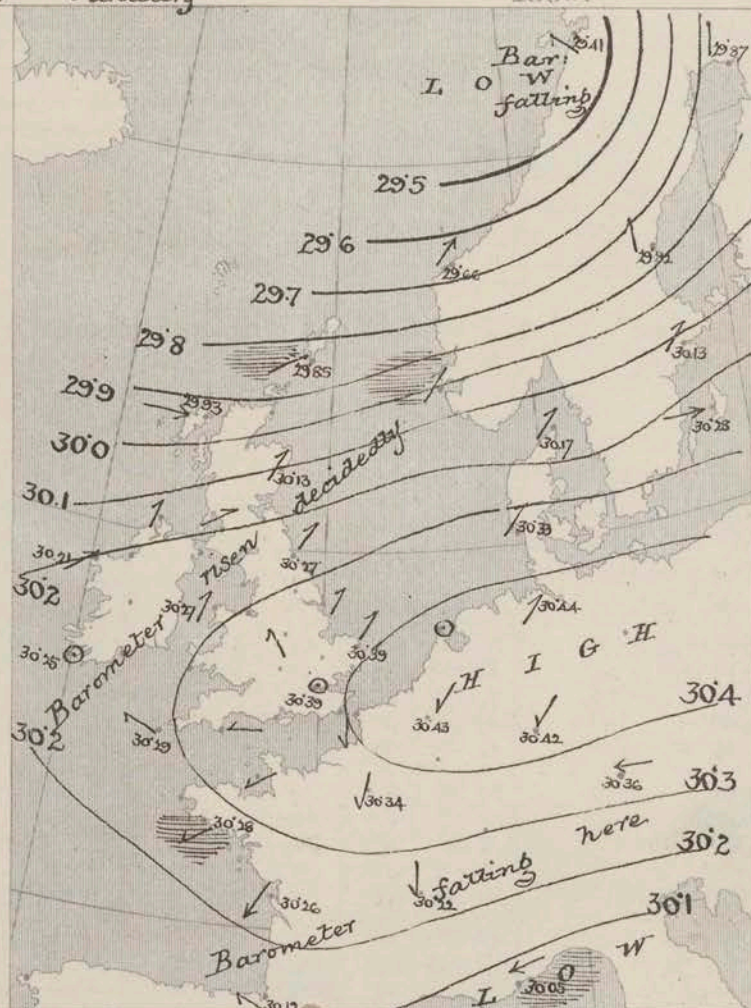
SEA DISTURBANCE—Where considerable, is shown thus:

⊖ = Rough, ⊕ = High.

MEAN HEIGHT OF THE BAROMETER

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

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



TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

TEMPERATURE—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

WEATHER is shown by Letters of the Beaufort Scale.

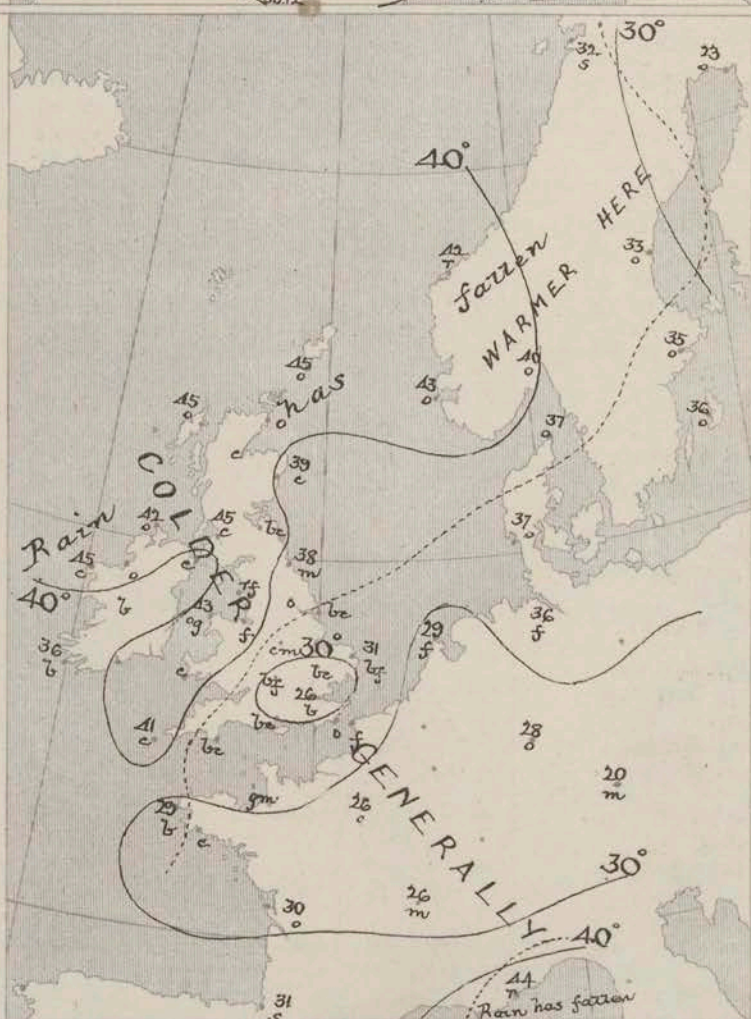
RAINFALL—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of January.)

STATIONS.	TEMPERATURE.				RAINFALL (Inches.)
	Daily Max.	Daily Min.	at 8 a.m.		
			Dry.	Wet.	
Sumburgh Head.....	42.9	35.4	39.4	38.2	3.06
Stornoway.....	43.0	34.2	39.0	37.8	5.17
Wick.....	42.2	33.2	37.9	36.4	1.97
Nairn.....	41.9	32.7	36.6	35.0	2.02
Aberdeen.....	42.4	33.3	37.1	35.4	2.34
Leith.....	44.6	33.7	38.2	36.8	1.98
Shields.....	43.1	34.7	38.0	36.7	1.79
York.....	43.2	33.1	36.8	35.9	1.83
Loughborough.....	43.5	32.9	36.5	35.5	2.08
Ardrossan.....	44.4	36.4	39.8	38.5	4.53
Donaghadee.....	44.4	36.3	39.9	39.1	3.03
Holyhead.....	45.9	39.0	41.7	40.2	3.49
Liverpool.....	43.9	35.6	38.7	37.1	2.23
Parsonstown.....	46.0	34.6	39.0	37.9	3.09
Valencia.....	49.8	40.5	44.3	43.3	6.79
Roche's Point.....	47.9	39.7	43.2	42.0	5.63
Pembroke.....	45.8	39.9	42.8	41.2	3.92
Sailly.....	49.1	43.3	46.5	45.0	3.93
Jersey.....	46.0	38.7	41.7	40.4	3.24
Hurst Castle.....	45.3	37.0	40.4	39.7	3.10
Dover.....	43.7	36.6	39.4	38.2	2.68
LONDON.....	44.8	34.4	37.9	36.8	2.20
Oxford.....	43.8	34.4	37.5	36.5	2.33
Cambridge.....	43.9	32.6	36.5	35.7	1.57
Yarmouth.....	41.9	34.5	37.7	36.9	2.06

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



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30.30 in: to 30.4 in: and more over Germany, the northern half of France, and the southern half of England.
Lowest, 29.5 in: and less, in a depression off the northwest coast of Norway, 30.1 in: and less, over the Gulf of Genoa.
Gradients moderate in the north, slight elsewhere.

Barometer falling in the northern parts of Scandinavia and in the south of France; rising over the United Kingdom, most in the east and north.

TEMPERATURE

Highest, 45° at Sumburgh H^d, Stromsøy, Bismullet and Andness, 43° at Holyhead, 42° at Christiansund, Tarris, Malin H^d and Mullaghmore.
Lowest, 20° at Munich, 22° at Cambridge, 26° at Lyons, Paris and in London, 28° at Newcastle and Oxford.

It has fallen considerably over Ireland and Scotland, risen in Norway, and fallen slightly over France and England since yesterday.

WIND

Moderate W and SW^{ly} at our northern stations, and from SW. in Norway;

Light S^{ly} in the Irish Channel — E^{ly} over the Bay of Biscay;

NE^{ly} in France and Western Germany — Very variable or calm over Central Ireland and the East of England.

Very unsettled in far north, with rain and snow over Norway.

Cloudy over Scotland and Ireland generally, with rain locally at Rockabruit.

Very foggy over England.

Rain fell yesterday on all our western and northern coasts.

WEATHER

SEA

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

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The depression in the north passes off the cold weather will probably become more general and severe over England and the fog more dense.

FORECASTS

For the 24 hours ending at NOON on 2nd JAN^y 1890.

DISTRICTS.

FORECASTS.

DISTRICTS.

FORECASTS

0 SCOTLAND
NORTH

W^{ly} winds, moderate or light; some showers.

1 SCOTLAND
EAST

W^{ly} or SW^{ly} breezes, light; fine generally, cold.

2 ENGLAND
N.E.

3 ENGLAND
EAST

4 MIDLAND
COUNTIES

5 ENGLAND
SOUTH

Varying airs 1 Calms;
cold, foggy.

6 SCOTLAND
WEST

Same as No. 0.

7 ENGLAND
N.W.

SW^{ly} and W^{ly} winds, light; showery to fair.

8 ENGLAND
S.W.

Same as Nos 3 to 5.

9 IRELAND
NORTH

0 IRELAND
SOUTH

Varying breezes; fair but foggy, colder.

WARNINGS

NONE ISSUED.

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

YESTERDAY'S 2 P.M. REPORTS.

	Bar.	Ther.		Wind		Wea.	Sea		Bar.	Ther.		Wind		Wea.	Sea.
		D	W	D	F					D	W	D	F		
Skudesnaes ...	30.40	42	41	SPSE	5	7 f	5		Holyhead ...	30.07	45	44	SPW	6	dgm 5
Sumburgh Head ...	29.58	47	47	SPW	4	0	6		Valencia ...	30.03	48	47	NNW	3	om 3
Stornoway ...	29.66	44	44	W	3	7	4		Scilly ...	30.16	47	44	S	5	c 4
Aberdeen ...	29.80	45	44	SPSE	5	0gg	5		Jersey ...	30.31	38	35	SE	4	c 3
Shields ...	30.03	41	38	SW	3	C	2		Dungeness ...	30.33	40	38	SW	3	bc 3
Ardrossan ...	29.86	47	46	S	4	0	4		London ...	30.32	41	38	SPW	1	bm 4
Malin Head ...	29.84	44	44	NW	4	07	3		Yarmouth ...	30.28	35	34	SW	2	b 3
Mullaghmore ...	29.91	46	45	NNW	5	07	4		Rocheport ...	30.33	33	32	E	4	0 2
Belmullet ...	29.95	48	45	NNW	4	C	*								

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

Continental Information delayed.

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 2ND JANUARY

1890.

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	BAROM.	TEMP.	WIND.		Weather.	BAROMETER.	SHADE TEMP.			WIND.		Weather.	Sea. (0 to 2.)	SHADE TEMP.		Amount of Rainfall.		
	Reading at 32° F. and Sea Level.	Dry.	Dir.	Force. (0 to 12.)			Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.			Dir.	Force. (0 to 12.)		Max.	Min.
SCANDINAVIA.	Haparanda ...	29.57	30	SW	4	b	29.15	-7.2	37	36	+14	SW	2	0	*	?	9	0.32
	Hernösand ...	29.75	34	S	2	b	29.66	-1.6	44	43	+11	S	2	C	*	?	9	—
	Stockholm ...	29.68	37	SW	4	0	30.01	-1.2	38	35	+3	WSW	6	0	*	?	27	—
	Wisby ...	30.27	36	SW	6	0	30.24	-0.4	36	35	0	SW	6	0	*	?	27	—
	Bodö ...	29.12	41	WSW	8	7	29.13	-2.8	39	37	+7	WSW	8	7	6	41	?	0.35
	Christiansund	29.62	44	SW	9	7	29.60	-0.6	47	43	+5	WSW	9	C	6	?	41	0.12
	Skudesnaes ...	30.12	43	SW	6	0	30.04	-0.2	44	42	+1	S	8	0	6	?	43	—
	Christiania Fjord (Færdar)	30.11	40	WSW	5	C	30.04	0.0	40	39	0	SW	5	C	4	41	39	—
	Skagen (The Seaw)	30.19	38	SW	3	m	30.15	-0.2	37	37	0	SW	3	b	3	39	36	—
	Fanö ...	30.35	36	SW	4	0	30.28	-0.5	33	32	-4	SW	4	f	*	37	32	—
BRITISH ISLANDS.	Sumburgh Head	29.86	46	WSW	5	0	29.73	-1.2	45	43	0	WSW	4	0	6	47	44	0.01
	Stornoway ...	29.92	48	SW	6	7	29.67	-2.6	47	46	+2	W	6	7	6	48	44	0.02
	Wick ...	29.96	46	SW	2	bc	29.77	-2.3	45	43	+3	W	3	bc	1	48	38	—
	Nairn ...	29.95	47	SW	4	bc	29.81	-2.3	47	45	+5	SW	5	C	4	47	40	—
	Aberdeen ...	30.12	42	S	2	c	29.92	-2.1	42	40	+3	SW	5	C	3	44	38	—
	Leith ...	30.18	45	WSW	1	C	30.01	-1.7	43	40	0	WSW	3	b	*	47	42	—
	Shields ...	30.27	40	SW	2	bc	30.11	-1.6	35	34	-3	SW	3	C	2	43	34	0.01
	Spurn Head ...	30.33	38	SW	2	0	30.19	-1.0	30	29	-5	S	3	bc	3	39	29	—
	York ...	30.34	38	S	1	0	30.19	-1.2	29	29	-9	S	1	f	*	40	29	—
	Loughborough	30.37	31	ESE	1	C	30.22	-1.1	22	22	-12	NE	1	f	*	44	22	—
GERMANY & HOLLAND.	Ardrossan ...	30.20	46	SW	3	bc	30.02	-1.7	45	43	0	SW	4	b	3	47	38	—
	Malin Head ...	30.14	39	S	4	bc	29.86	-1.5	40	39	-2	S	6	bc	4	43	38	—
	Mullaghmore ...	30.18	42	SW	5	C	29.91	-1.3	44	41	+2	S	6	bc	4	46	41	—
	Belmullet ...	30.16	46	SW	4	0	29.86	-1.3	44	46	+3	SW	5	0	*	50	44	0.03
	Donaghadee ...	30.24	41	SW	2	bc	30.06	-1.9	37	37	0	SW	2	b	1	46	38	0.01
	Liverpool (Bidston)	30.32	41	SW	1	b	30.15	-1.5	30	29	-11	SE	3	b	3	45	29	—
	Holyhead ...	30.32	45	SW	3	C	30.12	-1.5	39	37	-4	S	1	bc	2	47	39	0.04
	Parsonstown ...	30.24	45	S	0	0	30.04	-2.2	36	35	+6	S	0	b	*	46	29	—
	Valencia ...	30.24	49	ESE	5	C	30.01	-2.4	47	44	+11	SE	6	b	5	49	35	0.01
	Roche's Point...	30.29	46	SW	3	bc	30.07	-1.8	46	44	-1	SW	3	b	4	50	45	0.04
FRANCE AND BELGIUM.	Pembroke (St. Ann's Hd.)	30.34	40	SE	2	b	30.13	-2.0	36	35	-7	E	2	m	2	44	35	0.01
	Scilly ...	30.27	43	ENE	4	b	30.06	-2.3	45	44	+4	ESE	5	bc	5	45	40	—
	Prawle Point ...	30.33	38	ENE	4	b	30.14	-2.0	39	38	+1	ENE	4	omg	3	44	34	—
	Jersey (St. Aubin's)	30.30	38	ENE	3	b	30.18	-2.2	36	35	+2	E	4	om	3	40	33	—
	Hurst Castle ...	30.37	36	SW	2	m	30.18	-2.1	30	30	-6	NE	4	f	1	40	28	—
	Dungeness ...	30.32	38	E	4	0	30.15	-2.0	37	37	+4	ENE	5	0	4	38	32	—
	London ...	30.39	30	E	1	bc	30.20	-1.9	33	32	+7	E	1	0	*	36	26	—
	Oxford ...	30.38	25	NW	1	f	30.23	-1.6	23	23	-5	SE	1	fg	*	39	20	—
	Cambridge ...	30.40	29	S	0	b	30.22	-1.8	31	30	+9	SE	1	0	*	38	18	—
	Yarmouth ...	30.37	33	WSW	1	b	30.23	-1.6	34	33	+3	SE	2	0	*	34	26	—
PENINSULA.	Cuxhaven ...	30.39	30	S	2	f	30.34	-1.0	24	23	-12	SW	1	f	*	30	23	—
	Berlin ...	30.47	27	SE	2	C	30.37	-1.0	20	20	-7	ESE	3	b	*	27	19	—
	Wiesbaden ...	*	*	*	*	*	30.22	-2.0	21	20	-7	S	0	0	*	?	19	—
	Munich ...	*	*	*	*	*	30.16	-2.0	19	19	-1	E	4	m	*	27	19	—
	The Helder ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	—
	Brussels (9 a.m.)	*	*	*	*	*	30.23	-2.0	23	23	?	NNE	2	f	*	29	22	—
	Cape Gris Nez	*	*	*	*	*	?	?	25	25	-5	E	4	f	*	32	25	—
	Paris ...	30.30	28	NNE	3	0	30.15	-1.9	25	25	-1	N	2	0	*	29	25	—
	Brest ...	?	37	SE	4	b	?	?	37	36	+8	E	2	bc	2	32	28	—
	Lorient ...	30.21	38	ENE	4	b	30.05	-2.3	30	29	+1	E	3	0	4	41	28	—
FRANCE AND BELGIUM.	Rocheport ...	30.13	31	ENE	6	C	30.07	-1.9	31	30	+1	ENE	6	0	2	36	25	—
	Belfort ...	30.03	23	S	2	C	30.07	-1.9	23	?	?	S	3	0	*	29	20	—
	Lyons ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	—
	Nice ...	30.08	43	NNE	7	7	29.99	-0.6	45	44	+1	NE	7	7	7	50	43	1.14
	Perpignan ...	29.95	39	W	3	7	29.93	-0.4	48	47	+11	NE	2	7	*	?	?	—
	Biarritz ...	29.95	36	SW	3	S	29.92	-2.0	34	34	+3	ESE	3	7	2	37	?	0.47
PENINSULA.	Corunna ...	*	*	*	*	*	29.92	-1.3	38	37	-1	NE	4	0	7	52	37	—
	Lisbon ...	30.02	47	S	0	0	29.92	-1.3	38	37	-1	NE	4	0	7	52	37	—

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

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

WEATHER CHARTS

for 8 a.m. on

Thursday, 2nd January,

1890.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP

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

Changes since previous morning are stated in words.

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

their barbs and feathers refer to force thus—

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

→ = forces 5 to 7; → = forces 1 to 4.

⊙ = dead calm.

SEA DISTURBANCE—Where considerable, is shown thus:

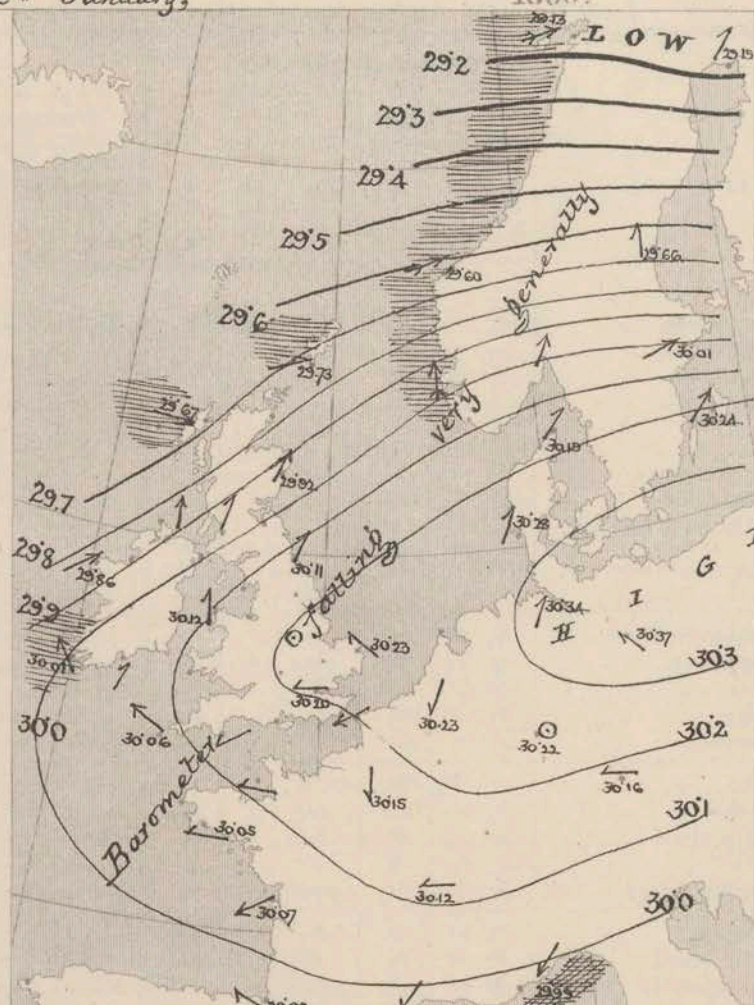
⊖ = Rough. ⊕ = High.

MEAN HEIGHT OF THE BAROMETER

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

During the 15 Years: 1871—1885.

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



TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

TEMPERATURE—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

WEATHER is shown by Letters of the Beaufort Scale.

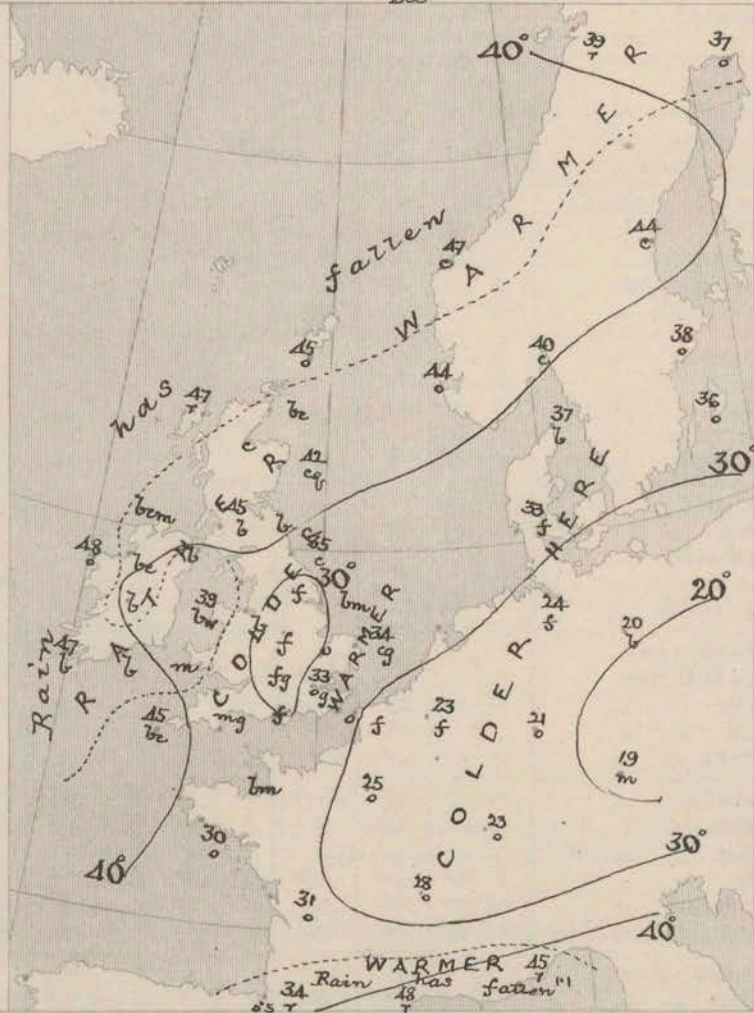
RAINFALL—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of January.)

STATIONS.	TEMPERATURE.				RAINFALL. (Inches.)
	Daily Max.	Daily Min.	at 8 a.m.		
			Dry.	Wet.	
Sumburgh Head.....	42.9	35.4	39.4	38.2	3.66
Stornoway.....	43.0	34.2	39.0	37.8	5.17
Wick.....	42.2	33.2	37.9	36.4	1.97
Nairn.....	41.0	32.7	36.6	35.0	2.02
Aberdeen.....	42.4	33.3	37.1	35.4	2.34
Leith.....	44.0	33.7	38.2	36.8	1.98
Shields.....	43.1	34.7	38.0	36.7	1.79
York.....	43.2	33.1	36.8	35.9	1.83
Loughborough.....	43.5	32.9	36.5	35.5	2.08
Ardrossan.....	44.4	36.4	39.8	38.5	4.53
Donaghadee.....	44.4	36.3	39.9	39.1	3.03
Holyhead.....	45.0	39.0	41.7	40.3	3.49
Liverpool.....	43.9	35.6	38.7	37.1	2.23
Parsonstown.....	46.0	34.0	39.0	37.9	3.09
Valencia.....	49.8	40.5	44.3	43.3	6.79
Roche's Point.....	47.9	39.7	43.2	42.0	5.63
Pembroke.....	45.8	39.9	42.8	41.2	3.92
Scilly.....	49.1	43.3	46.5	45.0	3.93
Jersey.....	46.0	38.7	41.7	40.4	3.24
Hurst Castle.....	45.3	37.0	40.4	39.7	3.10
Dover.....	43.7	36.0	39.4	38.2	2.68
LONDON.....	44.8	34.4	37.9	36.8	2.20
Oxford.....	43.8	34.4	37.5	36.5	2.33
Cambridge.....	43.9	32.6	36.5	35.7	1.57
Yarmouth.....	41.9	34.5	37.7	36.9	2.06

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



GENERAL SITUATION AT 8 A.M.

PRESSURE	Highest, 30.0 in: to nearly 30.4 in: in an anticyclone spreading from Germany across France and England to Ireland. Lowest, 29.2 in: and less, over Lapland, 30.0 in: and less, over the Mediterranean and the Spanish Peninsula. Gradients slight over southern parts of our area, rather steep in the north. Barometer falling generally, most in the northwest and north.
TEMPERATURE	Highest, 48° at Belmullet, 47° at Valencia, Stormoway, and Christiansund, and above 40° at the eastern and northern stations generally. Lowest, 19° to 21° at the German stations, 22° at Loughborough, 23° at Oxford and Brussels, 25° at Paris. In London the maximum temperature for the 24 hours occurred during the night.
WIND	Moderate from the E. over Germany, France, the Channel and south of England — Strong from S. on our most western coasts — from S. and S.W. in Scotland, gale from S.W. in Norway — and strong breezes over the Baltic. Variable air prevails over Central England
WEATHER	Fine and bright in Ireland at present — dull elsewhere — with rain at several northern stations, fog in many parts of England and over the southern parts of the North Sea. Rain has fallen in small quantity in several parts of Ireland and Scotland, and in larger quantity in Norway.
SEA	Rough in the far north and on several parts of our extreme west and southwest coasts, moderate to slight elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

It appears probable that another "V" shaped depression, will shortly reach our western coast and move northeastwards. A temporary break in the front over England is therefore likely, and perhaps some cold showers.

FORECASTS

For the 24 hours ending at NOON on 3rd JAN^y 1890.

DISTRICTS.	FORECASTS.	DISTRICTS.	FORECASTS
0 SCOTLAND NORTH	SW ^y and W ^y winds, strong; squally, showery.	6 SCOTLAND WEST	S ^y and SW ^y breezes, fresh or strong; dull, some rain.
1 SCOTLAND EAST	SW ^y breezes, moderate; fair, becoming milder.	7 ENGLAND N.W.	Same as No 5.
2 ENGLAND N.E.		8 ENGLAND S.W.	
3 ENGLAND EAST	SE ^y airs, dull, foggy, damp, becoming milder.	9 IRELAND NORTH	S ^y winds, strong, showery; perhaps shifting to NW. later, with fall of temperature.
4 MIDLAND COUNTIES		0 IRELAND SOUTH	
5 ENGLAND SOUTH	E ^y winds, moderate; dull, damp, some fog.	WARNINGS	NONE ISSUED.

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

YESTERDAY'S 2 P.M. REPORTS.

THER: WIND								THER: WIND							
BAR:	D.	W.	D.	F.	WEA.	SEA		BAR:	D.	W.	D.	F.	WEA.	SEA	
Skudesnaes ...	30. 13	44	42	SW	6	0	6	Holyhead ...	30. 30	46	46	SW	3	of m g	2
Sumburgh Head	29. 85	46	44	WSW	5	0	6	Valencia ...	30. 26	48	46	SE	2	bc m	3
Stornoway ...	29. 95	48	47	SW	5	0	4	Scilly ...	30. 30	45	42	ESE	4	bc	4
Aberdeen ...								Jersey ...	30. 32	39	37	E	3	bc	3
Shields ...	30. 27	43	40	SW	2	c	2	Dungeness ...	30. 35	37	36	E	3	m	1
Ardrossan ...	30. 21	46	44	SW	3	c	3	London ...	30. 39	36	35	2	0	f	*
Malin Head ...	30. 15	43	41	S	4	bc m	3	Yarmouth ...	30. 37	34	33	SW	1	bc m	2
Mullaghmore	30. 18	45	41	SSW	5	0	3	Rocheport ...	30. 14	34	31	NE	5	bc	2
Belmullet ...	30. 18	48	46	SSW	2	bc	*								

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

Continental Information not received.

General Remarks on the Weather over Europe for 24 hours ending 8am Dec^r. 31st 1889.

Weather in morning unsettled in west and north of our Islands, rain at some Irish and Scotch stations, the west of Norway, and at Rome - snow at Archangel and in the Bay of Biscay. Fine in the north of Norway, at the Swedish and some Spanish stations, dull or cloudy, in most other parts of Europe; dense fogs locally over England, and at Constantinople. Rain during day, in Ireland, Scotland and Norway, but ably clearing in Ireland subsequently. Remaining fair but foggy over England. Temperatures in morning rising considerably over Scotland, Denmark, Central and Southern Russia and at some Mediterranean stations, fallen over England, France, Northern Germany and the north of Russia. Readings over 50° at many of our western and northern stations; frost very prevalent in nearly all parts of Europe. Lowest readings ranging from 16° to 20° over Russia, absolute lowest 0° F. at Hermannstadt. Wind S³ to SW³ in the west and north of the United Kingdom, N³ to NW³ in Finland, W³ over Central Russia, variable over Germany and Austria. NE³ or E³ over France, Spain, the Mediterranean, and Bay of Biscay, SSE³ in Algeria. Strong at Scotch and Irish stations and over Algeria, light or moderate in most other places. Wind veering to NW. on our western coast later and still blowing strongly there. Barometer highest (30.4 ins. to 30.6 ins.) in a long band of high pressure stretching from France across Central Europe to the Black Sea; lowest (29.4 ins. and less) in a depression lying near Archangel, and (29.6 ins. and less) in another disturbance off the Helides. A third system of low readings (30.0 ins. and less) shown over Algeria. Later in the day a V shaped depression had advanced over our southern districts and the continent receded southward.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

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

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

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

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

DAILY WEATHER REPORT.

for FRIDAY 3RD JANUARY

1890.

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

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STATIONS.	YESTERDAY EVENING.						8 A.M. TO DAY.										PAST 24 HOURS.		
	BAROM.	TEMP.	WIND.		Weather.	Barometer.	SHADE TEMP.			WIND.		Weather.	Sea. (0 to 2.)	SHADE TEMP.		Amount of Rainfall.			
	Reading at 32° F. and Sea Level.	Dry.	Dirce.	Force. (0 to 12.)			Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.			Dirce.	Force. (0 to 12.)		Max.	Min.	
SCANDINAVIA.	Haparanda ...	29.24	39	SW	4	bc	29.48	+23	34	33	-3	SW	2	b	39	27	-		
	Hernösand ...	29.67	43	NW	2	bc	29.78	+12	29	28	-15	X	0	b	46	?	-		
	Stockholm ...	29.96	36	SW	4	o	29.97	-0.04	35	34	-3	SW	2	o	41	34	-		
	Wisby ...	30.14	35	WSW	6	o	30.06	-18	32	31	-4	SW	4	o	39	?	-		
	Bodö ...	29.31	41	SW	4	o	29.36	+23	44	43	+5	SW	8	p	?	36	0.79		
	Christiansund	29.63	48	WSW	6	c	29.65	+05	43	40	-4	SE	2	bc	48	43	-		
	Skudesnaes ...	29.96	43	SE	7	o	29.88	-16	41	40	-3	SE	6	o	?	41	-		
	Christiania Fjord (Færder)	29.99	41	SW	7	o	29.91	-13	38	37	-2	SW	6	o	41	37	-		
	Skagen (The Scaw)	30.06	37	SW	3	o	29.94	-21	32	31	-5	SW	2	o	37	32	-		
	Fanö ...	30.12	23	SE	4	f	29.91	-37	27	27	-6	SE	4	m	34	23	-		
BRITISH ISLANDS.	Sumburgh Head	29.65	46	SW	4	c	29.58	-18	44	41	-1	SE	4	c	48	42	-		
	Stornoway ...	29.58	46	SW	7	T	29.41	-26	45	44	-2	S	5	o	47	42	0.10		
	Wick ...	29.66	45	W	4	b	29.50	-27	44	39	-1	SW	3	b	45	39	-		
	Nairn ...	29.76	41	WSW	2	bc	29.51	-30	45	44	-2	WSW	4	c	48	35	-		
	Aberdeen ...	29.84	40	S	5	bc	29.62	-30	41	38	-1	S	2	bc	44	33	-		
	Leith ...	29.88	38	WSW	2	c	29.61	-40	35	34	-8	S	0	bcf	47	31	-		
	Shields ...	29.95	31	SW	2	bc	29.71	-40	24	23	-11	SW	2	bc	40	22	-		
	Spurn Head ...	30.00	29	SE	3	f	29.76	-43	31	30	+1	NNW	1	f	33	26	0.01		
	York ...	30.04	26	S	1	f	29.76	-43	25	25	-4	S	1	f	30	22	-		
	Loughborough	30.04	25	ENE	2	f	29.73	-45	26	26	+4	ENE	1	om	26	21	-		
GERMANY & HOLLAND.	Ardrossan ...	29.86	44	S	0	b	29.59	-45	40	39	-5	ENE	2	of	49	38	-		
	Malin Head ...	29.73	40	SE	5	b	29.43	-43	43	42	+3	S	4	of	43	38	-		
	Mullaghmore ...	29.73	44	S	5	b	29.44	-47	46	43	+2	SE	5	og	46	41	-		
	Belmullet ...	29.59	46	S	6	b	29.35	-51	44	43	-4	SE	4	o	48	42	-		
	Donaghadee ...	29.88	41	S	2	b	29.56	-50	44	44	+7	S	4	c	45	36	-		
	Liverpool (Bidston)	29.95	31	SE	4	b	29.67	-48	27	26	-3	SE	4	o	37	23	-		
	Holyhead ...	29.89	42	S	0	b	29.61	-51	40	39	+1	SE	2	omg	47	37	-		
	Parsonstown ...	29.79	37	S	0	b	29.47	-57	44	43	+8	S	0	o	44	35	0.10		
	Valencia ...	29.75	47	SE	6	cm	29.41	-60	48	47	+1	SE	5	pm	49	44	0.03		
	Roche's Point...	29.80	48	SW	4	c	29.50	-57	48	46	+2	SW	6	o	50	45	-		
FRANCE AND BELGIUM.	Pembroke (St. Ann's Hd.)	29.87	40	SE	4	m	29.59	-54	42	41	+6	SE	6	om	43	35	-		
	Scilly ...	29.83	46	SE	5	c	29.53	-51	48	48	+3	SE	6	om	49	44	0.01		
	Prawle Point ...	29.90	43	E	4	o	29.65	-49	41	40	+2	E	2	omg	44	38	-		
	Jersey (St. Aubin's)	29.94	34	ENE	4	o	29.71	-42	38	37	+2	SE	3	pm	38	33	0.02		
	Hurst Castle ...	29.96	34	ENE	4	m	29.71	-47	38	37	+8	ENE	3	mo	38	29	-		
	Dungeness ...	29.98	39	ENE	4	bc	29.75	-40	34	33	-3	SE	2	m	40	32	-		
	London ...	30.02	34	E	3	o	29.74	-46	32	32	-1	E	1	ofg	35	32	-		
	Oxford ...	29.98	28	ENE	2	f	29.74	-49	30	30	+7	E	1	of	30	23	-		
	Cambridge ...	30.01	30	SE	1	o	29.75	-47	31	30	0	SE	1	o	34	28	-		
	Yarmouth ...	30.05	35	ENE	2	CV	29.78	-45	35	34	+1	SE	4	cg	35	33	-		
PENINSULA.	Cuxhaven ...	?	27	SE	2	f	?	?	27	26	+3	SE	3	f	?	?	-		
	Berlin ...	30.17	29	ENE	4	f	29.97	-40	27	26	+7	SE	3	b	31	19	-		
	Wiesbaden ...	?	?	?	?	?	29.93	-29	30	30	+9	SE	2	o	32	?	-		
	Munich ...	30.00	26	SE	3	m	29.93	-23	24	24	+5	SW	2	bc	28	?	-		
	The Helder ...	30.04	28	ENE	1	b	29.86	-41	27	27	+1	SE	1	f	28	25	-		
	Brussels (9 a.m.)	?	?	?	?	?	29.85	-38	29	29	+6	S	1	o	30	22	-		
	Cape Gris Nez	?	32	ENE	3	f	?	?	27	?	+2	S	2	f	34	23	-		
	Paris ...	29.99	28	SE	2	o	29.82	-33	27	27	+2	E	1	b	?	?	-		
	Brest ...	?	38	S	1	o	?	?	42	41	+5	SE	2	o	54	28	0.04		
	Lorient ...	29.91	34	E	1	o	29.66	-39	36	35	+6	E	3	o	37	28	-		
FRANCE AND BELGIUM.	Rochefort ...	29.97	37	ENE	4	o	29.76	-31	37	37	+6	E	2	o	41	30	-		
	Belfort ...	?	28	E	1	f	29.98	-17	28	28	0	W	1	f	31	26	-		
	Lyons ...	30.02	47	ENG	5	c	30.02	+03	46	45	+1	NE	3	f	52	45	0.63		
	Nice ...	29.84	48	NE	2	p	29.95	+02	43	42	-5	SW	2	b	50	35	2.52		
	Perpignan ...	29.87	40	SE	3	o	29.71	-21	43	43	+9	S	3	o	43	?	0.24		
	Biarritz ...	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	-		
PENINSULA.	Corunna ...	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	-		
	Lisbon ...	29.73	46	ENG	4	o	29.67	-25	43	42	+5	NNE	5	c	48	?	0.16		

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

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Friday, 3rd January.

1890.

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their barbs and feathers refer to force thus—

— forces above 10; — forces 8 to 10;

— forces 5 to 7; — forces 1 to 4.

○ = dead calm.

SEA DISTURBANCE—Where considerable, is shown thus:

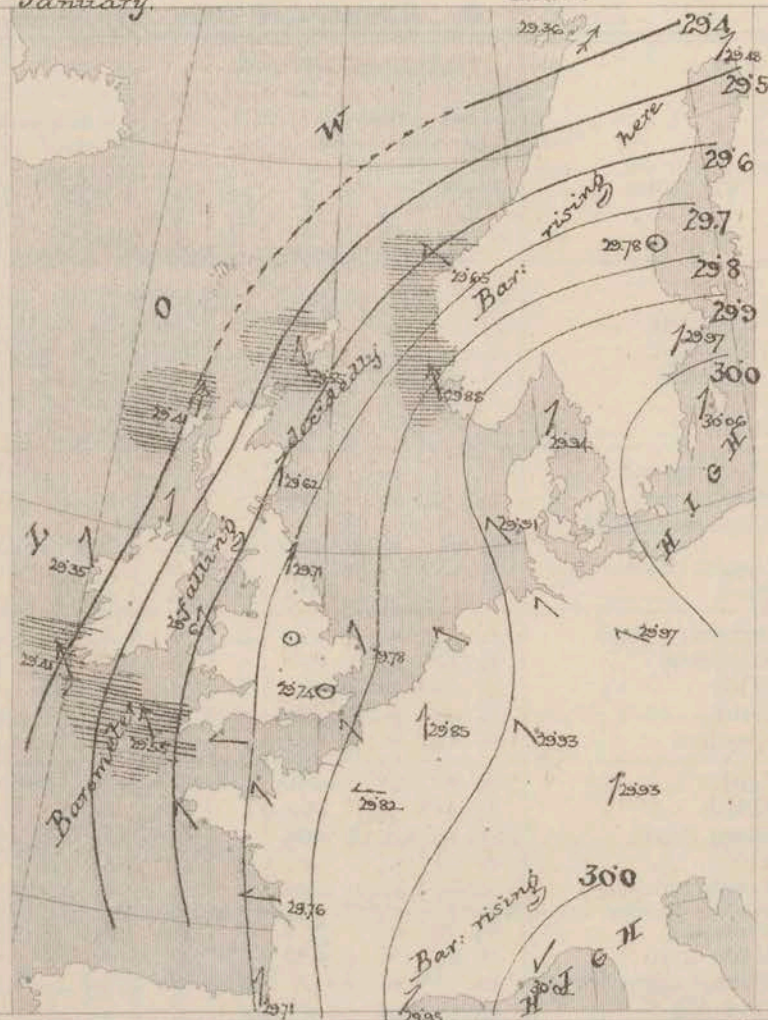
— Rough. — High.

MEAN HEIGHT OF THE BAROMETER

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

During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS.
Sumburgh Head	29.655
Stornoway	29.687
Wick	29.725
Nairn	29.753
Aberdeen	29.790
Leith	29.829
Shields	29.886
York	29.935
Loughborough	29.967
Ardrossan	29.840
Donaghadee	29.851
Holyhead	29.896
Liverpool	29.922
Parsonstown	29.886
Valencia	29.869
Roche's Point	29.894
Pembroke	29.926
Silly	29.960
Jersey	30.010
Hurst Castle	29.997
Dover	30.017
LONDON	30.007
Oxford	29.997
Cambridge	29.992
Yarmouth	29.981



TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

TEMPERATURE—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

WEATHER—is shown by Letters of the Beaufort Scale.

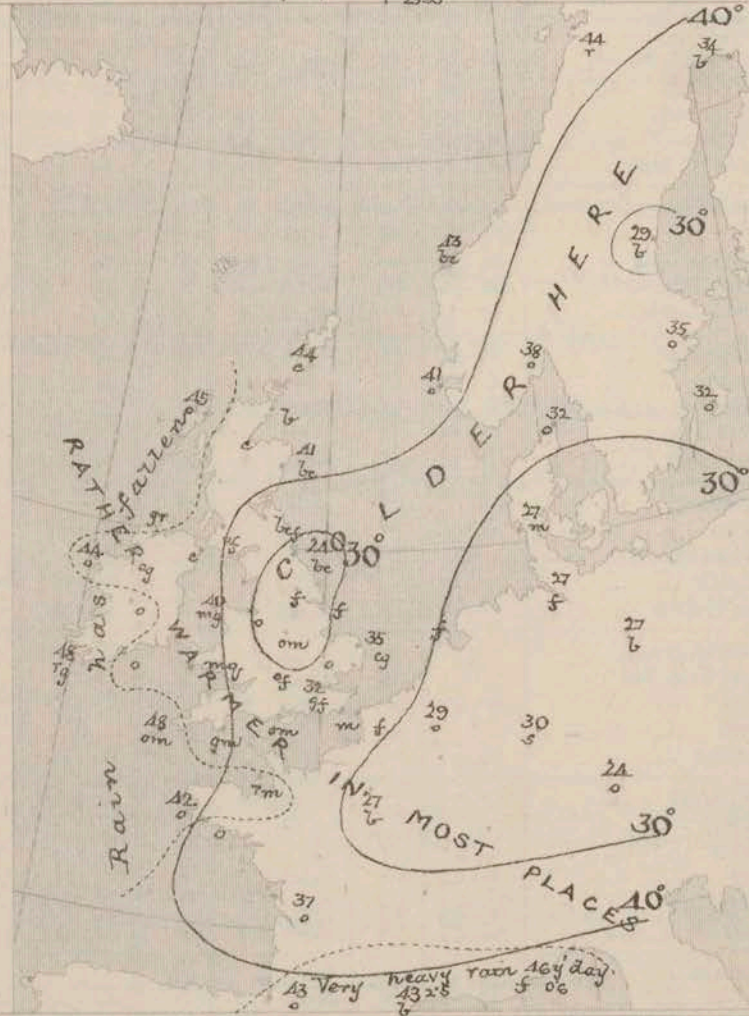
RAINFALL—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of January.)

STATIONS.	TEMPERATURE.				RAINFALL. (Inches.)
	Daily Max.	Daily Min.	at 8 a.m.		
			Dry.	Wet.	
Sumburgh Head.....	42.9	35.4	39.4	38.2	3.66
Stornoway.....	43.0	34.2	39.0	37.8	5.17
Wick.....	42.2	33.2	37.9	36.4	1.97
Nairn.....	41.0	32.7	36.6	35.0	2.02
Aberdeen.....	42.4	33.3	37.1	35.4	2.34
Leith.....	41.6	33.7	38.2	36.8	1.98
Shields.....	43.1	34.7	38.0	36.7	1.79
York.....	43.2	33.1	36.8	35.9	1.83
Loughborough.....	43.5	32.9	36.5	35.6	2.08
Ardrossan.....	44.4	35.4	39.8	38.5	4.53
Donaghadee.....	44.4	36.3	39.9	39.1	3.03
Holyhead.....	45.0	39.0	41.7	40.3	3.49
Liverpool.....	43.0	35.0	38.7	37.1	2.23
Parsonstown.....	46.0	34.6	39.0	37.9	3.09
Valencia.....	49.8	40.5	44.3	43.3	6.70
Roche's Point.....	47.9	39.7	43.2	42.0	5.03
Pembroke.....	45.8	39.9	42.8	41.2	3.92
Silly.....	49.1	43.3	46.5	45.0	3.93
Jersey.....	46.0	38.7	41.7	40.4	3.24
Hurst Castle.....	45.3	37.0	40.4	39.7	3.10
Dover.....	43.7	36.0	39.4	38.2	2.08
LONDON.....	44.8	34.4	37.9	36.8	2.20
Oxford.....	43.8	34.4	37.5	36.5	2.33
Cambridge.....	43.0	32.6	36.5	35.7	1.37
Yarmouth.....	41.9	34.5	37.7	36.9	2.06

NOTE.—The Temperature means are for the 15 years 1871-85, the Rainfall means are mainly those for the 20 years 1869-85.



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30.0 in. and more, over the Baltic, and also over Northern Italy and the south of France.
 Lowest, 29.4 in. and less, off the west coasts of the British Isles, 29.3 in. and less, over Lapland.
 Gradients moderate for S. winds over Western Europe, and for SW. in the north. Slight and variable over France and Germany.
 Barometer falling irregularly and considerably, except over Lapland.

TEMPERATURE

Highest, 48° at Scilly and Valencia, 46° at Mullaghmore, 43° at Biarritz, Malin Hd. and Christiansund.
 Lowest, 24° at Munich and Shields, 25° at York, 26° at Loughborough, 27° at Paris and Berlin.
 Thermometer rising decidedly over the British Isles, France and Germany, and air becoming damp.

WIND

S. (SE to SW) throughout our Islands, the North Sea and Norway—light in the east, strong in the west, and again at Oslo.
 E. over the greater part of France and Germany, but S. at Biarritz and Perpignan.

WEATHER

Fine in the north of Sweden and south of France, dull elsewhere; raining at some of our western stations and at Oslo—foggy, misty and damp in many parts of England.
 Rainfall has been very heavy over the southern part of France, heavy at Oslo, but slight at our own stations.

SEA

Rough in the extreme north, northwest, and southwest, moderate at Holyhead, slight in the Channel.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

FORECASTS

For the 24 hours ending at NOON on 4TH JAN^Y 1890.

DISTRICTS.

FORECASTS.

DISTRICTS.

FORECASTS

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

S^W winds, fresh or strong; rain at times.

SE^W and S^W winds, light or moderate; fair but damp to rainy

SE^W winds, moderate; dull and damp perhaps rain later.

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

S^W winds, fresh; rain at times.
 Wind shifting NW^W later.

Very variable breezes; dull, rainy, unsettled.

WARNINGS

NONE ISSUED.

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

YESTERDAY'S 2 P.M. REPORTS.

THER: WIND								THER: WIND							
BAR:	D.	W.	D.	F.	WEA.	SEA		BAR:	D.	W.	D.	F.	WEA.	SEA	
Skudesnaes ...	29.99	44	42	SE	6	7f	5	Holyhead ...	29.99	46	39	SE	2	b	2
Sumburgh Head	29.67	46	43	SW	4	c	6	Valencia ...	29.85	48	46	SE	6	ben	5
Stornoway ...	29.63	46	46	SW	7	p	6	Scilly ...	29.90	48	45	ENE	6	c	5
Aberdeen ...	29.89	44	41	S	3	bcg	3	Jersey ...	30.00	36	34	E	3	o	3
Shields ...	30.02	40	37	S	2	bm	2	Dungeness ...	30.04	40	39	ENE	4	bc	3
Ardrossan ...	29.91	47	45	SW	3	b	2	London ...	30.09	34	34	E	0	ogm	*
Malin Head	29.77	43	40	S	6	b	4	Yarmouth ...	30.11	35	34	ENE	1	c	2
Mullaghmore	29.82	46	41	SW	6	b	4	Rocheport ...	30.02	38	37	E	4	c	2
Belmullet ...	29.76	48	47	SW	7	c	*								

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

Weather in morning rough and unsettled over our northwestern district and the whole Northern Europe; rain in the Hebrides, and extreme northwest of Norway, as well as over all the southern parts of France and at Malta, where the fall was heavy. Fine at many Irish and some Scotch stations, as well as over a large portion of Spain, the northeast of Africa and Little Russia; sky densely overcast elsewhere, and fog at several English, German and Danish stations. Heavy rain in south of France during day, and a little at some of our western stations, fog over England.

Temperatures risen considerably over Sweden, Finland, and Northern Russia, slightly over many districts in Western Europe and Northern Africa; fallen decidedly over Central England and south of Russia. Morning readings exceeding 60° at Malta and 50° at the Italian and some other Mediterranean stations; frost prevailing in all other places excepting the northwestern and southern coasts of Europe—severe over Russia and the south of Austria. Lowest readings ranging from 17° at Kharkov, and 4° at Moscow to 11° at Hermannstadt and Archangel. Thermometer rising over British Islands later, but frost still holding over our northern counties.

Winds S^W (SE to SW) strong over our northwest coasts, S^W to W^W gales over Scandinavia and Finland. E^W (NE to SE) strong on the northern shores of the Mediterranean, SE^W or E^W, light to moderate; in most other places; variable over France, SE^W to S^W winds in west of our Islands later and blowing strongly.

Barometer highest 30.5 ins. to 30.7 ins. and more in a large area over Southern Russia and the Black Sea, and exceeding 30.0 ins. in a large ridge spreading thence across Central Europe to France and England. Low, 29.2 ins. and less, over Lapland and Northern Russia, and 29.9 ins. in a small depression lying over the northern portion of the Mediterranean. Barometer rising over Northern Europe later, but falling fast in 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 *Saturday, 4th January, 1890.*
Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.

STATIONS.	YESTERDAY EVENING.						8 A.M. TO DAY.										PAST 24 HOURS.		
	BAROM.	TEMP.	WIND.		Weather.		BAROMETER.		SHADE TEMP.			WIND.		Weather.	Sea. (0 to 9.)		SHADE TEMP.		Amount of Rainfall.
	Reading at 3 ²⁰ P. and Sea Level.	Dry.	Dirce.	Force. (0 to 12.)			Reading at 3 ²⁰ P. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Dirce.	Force. (0 to 12.)				Max.	Min.	
SCANDINAVIA.	Haparanda ...	29.64	34	SW	2	c	29.80	+ 32	31	31	- 3	SW	2	0	*		39	?	
	Hernösand ...	29.83	22	2	0	0	29.85	+ 07	28	27	- 1	2	0	0	*		45	19	
	Stockholm ...	29.90	33	2	0	0	29.92	- 05	28	27	- 1	SSW	2	0	*		39	28	
	Wisby ...	29.93	35	S	4	0	29.93	- 13	35	34	+ 3	W	2	0	*		36	28	
	Bodö ...	29.60	42	WSW	2	0	29.60	+ 24	39	35	- 5	ESE	4	0	*	3	45	36	0.12
	Christiansund	29.64	41	ESE	3	b	29.62	- 03	38	37	- 5	2	0	0	5		?	37	
	Skudesnaes ...	29.80	37	SSE	8	c	29.69	- 19	38	36	- 3	SSE	8	0	6		?	36	
	Christiania Fjord (Færd)	29.88	35	SSE	3	m	29.88	- 03	32	31	- 6	SSE	3	0	3		?	32	
	Skagen (The Scaw)	29.88	31	S	1	m	29.85	- 09	35	34	+ 3	SSW	3	m	2		?	30	
	Fanö ...	29.86	27	SSE	3	m	29.83	- 08	30	29	+ 3	SSE	4	bc	*		30	27	
BRITISH ISLANDS.	Sumburgh Head	29.44	45	SSE	6	c	29.35	- 20	43	41	- 1	SSE	4	r	6		46	42	
	Stornoway ...	29.30	45	SW	6	r	29.34	- 07	38	38	- 7	SW	2	0	3		45	38	0.06
	Wick ...	29.41	43	S	5	0	29.36	- 14	42	41	- 2	SW	1	0	1		45	39	0.10
	Nairn ...	29.39	43	WSW	2	0	29.36	- 15	41	40	- 4	2	0	c	1		45	39	
	Aberdeen ...	29.52	41	SSE	5	09	29.43	- 19	39	38	- 2	S	2	0pm	4		43	34	0.04
	Leith ...	29.49	39	W	1	bc	29.41	- 20	41	40	+ 6	W	1	cm	*		41	35	0.20
	Shields ...	29.58	28	S	3	om	29.52	- 19	35	35	+ 11	S	3	0	2		35	28	0.21
	Spurn Head ...	29.64	32	SSE	4	0	29.62	- 14	37	36	+ 6	S	4	om	3		37	30	0.02
	York ...	29.51	30	S	1	f	29.58	- 18	35	35	+ 10	SE	2	m	*		35	24	0.03
	Loughborough	29.65	32	SSE	2	r	29.62	- 11	36	36	+ 10	SE	2	f	*		36	26	0.03
GERMANY & HOLLAND.	Ardrossan ...	29.47	39	ESE	2	r	29.42	- 15	43	42	+ 3	HW	3	om	2		43	37	0.51
	Malin Head ...	29.34	45	SSE	4	0	29.41	- 02	40	38	- 3	SSW	3	b	3		45	40	0.21
	Mullaghmore ...	29.37	43	WSW	4	r	29.43	- 01	37	35	- 9	SSW	2	b	3		47	39	0.24
	Belmullet ...	29.39	44	WSW	3	0	29.40	+ 05	43	41	- 1	SW	3	bc	*		45	39	0.23
	Donaghadee ...	29.46	45	S	4	r	29.47	- 09	39	39	- 5	S	2	c	*	1	45	36	0.39
	Liverpool (Bidston)	29.55	32	SE	4	0	29.53	- 14	37	37	+ 10	SE	4	0	3		38	27	0.20
	Holyhead ...	29.51	43	S	4	mr	29.49	- 12	43	43	+ 3	WSW	1	rgm	2		45	40	0.29
	Parsonstown ...	29.37	46	2	0	r	29.49	+ 02	35	34	- 9	2	0	bc	*		48	34	0.08
	Valencia ...	29.45	43	W	2	0	29.50	+ 09	43	39	- 5	S	1	bcv	*	2	48	35	0.42
	Roche's Point...	29.41	46	SW	4	c	29.54	+ 04	37	36	- 11	N	1	b	3		50	36	0.01
FRANCE AND BELGIUM.	Pembroke (St. Ann's Hd.)	29.49	42	SE	6	r	29.49	- 10	44	43	+ 2	HW	4	op	4		48	42	0.43
	Scilly ...	29.46	49	SSE	6	r	29.56	+ 01	46	43	- 2	WSW	4	0	5		49	44	0.50
	Prawle Point ...	29.56	45	SE	3	r	29.62	- 03	49	48	+ 8	S	5	c	4		49	40	0.03
	Jersey (St. Aubin's)	29.60	42	SE	3	gpm	29.71	- 00	45	44	+ 7	SSE	4	bcm	4		45	37	0.09
	Hurst Castle ...	29.61	41	ESE	3	m	29.69	- 02	48	47	+ 10	SSW	3	cp	2		48	37	0.04
	Dungeness ...	29.65	42	SSE	4	c	29.69	- 06	45	44	+ 11	SW	4	c	3		45	33	0.12
	London ...	29.65	35	SE	1	0	29.69	- 05	44	43	+ 12	SSE	2	0	*		44	32	0.14
	Oxford ...	29.64	34	E	1	0	29.65	- 09	40	40	+ 10	SSE	2	om	*		40	30	0.05
	Cambridge ...	29.66	33	S	1	0	29.67	- 08	38	37	+ 7	S	1	0	*		38	29	0.18
	Yarmouth ...	29.69	34	SW	2	c	29.70	- 08	41	41	+ 6	SSW	3	c	*	3	41	31	0.04
GERMANY & HOLLAND.	Cuxhaven ...	29.80	31	SSE	3	f	29.82	?	32	32	+ 5	SSE	3	c	*		?	?	
	Berlin ...	29.91	31	S	3	b	30.04	+ 07	31	31	+ 4	SSW	1	c	*		34	?	
	Wiesbaden ...						30.04	+ 11	28	24	- 2	2	0	0	*		32	25	
	Munich ...	29.95	30	* SE	* 2	* 6	30.06	+ 13	23	23	- 1	SE	3	b	*		34	23	
	The Helder ...	29.79	29	SE	1	f	29.77	- 09	36	35	+ 9	SSE	2	c	*	3	36	25	
	Brussels (9 a.m.)						29.85	- 00	42	40	+ 13	S	1	c	*		43	41	
	Cape Gris Nez		37	S	2	0	?	?	41	40	+ 14	SW	4	0	*	4	?	25	
	Paris ...	29.75	41	S	3	0	29.86	+ 04	43	40	+ 16	S	2	0	*		44	?	0.04
	Brest ...		45	SE	3	0	?	?	50	46	+ 8	SSW	4	b	*	3	54	41	0.04
	Lorient ...	29.59	42	ESE	3	0	29.70	+ 04	49	46	+ 13	SSW	3	0	3		?	36	
FRANCE AND BELGIUM.	Rochefort ...	29.74	44	SE	5	0	29.84	+ 08	41	41	+ 4	S	3	c	2		45	36	0.12
	Belfort ...	29.86	28	N	1	0	30.01		28	21		N	1	f	*		33	23	
	Lyons ...	29.89	46	S	3	0	29.94	- 01	48	42	+ 20	S	5	0	*		51	?	
	Nice ...	30.08	46	ESE	4	c	30.10	+ 08	47	46	+ 1	E	5	bc	*	4	80	45	0.24
	Perpignan ...	29.85	52	S	5	0	29.93	- 02	49	48	+ 6	S	2	0	*		55	?	0.04
	Biarritz ...	29.68	49	SSW	3	0	29.74	+ 03	49	43	+ 6	SSW	3	0	*	2	50	?	
	Corunna ...																		
	Lisbon ...	29.70	48	* NE	* 2	* 0	29.90	+ 23	50	46	+ 7	HW	4	bc	8		?	?	0.35

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

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

WEATHER CHARTS

for 8 a.m. on

Saturday 4th January,

1890.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP

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

Changes since previous morning are stated in words.

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

their bars and feathers refer to force thus—

— forces above 10 ; — forces 8 to 10 ;

— forces 5 to 7 ; — forces 1 to 4.

⊙ = dead calm.

SEA DISTURBANCE—Where considerable, is shown thus:

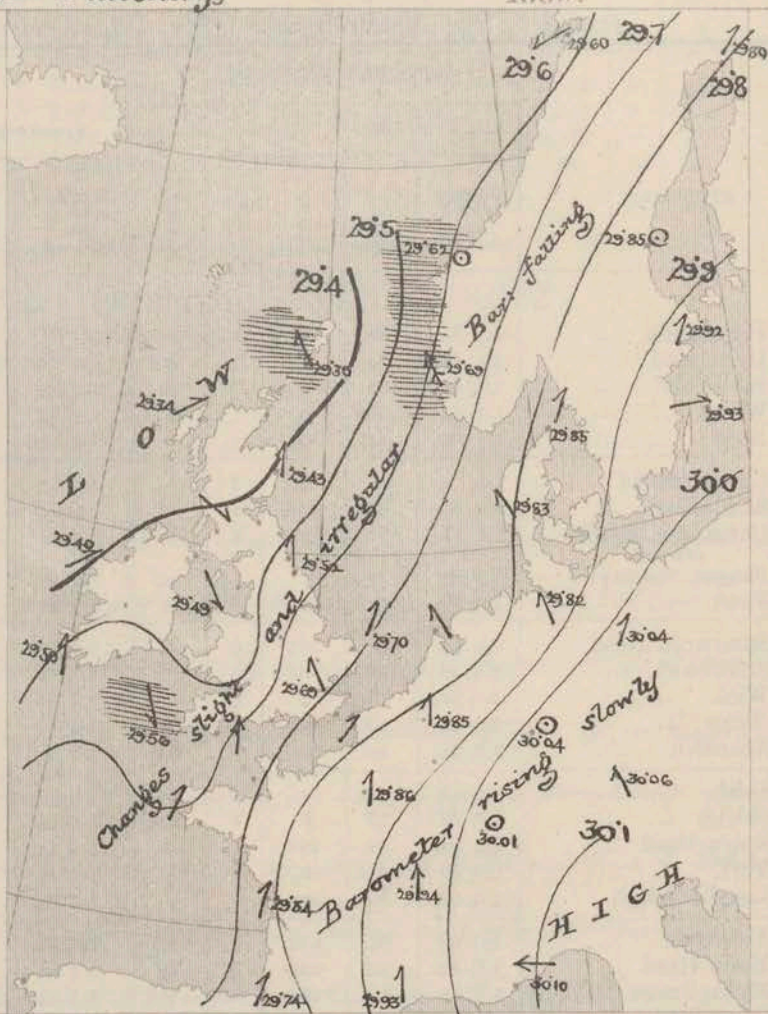
— Rough. — High.

MEAN HEIGHT OF THE BAROMETER

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

During the 15 Years: 1871—1885.

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



TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

TEMPERATURE—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

WEATHER is shown by Letters of the Beaufort Scale.

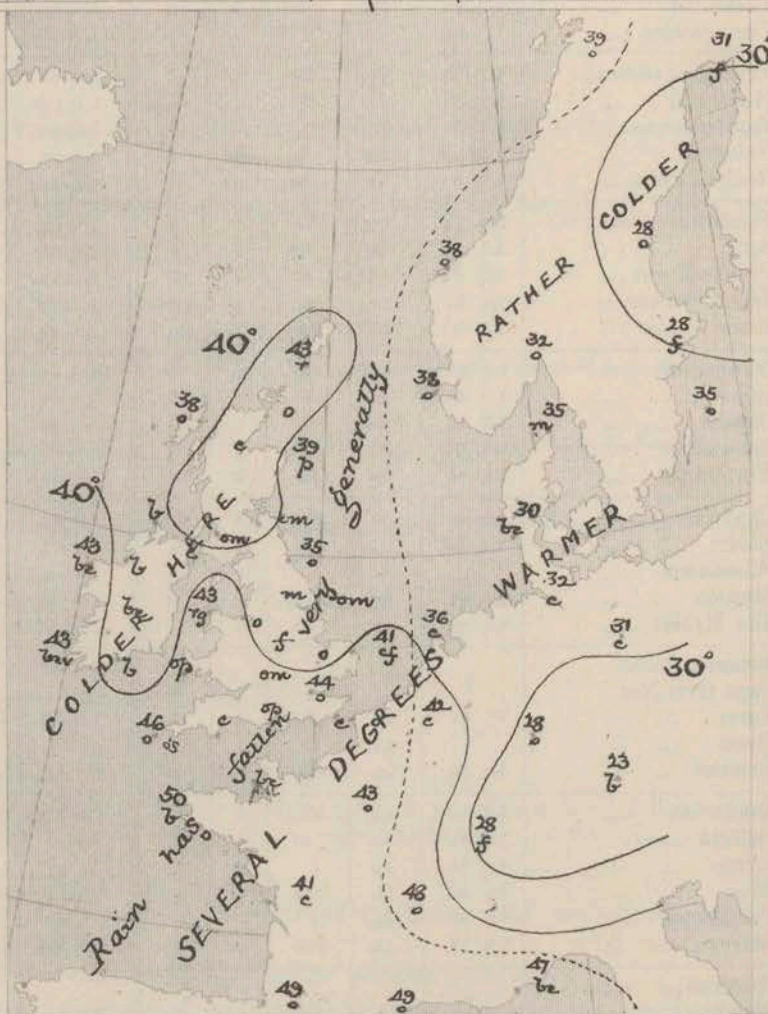
RAINFALL—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of January.)

STATIONS.	TEMPERATURE.				RAINFALL (Inches.)
	Daily Max.	Daily Min.	at 8 a.m.		
			Dry.	Wet.	
Sumburgh Head.....	42.9	35.4	39.4	38.2	3.66
Stornoway.....	43.0	34.2	39.0	37.8	5.17
Wick.....	42.2	33.2	37.9	36.4	1.97
Nairn.....	41.9	32.7	36.6	35.0	2.02
Aberdeen.....	42.1	33.3	37.1	35.4	2.34
Leith.....	44.6	33.7	38.2	36.8	1.98
Shields.....	43.1	34.7	38.0	36.7	1.79
York.....	43.2	33.1	36.8	35.9	1.88
Loughborough.....	43.5	32.9	36.5	35.5	2.08
Ardrossan.....	44.4	36.4	39.8	38.5	4.53
Donaghadee.....	44.4	36.3	39.9	39.1	3.03
Holyhead.....	45.9	39.0	41.7	40.2	3.49
Liverpool.....	43.9	35.0	38.7	37.1	2.23
Parsonstown.....	46.0	34.0	39.0	37.9	3.09
Valencia.....	49.8	40.5	44.3	43.3	6.79
Roche's Point.....	47.9	39.7	43.2	42.0	5.63
Pembroke.....	45.8	39.9	42.8	41.2	3.92
Sally.....	49.1	43.3	46.5	45.0	3.93
Jersey.....	46.0	38.7	41.7	40.4	3.24
Hurst Castle.....	45.3	37.0	40.4	39.7	3.10
Dover.....	43.7	36.0	39.4	38.2	2.68
LONDON.....	44.8	34.4	37.9	36.8	2.20
Oxford.....	43.8	34.4	37.5	36.5	2.33
Cambridge.....	43.9	32.6	36.5	35.7	1.37
Yarmouth.....	41.9	34.5	37.7	36.9	2.06

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



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 29.9 in: to 30.1 in: over the Baltic, Germany, the east of France, and Northern Italy.
 Lowest, 29.4 in: and less, over Scotland, the extreme northwest of Ireland, and the adjacent parts of the Atlantic.
 Gradients moderate, mainly favourable for S^W winds, but variable in west, owing to local shallow disturbances.
 Barometer unsteady; inclined to fall slightly in Ireland.

TEMPERATURE

Highest, 50° at Dublin, 49° at Biarritz and Perpignan, and Hazle Point, 48° at Lyons and Hunt Castle, 44° in London, and 43° in the west of Ireland.
 Lowest, 23° at Munich, 28° at Belfort, Wiesbaden, Stockholm and Helsingfors.
 It has risen decidedly over England since yesterday, fallen decidedly in Ireland and Scotland.

WIND

S^W moderate, over nearly the whole of England and the western countries of Europe.
 Very variable and light in Scotland and Ireland, and calm at several stations.
 NW^W at Lisbon.

WEATHER

Fine in Ireland, dull elsewhere, with showers in several parts of England, and fog in some localities.
 Rainfall has been general, but not heavy, over the British Isles and France.

SEA

Still rough in the extreme north and at Scilly, moderate or slight elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The "V" shaped local disturbances in the west seems to filling up, so that it is hardly likely that the NW^W wind on our western coasts will reach the eastern half of England at all.

FORECASTS

For the 24 hours ending at NOON on 5TH JAN^Y 1890.

DISTRICTS.

FORECASTS.

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

Calms followed by S^W winds;
 air becoming milder again.

S^W winds, very unsettled, damp,
 some rain.

DISTRICTS.

FORECASTS

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

Wind backing to S^W again;
 unsettled, rainy, milder.

S^W winds, fair to changeable
 and rainy.

WARNINGS.

NONE ISSUED.

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

YESTERDAY'S 2 P.M. REPORTS.

	BAR:	THER:		WIND		WEA.	SEA		BAR:	THER:		WIND		WEA.	SEA
		D.	W.	D.	F.					D.	W.	D.	F.		
Skudesnaes ...	29.82	40	39	SSE	7	c	5	Holyhead ...	29.53	42	40	S	4	o g m	4
Sumburgh Head ...	29.48	45	43	SSE	5	o	6	Valencia ...	29.40	43	41	NW	3	r m	3
Stornoway ...	29.33	45	45	S	6	o m	6	Scilly ...	29.46	49	49	SSE	6	r m	6
Aberdeen ...	29.55	42	39	SSE	3	6 c	4	Jersey ...	29.62	41	39	ESE	3	o	3
Shields ...	29.62	29	29	S	3	o	2	Dungeness ...	29.70	36	35	S	3	c	2
Ardrossan ...	29.50	40	40	ESE	2	o	2	London ...	29.67	36	35	SE	1	o g m	*
Malin Head ...	29.37	44	43	SSE	4	o	3	Yarmouth ...	29.69	35	34	S	4	o g m	3
Mullaghmore ...	29.36	47	44	SSE	4	o g	3	Rocheport ...	29.73	44	43	SE	4	r	2
Belmullet ...	29.36	43	43	NW	2	o	*								

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

Weather very variable in morning; fine at a few places in the north of Europe, the east of France, the Adriatic, and on the southern shores of the Mediterranean, very dull or cloudy in nearly all other places, with fog at many British stations and over Central Europe. Rain at one or two stations on the extreme west coasts of Europe and snow at Vienna. The falls of rain at some Mediterranean ^{stations} and in the latter had been very large. Rain falling generally over the British Isles and France later, but falls not heavy.

Temperatures risen rapidly in Northern Europe and Northern Russia, and to a smaller extent over many other parts of Europe, fallen somewhat in most other localities. Morning readings exceeding 50° at several Algerian, Italian, and other Mediterranean stations, 40° or more on the extreme western coasts of Europe, and above freezing point in Lapland, Finland, and Northern Russia; over remainder of Russia, Central Europe, and inland England frost still prevalent, the lowest readings being 10° at Hermannstadt, 11° at Khar'kov, and 14° at Cracow. Thermometer falling at Irish and Scotch stations towards night, rising quickly over England.

Wind SW or W in Northern Europe — a gale at Oslo, E, very light, in Southern Europe, variable over Italy, and on the northern shores of the Mediterranean, SE, light in Austria, and S to SE, moderate to strong, over the greater part of W Europe and Algeria. Shifting to NW over the W parts of the British Isles later, but remaining S over England.

Barometer fallen decidedly, except at the most N and the most S stations, highest 30.4 ins to 30.6 ins. and upwards over S Russia and the Black Sea, lowest 29.25 ins. to 29.35 ins. along the W. coast of Ireland, as well as in Lapland, and N Russia. Shallow local disturbances over the Mediterranean. A "V" shaped depression beginning to advance E over the British Isles later.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

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

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

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

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

DAILY WEATHER REPORT.

for Sunday 5TH JAN^Y 1890.
 Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.

STATIONS.		YESTERDAY EVENING.					8 A.M. TO DAY.											PAST 24 HOURS.		
		BAROM.	TEMP.	WIND.			BAROMETER.		SHADE TEMP.			WIND.				SHADE TEMP.				
Reading at 32° F. and Sea Level.	Dry.	Dirac.	Force. (0 to 12.)	Weather.	Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Dirac.	Force. (0 to 12.)	Weather.	Sea. (0 to 9.)	Max.	Min.	Amount of Rainfall.				
SCANDINAVIA.	Haparanda ...	29.87	32	2	0	S	29.84	+ .04	33	32	+ 2	SSW	2	0	*	26	27	0.04		
	Hernösand ...	29.88	26	SSW	2	0	29.88	+ .03	31	30	+ 3	S	4	0	*	32	19	—		
	Stockholm ...	30.02	28	2	0	0	30.09	+ .17	35	34	+ 7	S	2	0	*	34	27	—		
	Wisby ...	30.07	35	SW	4	0	30.16	+ .23	39	38	+ 4	SSW	4	0	*	?	32	—		
	Bodö ...	29.61	39	ENE	2	6	29.60	.00	35	31	— 4	ENE	2	0	*	29	34	—		
	Christiansund	29.55	40	ESE	1	C	29.60	— .02	43	41	+ 5	ESE	1	6C	4	43	28	—		
	Skudesnaes ...	29.69	42	SSE	8	r	29.69	.00	44	42	+ 6	SSE	8	0	6	?	?	0.08		
	Christiania Fjord (Færder)	29.88	38	SE	4	r	29.96	+ .08	40	39	+ 8	SSW	5	0	3	?	?	—		
	Skagen (The Scaw)	29.91	39	SSW	3	m	29.98	+ .13	39	38	+ 4	SSW	3	m	2	39	34	0.04		
	Fanö ...	29.94	36	S	4	0	29.98	+ .15	34	32	+ 4	S	4	6	*	39	30	—		
BRITISH ISLANDS.	Sumburgh Head	29.39	43	WSW	1	0	29.10	— .25	45	44	+ 2	SSE	7	r	7	46	43	0.14		
	Stornoway ...	29.29	43	SW	4	6C	28.73	— .61	49	48	+ 11	S	7	0	6	49	38	0.04		
	Wick ...	29.37	43	S	2	6	29.00	— .36	44	41	+ 2	S	7	6	4	45	36	0.02		
	Nairn ...	29.40	35	2	0	6	28.95	— .41	45	40	+ 4	SSW	6	5	5	45	35	—		
	Aberdeen ...	29.45	38	SW	2	6	29.17	— .26	45	43	+ 6	SSE	7	6	6	45	37	0.32		
	Leith ...	29.49	38	W	1	C	29.14	— .27	48	46	+ 7	WSW	5	6	*	49	36	0.03		
	Shields ...	29.54	42	S	2	0	29.33	— .19	46	45	+ 11	S	7	0	3	46	34	0.06		
	Spurn Head ...	29.67	41	S	4	6C	29.52	— .10	44	43	+ 7	S	7	0	5	44	31	0.01		
	York ...	29.62	42	S	2	0	29.47	— .11	48	46	+ 13	S	2	0	*	48	34	0.03		
	Loughborough	29.66	44	S	4	6	29.55	— .07	48	46	+ 12	S	6	0	*	48	36	0.04		
GERMANY & HOLLAND.	Ardrossan ...	29.44	42	SE	3	6	29.11	— .31	48	46	+ 5	SSE	5	6C	5	49	39	0.14		
	Malin Head ...	29.26	39	SSE	6	C	28.81	— .60	46	43	+ 6	S	8	6C	4	47	38	0.11		
	Mullaghmore ...	29.22	42	SE	7	0	28.95	— .48	48	44	+ 11	SW	7	6C	6	50	37	0.46		
	Belmullet ...	29.06	42	SSE	10	0	28.91	— .49	49	46	+ 6	SW	10	6	5	50	36	0.33		
	Donaghadee ...	29.46	40	SSW	2	6C	29.15	— .32	48	46	+ 9	WSW	7	6	5	48	35	0.28		
	Liverpool (Bidston)	29.57	41	SSE	1	6C	29.40	— .13	49	46	+ 12	SSW	2	C	3	50	37	0.14		
	Holyhead ...	29.53	42	S	3	6C	29.32	— .17	50	48	+ 7	S	5	6C	5	51	42	0.51		
	Parsonstown ...	29.31	42	SE	2	0	29.20	— .29	44	42	+ 9	SW	2	6C	5	49	39	0.56		
	Valencia ...	29.12	45	SE	8	f	29.20	— .30	53	49	+ 10	SSW	8	6C	6	53	43	0.58		
	Roche's Point...	29.38	47	SSW	8	r	29.34	— .20	51	48	+ 14	WSW	4	6C	6	51	37	0.80		
FRANCE AND BELGIUM.	Pembroke (St. Ann's Hd.)	29.54	46	SSW	5	6C	29.45	— .04	51	50	+ 7	SSW	7	C	8	51	40	0.28		
	Scilly ...	29.58	48	SSW	7	C	29.55	— .01	52	51	+ 6	SSW	7	6C	6	53	44	0.15		
	Prawle Point ...	29.71	46	SSW	3	r	29.65	+ .03	50	50	+ 1	SSW	8	6C	6	50	45	0.17		
	Jersey (St. Aubin's)	29.81	46	SSE	4	6	29.87	+ .16	49	48	+ 4	S	7	6C	5	49	44	0.09		
	Hurst Castle ...	29.75	48	SSW	5	6	29.70	+ .01	49	48	+ 1	SSW	9	6C	5	50	38	0.07		
	Dungeness ...	29.83	37	SW	4	6C	29.84	+ .15	47	45	+ 2	SW	7	C	5	47	44	—		
	London ...	29.77	44	SSE	3	6C	29.73	+ .04	47	46	+ 3	S	7	6C	*	49	43	0.14		
	Oxford ...	29.73	43	SSW	3	C	29.64	— .01	47	46	+ 7	S	4	6C	*	47	40	0.09		
	Cambridge ...	29.77	42	S	2	6C	29.69	+ .02	46	45	+ 8	S	3	6C	*	46	38	0.04		
	Yarmouth ...	29.79	42	SSW	3	6	29.76	+ .06	44	43	+ 3	SSW	4	6C	4	44	40	—		
PENINSULA.	Cuxhaven ...	30.01	35	SSW	3	C	30.06	+ .24	36	36	+ 4	SSW	3	6	*	39	32	—		
	Berlin ...	30.17	35	SE	1	6C	30.25	+ .21	29	28	— 2	SE	1	C	*	37	27	—		
	Wiesbaden ...	*	*	*	*	*	30.29	+ .25	29	28	+ 1	2	0	0	*	36	28	—		
	Munich ...	30.16	29	SE	1	f	30.35	+ .29	26	20	— 3	SE	4	6	*	30	?	—		
	The Helder ...	29.93	36	S	1	f	29.93	+ .16	36	36	0	S	3	6C	3	39	34	—		
	Brussels (9 a.m.)	?	?	?	?	?	30.06	+ .21	42	41	+ 0	SSE	2	6C	*	46	39	—		
	Cape Gris Nez	?	45	SSW	4	6	?	?	42	41	+ 1	SSW	5	6	*	46	41	—		
	Paris ...	29.98	43	SSE	1	6	30.12	+ .26	40	39	— 3	SSW	2	6	*	46	37	—		
	Brest ...	?	51	SW	4	6	?	?	51	50	+ 1	N	9	6	*	52	41	0.08		
	Lorient ...	29.82	50	SSW	3	0	29.91	+ .21	51	49	+ 2	SSW	7	6	7	54	46	0.04		
GERMANY & HOLLAND.	Rochefort ...	30.00	47	WSW	3	6C	30.18	+ .34	44	43	+ 3	S	4	C	2	52	36	—		
	Belfort ...	29.98	31	S	1	0	30.28	+ .27	?	35	?	SW	1	C	*	39	28	—		
	Lyons ...	30.07	51	S	3	0	30.27	— .01	41	?	— 7	E	1	6	*	56	41	—		
	Nice ...	30.19	51	E	5	C	30.32	+ .22	47	40	+ 0	E	5	6C	2	54	45	—		
	Perpignan ...	29.99	52	SE	2	C	30.30	+ .37	51	51	+ 3	SE	2	6	3	57	48	0.12		
	Biarritz ...	30.00	53	SSE	3	0	30.17	+ .43	48	44	— 1	S	3	6	3	54	46	—		
PENINSULA.	Corunna ...	?	?	?	?	?	30.13	+ .43	58	?	+ 11	S	5	0	4	57	45	0.04		
	Lisbon ...	30.19	51	W	1	f	30.31	+ .41	50	50	0	N	1	f	?	55	48	0.04		

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

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

WEATHER CHARTS

for 8 a.m. on

Sunday, 5th January,

1890.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP

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

Changes since previous morning are stated in words.

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

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

→ = forces 5 to 7; → = forces 1 to 4.

⊙ = dead calm.

SEA DISTURBANCE—Where considerable, is shewn thus:

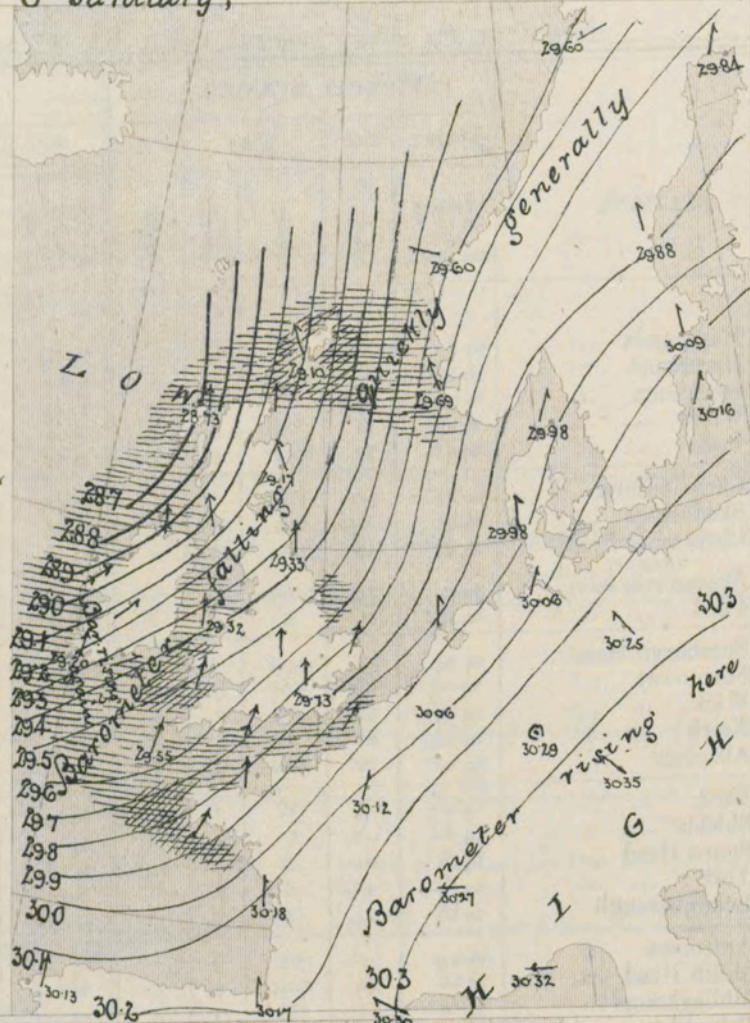
— Rough. — High.

MEAN HEIGHT OF THE BAROMETER

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

During the 15 Years: 1871—1885.

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



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30.1 in: to 30.3 in: and more, over the Baltic, Germany, and the southeastern half of France.
Lowest, 28.7 in: and less, in a deep depression lying off the northwest of our Islands.
Gradients steep over the whole of the British Islands, the Bay of Biscay and North Sea, slight over the Continent generally.
Barometer rising at the southwestern stations and over Germany, falling fast in the northwest and north.

TEMPERATURE

Highest, 57° at Comma, 53° at Valencia, 52° at Seilly, 51° at Livorno, Pembroke, and Rocher Point.
Lowest, 20° at Munich, 19° at Wiesbaden and Lisbon, 31° at Heröland.
 It has risen considerably over the British Isles and Northwestern Europe and is high for the time of year.

WIND

S⁴ to SW⁴ over the whole of Western Europe — blowing a gale over nearly the whole of the British Isles and Brittany, as well as at Rhadenas, moderate at other stations.
 Chiefly SE⁴ or E⁴, but variable and light over northern and central Europe, and E⁴ in the south of France.

WEATHER

Very squally and unsettled over the United Kingdom, though fair temporarily in Scotland and the west of Norway, as well as over Germany and the central and southern parts of France.
 Rainfall during past day very general in the United Kingdom, and heaviest in the west.

SEA

High at Stornoway, on our southwest coasts and the coasts of Brittany, very rough or rough elsewhere, except on our northeast and east coasts.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

FORECASTS

For the 24 hours ending at NOON on 6TH JAN^Y 1890.

DISTRICTS.

FORECASTS.

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

NONE ISSUED.

DISTRICTS.

FORECASTS

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

WARNINGS

NONE ISSUED.

The SOUTH CONE was hoisted yesterday in all districts excepting 2. and 3.

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

YESTERDAY'S 2 P.M. REPORTS.

		THER:		WIND						THER:		WIND					
	BAR:	D.	W.	D.	F.	WEA.	SEA		BAR:	D.	W.	D.	F.	WEA.	SEA		
Skudesnaes ...	29.67	41	38	SSE	6	o	6	Holyhead ...	29.54	42	42	VI	1	c	2		
Sumburgh Head ...	29.36	44	43	SN	3	o	6	Valencia ...	29.34	47	44	SSE	7	o	6		
Stornoway ...	29.35	43	42	S	4	c	4	Scilly ...	29.62	50	46	SSW	4	bc	5		
Aberdeen ...	29.46	41	40	SSW	2	ogmp	4	Jersey ...	29.77	48	45	SE	4	bc	3		
Shields ...	29.53	40	39	SSW	2	omv	2	Dungeness ...	29.78	47	45	SN	4	c	3		
Ardrossan ...	29.46	43	42	L	0	o	0	London ...	29.76	49	47	SN	3	c	*		
Malin Head ...	29.40	42	39	SSE	3	b	2	Yarmouth ...	29.64	44	43	SSW	3	cm	3		
Mullaghmore ...	29.37	43	38	SE	4	cmv	3	Rochefort ...	29.40	51	47	SSE	3	bc	2		
Belmullet ...	29.30	42	40	SSE	5	o	*										

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

Weather fine in Algeria, and at many other stations on the southern shores of the Mediterranean and in the south of Spain; temporarily fine and bright in Ireland also. (Dull or overcast elsewhere, with rain at isolated stations in the British Isles and Spain, fog at Belfast. Becoming raining, squally and unsettled in the western parts of the United Kingdom later and the disturbed weather spreading to France.

Temperature continuing below the freezing point over Lapland, Russia, Austria, South Germany and the east of France, lowest morning values being 16° at Kharkov and Kiev, 20° at Moscow and 29° at Rode. Rather high and rising over the British Isles and the western parts of France and Spain; highest morning values 60° at Malta, 55° at Brindisi, 51° at Palermo and Naples, 50° at Lisbon and Brest, 49° at Rhénie, and 46° at Scilly. Rising to above 50° over all the southwestern parts of our Islands later, and approximately 50° in many other western districts.

Wind S over nearly the whole of Western, Northwestern and Central Europe, and of little strength; very light and variable over Scotland and Ireland (calm in several places), NE to E over Italy and the south of France. SE and S gales setting in over Ireland later, attaining great force and subsequently spreading up the Channel and to the Scotch stations.

Barometer highest, 30.2 in. to about 30.6 in., over the southeastern parts of Europe, lowest over the Atlantic the British Islands and the Irish Sea — the lowest of all being 29.4 in. and less, in a shallow depression of irregular form lying over Scotland. Deep new depression approaching Ireland later and moving quickly in a northeasterly direction.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

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

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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, 6th January, 1890.*
Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.

Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.																		
STATIONS.	YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
	BAROM.	TEMP.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Weather.	Sea. (0 to 9.)	SHADE TEMP.		Amount of Rainfall.	
	Reading at 32° F. and Sea Level.	Dry.	Dir.	Force. (0 to 12.)		Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Dir.	Force. (0 to 12.)			Max.	Min.		
SCANDINAVIA.																		
Haparanda ...	29.82	29	Z	0	0	29.82	-0.02	32	32	-1	Z	0	0	*	37	28	.	
Hernösand ...	29.91	35	SW	2	bc	29.75	-0.13	36	35	+5	S	4	0	*	37	21	.	
Stockholm ...	30.10	37	SSE	2	0	29.93	-0.16	38	37	+4	S	2	0	*	39	27	.	
Wisby ...	30.17	36	SSW	4	b	30.07	-0.09	41	39	+2	SW	6	r	*	41	36	0.12	
Bodö ...	29.60	40	E	4	c	29.51	-0.09	36	31	+1	E	2	0	*2	?	34	.	
SCANDINAVIA.																		
Christiansund	29.41	47	SE	5	c	29.42	-0.18	45	40	+2	SE	3	c	3	?	43	.	
Skudesnaes ...	29.60	44	SSE	8	0	29.71		45	44		SSW	7	0	6	45	43	0.55	
Christiania Fjord (Fæder)	29.82	41	SSE	6	r	29.73		42	41		SSW	7	c	5	?	39	0.32	
Skagen (The Seaw)	29.85	41	S	5	r	29.86	-0.12	44	43	+5	SW	4	0	3	45	37	0.16	
Fanö ...	29.93	39	S	4	0	30.06	+0.08	41	41	+7	WSW	5	b	*	41	34	0.04	
SCANDINAVIA.																		
Sumburgh Head	29.07	46	S	7	0	29.38	+0.28	47	44	+2	WSW	6	c	7	48	45	0.04	
Stornoway ...	29.83	48	SW	7	0	29.46	+0.73	47	45	-2	W	7	oh p	6	49	43	0.12	
Wick ...	29.06	43	W	5	bc	29.61	+0.61	43	41	-1	WNW	4	bc	2	48	40	0.03	
Nairn ...	29.08	45	SSW	4	b	29.60	+0.65	45	44	0	SSW	5	c	4	49	37	0.29	
Aberdeen ...	29.24	47	SSW	6	b	29.75	+0.58	42	39	-3	SW	4	b	5	47	41	0.07	
SCANDINAVIA.																		
Leith ...	29.30	50	WSW	5	o q p	29.86	+0.72	46	42	-2	WSW	4	b	*	51	34	0.07	
Shields ...	29.49	48	SSW	3	0	29.99	+0.66	43	41	-3	SW	3	c	2	52	42	0.10	
Spurn Head ...	29.67	46	S	5	b	30.14	+0.62	44	43	0	S	4	om	4	48	37	0.01	
York ...	29.61	49	S	2	b	30.10	+0.63	43	40	-5	SSE	1	0	*	53	41	0.06	
Loughborough	29.69	50	WSW	5	b	30.15	+0.60	45	44	-3	SSE	1	o q m	*	54	44	.	
BRITISH ISLANDS.																		
Ardrossan ...	29.30	49	SSW	6	bc	29.80	+0.69	46	44	-2	S	5	o	4	49	42	0.06	
Malin Head ...	29.14	39	SW	9	o q p h	29.66	+0.85	43	41	-3	S	6	bc	5	48	38	0.27	
Mullaghmore ...	29.25	47	SSW	6	o q p l	29.70	+0.75	46	42	-2	SSE	5	o q	5	50	42	0.10	
Belmullet ...																		
Donaghadee ...	29.35	47	WSW	7	b	29.88	+0.73	44	42	-4	S	6	b	*5	51	43	0.03	
BRITISH ISLANDS.																		
Liverpool (Bidston)	29.58	47	SW	6	b	30.05	+0.65	44	42	-5	SE	2	0	3	53	44	0.05	
Holyhead ...	29.49	47	SW	6	o q m	29.98	+0.66	47	46	-3	SSW	4	o q m	4	51	43	0.13	
Parsonstown ...	29.41	46	SW	3	b	29.81	+0.61	44	43	0	SSE	3	c	*	52	40	0.17	
Valencia ...	29.49	49	SSW	8	bc l u	29.73	+0.53	52	51	-1	SSE	8	om u	*6	53	45	0.17	
Roche's Point ...	29.59	46	WSW	6	bc l	29.84	+0.50	50	50	-1	SW	6	r	5	51	43	0.15	
BRITISH ISLANDS.																		
Pembroke (St. Ann's Hd.)	29.62	51	S	6	c	30.00	+0.55	49	49	-2	S	5	dm	7	52	49	0.03	
Scilly ...	29.75	53	SW	7	c	30.02	+0.47	53	53	+1	SSW	7	opm	6	54	50	0.10	
Prawle Point ...	29.89	52	SW	7	0	30.14	+0.49	50	50	0	SSE	7	r f	6	52	48	0.05	
Jersey (St. Aubin's)	29.99	53	SW	6	o q	30.29	+0.42	52	51	+3	SSW	6	opm u	5	53	48	0.63	
Hurst Castle ...	29.90	50	SSW	7	0	30.22	+0.52	53	52	+4	SSW	5	odm	5	56	47	0.30	
BRITISH ISLANDS.																		
Dungeness ...	29.91	49	SW	8	r	30.26	+0.42	50	50	+3	SW	4	0	3	51	47	0.21	
London ...	29.86	52	SW	5	bc	30.23	+0.46	51	50	+4	S	1	0	*	52	46	0.12	
Oxford ...	29.88	49	SW	4	b	30.19	+0.55	49	48	+2	S	1	o q m	*	53	47	0.01	
Cambridge ...	29.85	48	S	2	b	30.22	+0.53	47	47	+1	S	1	0	*	52	45	0.05	
Yarmouth ...	29.81	47	SSW	6	o q p d	30.22	+0.46	47	46	+3	SW	1	cm	*3	48	43	0.06	
GERMANY & HOLLAND.																		
Cuxhaven ...	30.09	40	SW	6	r	30.23	+0.17	45	45	+9	SW	5	0	*	45	?	0.08	
Berlin ...	30.34	34	S	3	b	30.40	+0.15	40	38	+11	SSW	4	0	*	?	?	.	
Wiesbaden ...						30.52	+0.23	36	36	+7	Z	0	0	*	37	?	0.04	
Munich ...	30.49	28	*NW	*2	*b	30.65	+0.30	30	29	+1	SSW	2	c	*	36	19	.	
The Helder ...	29.96	43	SSW	5	r	30.25	+0.32	43	43	+7	SW	2	c	*3	45	36	0.20	
FRANCE AND BELGIUM.																		
Brussels (9 a.m.)	?	45	*SW	*5	*0	?	?	47	47	+5	SW	5	f	*5	?	41	0.12	
Cape Gris Nez		51	SSW	3	0	30.46	+0.34	49	45	+9	SSW	2	bc	*	?	?	0.08	
Paris ...	30.22	53	W	7	0	?	?	53	51	+2	SW	8	0	*9	54	41	0.12	
Brest ...	?	52	SSW	6	m	30.34	+0.43	53	52	+2	SW	4	0	7	54	50	0.35	
Lorient ...	30.11																	
FRANCE AND BELGIUM.																		
Rochefort	30.35	50	SSW	4	0	30.52	+0.34	46	45	+2	S	4	c	2	50	39	.	
Belfort ...	30.38	39	NW	1	c	30.57	+0.29	39	31	?	NW	1	c	*	49	30	.	
Lyons ...	30.44	47	S	2	b	30.65		37	37		WNW	1	b	*	56	36	.	
Nice ...	30.47	48	E	3	b	30.60	+0.28	46	40	-1	ENE	4	b	*0	57	43	.	
Perpignan ...	30.45	52	Z	0	0	30.61	+0.31	45	?	-7	W	1	0	*	58	44	.	
Biarritz ...	30.32	58	SW	5	c	30.48	+0.31	51	45	+3	SW	2	b	*8	61	45	.	
PENINSULA.																		
Corunna ...																		
Lisbon ...	30.46	55	*S	*1	*bc	30.50	+0.19	47	47	-3	NE	2	f	?	59	46	.	

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

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

WEATHER CHARTS

for 8 a.m. on

Monday, 6th January.

1890.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP

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

Changes since previous morning are stated in words.

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

their barbs and feathers refer to force thus—

— forces above 10; — forces 8 to 10;

— forces 5 to 7; — forces 1 to 4.

⊙ = dead calm.

SEA DISTURBANCE—Where considerable, is shown thus:

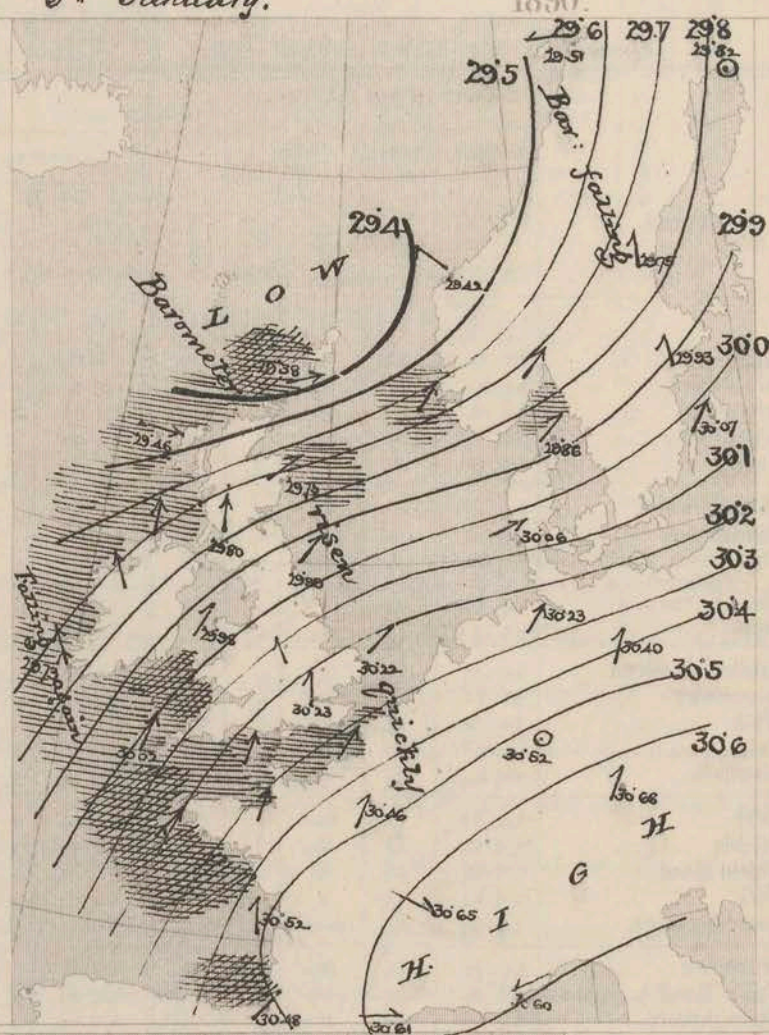
— Rough. — High.

MEAN HEIGHT OF THE BAROMETER

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

During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS.
Sumburgh Head	29.685
Stornoway	29.687
Wick	29.725
Nairn	29.753
Aberdeen	29.790
Leith	29.829
Shields	29.886
York	29.935
Loughborough	29.967
Ardrossan	29.840
Donaghadee	29.851
Holyhead	29.896
Liverpool	29.922
Parsonstown	29.888
Valencia	29.869
Roche's Point	29.894
Pembroke	29.926
Scilly	29.960
Jersey	30.010
Hurst Castle	29.997
Dover	30.017
LONDON	30.007
Oxford	29.997
Cambridge	29.992
Yarmouth	29.981



TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

TEMPERATURE—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

WEATHER is shown by Letters of the Beaufort Scale.

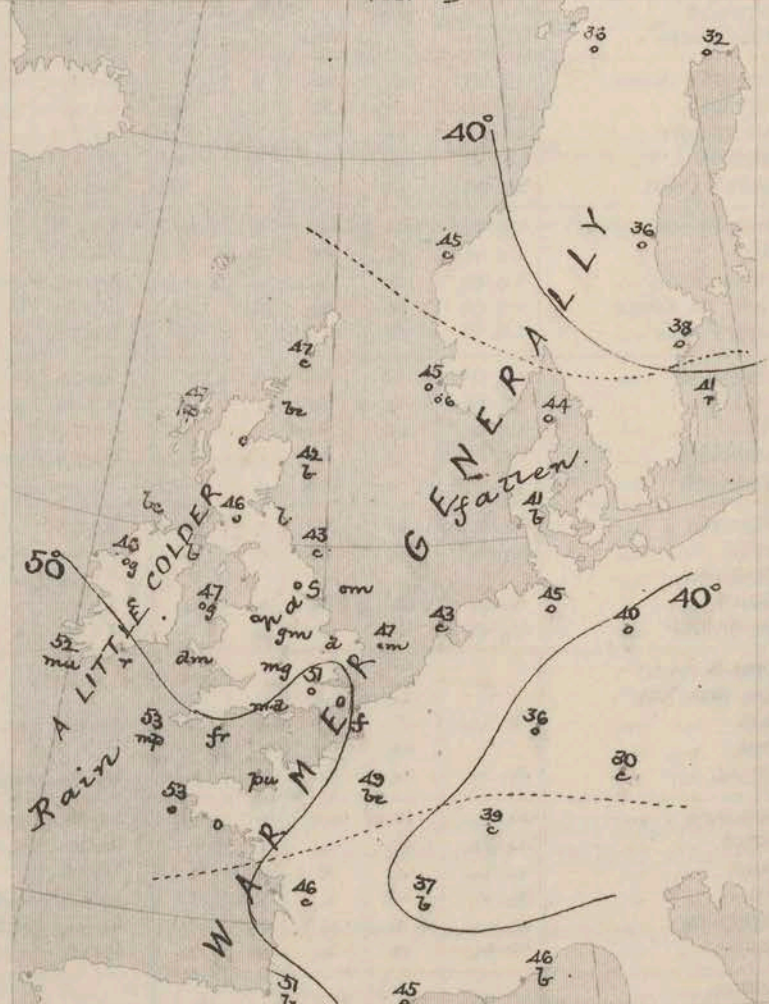
RAINFALL—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of January.)

STATIONS.	TEMPERATURE.				RAINFALL (Inches.)
	Daily Max.	Daily Min.	at 8 a.m. Dry.	Wet.	
Sumburgh Head	42.9	35.4	39.4	38.2	3.06
Stornoway	43.0	34.2	39.0	37.8	5.17
Wick	42.2	33.2	37.9	36.4	1.97
Nairn	41.0	32.7	36.6	35.0	2.02
Aberdeen	42.4	33.3	37.1	35.4	2.34
Leith	44.6	33.7	38.2	36.8	1.98
Shields	43.1	34.7	38.0	36.7	1.79
York	43.2	33.1	36.8	35.9	1.88
Loughborough	43.5	32.9	36.5	35.5	2.08
Ardrossan	44.4	36.4	39.9	38.5	4.53
Donaghadee	41.4	36.3	39.9	39.1	3.03
Holyhead	45.9	39.0	41.7	40.3	3.49
Liverpool	43.9	35.6	38.7	37.1	2.23
Parsonstown	46.0	34.6	39.0	37.9	3.09
Valencia	49.8	40.5	44.3	43.3	6.79
Roche's Point	47.9	39.7	43.2	42.0	5.03
Pembroke	45.8	39.9	42.8	41.2	3.92
Scilly	49.1	43.3	46.5	45.0	3.93
Jersey	46.0	38.7	41.7	40.4	3.24
Hurst Castle	45.3	37.0	40.4	39.7	3.10
Dover	43.7	36.6	39.4	38.2	2.68
LONDON	44.8	34.4	37.9	36.8	2.20
Oxford	43.8	34.4	37.5	36.5	2.33
Cambridge	43.9	32.6	36.5	35.7	1.57
Yarmouth	41.0	34.5	37.7	36.9	2.06

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



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30.2 in: to 30.6 in: in an anticyclone lying over Germany, France, and the southeast of England.
Lowest, 29.4 in: and less, in a depression lying off our extreme northern coasts, and travelling north-eastwards.

Gradients steep over the British Isles and North Sea

Barometer rising decidedly in the north and east, beginning to fall again in the west of Ireland.

TEMPERATURE

Highest, 53° at Lorient, Brest, and Hunt Castle, 52° at Jersey and Valencia, 51° at Biarritz and in London, 49° at Paris.

Lowest, 30° at Munich, 32° at Kaparanda, 36° at Hemsand and Thiersbaden, 41° at Terni, and 42° at Aberdeen.

It is very high for the time of year throughout our Islands and air is very damp.

WIND

S⁴ throughout Ireland, England, and the west and north of France, and also in Sweden and the south of Norway, moderate to strong in most places, a moderate gale in southwest.
N¹ and SW¹ in Scotland - moderate breeze to a moderate gale - SE¹ in the northwest of Norway.

It blew hard from S. and SW. in most places yesterday, and after moderating is apparently increasing decidedly again on our extreme west and southwest coast.

Fine over Central and southern parts of France, fair (temporarily) on the northeast coast of Great Britain.

Roll elsewhere, rainy, in many places, rainy in many places, and very unsettled generally.

A threatening appearance is reported at Valencia

WEATHER

SEA

Very much disturbed silt on our east and northeast coasts; very high at Great, high at Loviet, Pembroke and Loughborough Hds.
rough on our southern, western and northern coasts generally.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

It appears evident that a new and large disturbance is approaching Ireland, likely to produce a renewal of the southerly gales in most places. The south cone is therefore left up on our southern, western, and northern coasts.

FORECASTS

For the 24 hours ending at NOON on 7th JAN^y 1890.

DISTRICTS.FORECASTS.

रा ०	SCOTLAND NORTH
रा १	SCOTLAND EAST
२	ENGLAND N.E.
३	ENGLAND EAST
४	MIDLAND COUNTIES
रा ५	ENGLAND SOUTH

Wind backing to S^{nd} again and increasing;
very rough, unsettled and rainy.

²⁴ S: Winds, increasing greatly in force, possibly strong gales; rainy, very unsettled.

DISTRICTS.

FORECASTS

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

⁴ Sth strong gales; rainy, very squally
and rough

The SOUTH CONE is still flying in all districts excepting 2, 3 and 4.

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

YESTERDAY'S 2 P.M. REPORTS.

	BAR:	THER:		WIND		WEA.	SEA		BAR:	THER:		WIND		WEA.	SEA
		D.	W.	D.	F.					D.	W.	D.	F.		
Skudesnaes ...	29.60	43	42	SSW	8	r f	6	Holyhead ...	29.43	51	49	SSW	5	6 qm	5
Sumburgh Head								Valencia ...							
Stornoway ...	28.78	49	48	SW	8	o	6	Scilly ...							
Aberdeen ...								Jersey ...	29.89	50	49	SSE	6	o	5
Shields ...								Dungeness ...	29.56	49	48	SW	7	r	5
Ardrossan ...								London ...							*
Malin Head ...	29.04	48	45	SSW	8	bc	5	Yarmouth ...							
Mullaghmore ...								Rocheport ...	30.24	49	48	SSW	5	o	2
Belmullet ...							*								

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

*The continental information will appear
in tomorrow's Report.*

SUMMARY OF CHANGES IN THE WEATHER OVER THE BRITISH ISLANDS AND THEIR NEIGHBOURHOOD FROM THE 29TH DEC 1889 TO THE 4TH JAN 1890

During this week pressure has been highest over the southern, central or eastern part of the continent, lowest in the extreme north and northwest, and the gradients have at times been very steep over the last named regions.

The depression which reached our western coasts late on the 28th, filled up over the south of Ireland during Sunday (29th) without causing more disturbance of the weather than a good deal of rain at the Irish stations. A high-pressure area then spread northwards over England, and for a time the thermometer fell decidedly.

Another (large) depression passed by our northwestern coasts to Lapland during Tuesday and Wednesday, causing strong SW^{ly} winds and rain over the western and northern parts of the Kingdom, while fog continued to prevail over England, with low pressure over our northern countries.

Pressure then gave way decidedly all over western and central Europe, but the depression which reached our western coasts were of little size or intensity, until Saturday afternoon, when a large and deep one began to approach Ireland, and the wind at the Irish stations rose to a gale from the S^W.

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 7th JANUARY

1890.

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

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STATIONS.	YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
	BAROM. Reading at 32° F. and Sea Level.	TEMP. Dry.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Sea (0 to 4).	SHADE TEMP.				
			Dirac.	Force. (0 to 12.)		Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Dirac.	Force. (0 to 12.)		Weather.	Max.	Min.	Amount of Rainfall.	
SCANDINAVIA.																		
Haparanda ...	29.68	34	S	0	P	29.88	+0.6	26	25	-6	WSW	2	C	*	34	?	0.08	
Hernösand ...	29.82	36	S	4	C	30.01	+0.26	28	28	-8	S	0	CC	*	39	?	—	
Stockholm ...	30.08	41	W	4	C	30.22	+0.29	35	34	-3	SW	2	C	*	43	?	—	
Wisby ...	30.21	41	WSW	4	C	30.32	+0.25	37	37	-4	WSW	4	C	*	43	34	0.04	
Bodö ...	29.67	52	E	4	CC	29.66	+0.15	42	40	+6	SE	2	P	1	?	30	0.08	
SCANDINAVIA.																		
Christiansund ...	29.75	44	SW	4	C	29.75	+0.33	48	43	+3	SW	3	C	4	48	?	—	
Skudesnaes ...	30.06	44	SE	8	O	29.54	+0.23	45	44	0	SE	8	P	6	45	43	0.20	
Christiania Fjord (Færder)	30.11	41	SW	5	C	30.09	+0.36	40	40	-2	S	3	F	4	?	39	0.04	
Skagen (The Seaw)	30.26	40	SW	5	C	30.15	+0.29	46	46	+2	W	6	O	5	46	39	0.04	
Fanø ...	30.32	41	S	4	T	30.32	+0.26	42	42	+1	SW	4	O	*	43	37	0.12	
SCANDINAVIA.																		
Sumburgh Head	29.58	46	S	6	CC	29.50	+0.12	49	48	+2	S	4	O	6	49	46	0.03	
Stornoway ...	29.49	51	SW	7	O	29.49	+0.01	49	48	+2	SW	4	P	4	51	44	0.15	
Wick ...	29.56	46	S	5	CC	29.56	-0.05	48	47	+5	SW	2	O	2	49	40	0.05	
Nairn ...	29.64	52	SW	3	O	29.54	-0.06	53	52	+8	WSW	4	P	3	54	41	0.03	
Aberdeen ...	29.77	46	S	5	CC	29.68	-0.07	51	49	+9	S	5	CCW	5	52	42	0.01	
SCANDINAVIA.																		
Leith ...	29.80	51	WSW	4	P	29.73	-0.13	53	51	+7	WSW	5	P	*	55	41	0.04	
Shields ...	29.93	49	S	3	M	29.95	-0.04	54	50	+11	SW	5	O	2	55	42	—	
Spurn Head ...	30.05	51	SW	6	C	30.18	+0.04	50	48	+6	SW	6	CC	4	52	42	—	
York ...	30.02	54	S	2	O	30.11	+0.01	53	49	+10	S	3	O	*	56	40	—	
Loughborough	30.12	55	SW	5	C	30.20	+0.05	53	50	+8	SW	6	C	*	56	44	0.04	
SCANDINAVIA.																		
Ardrossan ...	29.78	49	S	3	OM	29.75	-0.05	47	46	+1	SW	5	P	5	51	45	0.28	
Malin Head ...	29.62	50	S	6	O	29.65	-0.01	46	44	+3	SW	5	CC	3	52	42	1.04	
Mullaghmore ...	29.67	53	SW	6	CM	29.75	+0.05	47	45	+1	SW	5	OP	5	54	46	0.21	
Belmullet ...	29.64	50	S	6	O	29.72	+0.12	49	47	0	WSW	6	CC	*	53	44	0.45	
Donaghadee ...	29.80	50	SW	4	C	29.80	-0.08	49	49	+5	SW	6	CCP	4	51	43	0.15	
SCANDINAVIA.																		
Liverpool (Bidston)	29.98	55	SW	4	O	30.05	0.0	54	50	+10	SW	5	O	4	56	44	0.02	
Holyhead ...	29.92	51	SW	6	TM	29.97	-0.01	51	50	+4	S	8	TM	6	52	46	0.26	
Parsonstown ...	29.78	52	SE	2	O	29.86	+0.05	47	46	+3	SW	2	O	5	56	43	0.46	
Valencia ...	29.75	54	S	8	OM	29.89	+0.16	48	46	-4	SW	6	OP	6	54	46	0.81	
Roche's Point...	29.87	51	SW	6	O	29.99	+0.15	49	47	-1	WSW	3	C	5	52	47	0.75	
SCANDINAVIA.																		
Pembroke (St. Ann's Hd.)	30.02	52	S	6	P	30.07	+0.07	51	51	+2	SW	7	TCM	8	52	49	0.10	
Scilly ...	30.10	53	S	7	OP	30.18	+0.16	53	52	0	SW	7	OPDM	7	55	52	0.02	
Prawle Point ...	30.28	53	SW	7	O	30.32	+0.18	50	50	0	SW	6	CCM	5	52	49	0.04	
Jersey (St. Aubin's)	30.42	52	S	5	OP	30.48	+0.16	47	46	-5	SE	5	CCM	5	54	46	0.01	
Hurst Castle ...	30.32	53	SW	8	MD	30.37	+0.15	50	48	-3	SW	6	CC	5	54	48	0.07	
SCANDINAVIA.																		
Dungeness ...	30.34	51	SW	6	C	30.43	+0.17	48	47	-2	SW	6	C	4	51	48	0.02	
London ...	30.30	54	S	5	OP	30.37	+0.14	48	46	-3	S	3	CC	*	56	48	0.09	
Oxford ...	30.26	53	SW	6	P	30.32	+0.13	50	48	+1	S	3	C	*	54	48	0.14	
Cambridge ...	30.24	51	S	2	CC	30.33	+0.11	50	48	+3	S	3	C	*	58	45	0.12	
Yarmouth ...	30.24	49	SW	4	CM	30.32	+0.10	47	46	0	SW	4	CC	3	52	41	0.10	
SCANDINAVIA.																		
Cuxhaven ...	30.42	44	SW	4	F	30.46	+0.2	46	45	+1	SW	4	CC	*	47	44	0.02	
Berlin ...	30.60	42	SW	3	O	30.61	+0.21	42	41	+2	SW	2	O	*	45	39	—	
Wiesbaden ...	30.69	41	S	2	O	30.69	+0.17	33	32	-3	S	0	F	*	41	32	—	
Munich ...	30.75	31	SW	1	C	30.75	+0.10	27	26	-3	E	4	C	*	46	26	—	
The Helder ...	30.36	46	SW	4	C	30.44	+0.19	44	43	+1	SW	4	CC	3	48	43	0.08	
SCANDINAVIA.																		
Brussels (9 a.m.)	*	*	SW	6	O	30.57	?	45	43	?	S	2	C	*	52	45	0.20	
Cape Gris Nez	*	47	SW	6	O	?	?	49	46	+2	SW	5	C	5	50	45	0.08	
Paris ...	30.58	50	SE	2	CC	30.58	+0.12	38	37	-11	SE	2	C	*	?	36	—	
Brest ...	?	54	WSW	8	O	?	?	52	51	-1	SW	7	C	7	55	43	0.04	
Lorient ...	30.46	53	SW	5	C	30.45	+0.11	48	48	-5	NE	3	C	6	54	46	—	
SCANDINAVIA.																		
Rochefort ...	30.59	48	SE	3	C	30.56	+0.04	41	41	-5	SE	3	C	2	54	36	—	
Belfort ...	30.69	51	E	1	C	30.71	+0.06	35	34	-2	SW	1	C	*	53	33	—	
Lyons ...	30.65	48	E	2	C	30.66	+0.06	48	39	+2	SE	2	C	1	57	45	—	
Nice ...	30.65	52	S	0	O	30.67	+0.06	45	43	0	SW	1	O	*	55	41	—	
Perpignan ...	30.53	55	SE	3	C	30.51	+0.03	50	46	-1	S	3	C	5	61	43	—	
Biarritz ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
SCANDINAVIA.																		
Corunna ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
Lisbon ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	

BRITISH ISLANDS.

GERMANY & HOLLAND.

FRANCE AND BELGIUM.

PENIN- SULA.

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

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

WEATHER CHARTS

for 8 a.m. on

Tuesday, 7th January,

1890.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP

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

Changes since previous morning are stated in words.

WIND—Arrows show the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—
 — forces above 10; — forces 8 to 10;
 — forces 5 to 7; — forces 1 to 4.
 ☉ = dead calm.

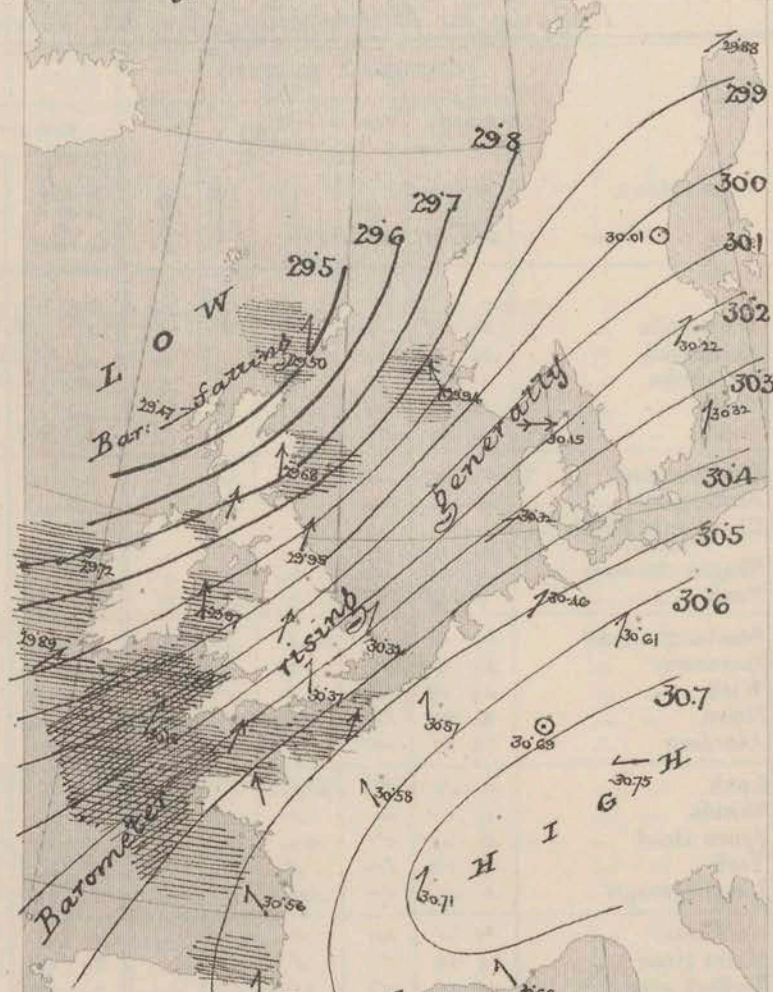
SEA DISTURBANCE—Where considerable, is shown thus:

— Rough. — High.

MEAN HEIGHT OF THE BAROMETER

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

STATIONS.	MEAN READINGS.
Sumburgh Head	29.685
Stornoway	29.687
Wick	29.725
Nairn	29.753
Aberdeen	29.790
Leith	29.829
Shields	29.886
York	29.935
Loughborough	29.967
Ardrossan	29.840
Donaghadee	29.851
Holyhead	29.896
Liverpool	29.922
Parsonstown	29.886
Valencia	29.860
Roshe's Point	29.894
Pembroke	29.926
Scilly	29.960
Jersey	30.010
Hurst Castle	29.997
Dover	30.017
LONDON	30.007
Oxford	29.997
Cambridge	29.992
Yarmouth	29.981



TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

TEMPERATURE—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

WEATHER is shown by Letters of the Beaufort Scale.

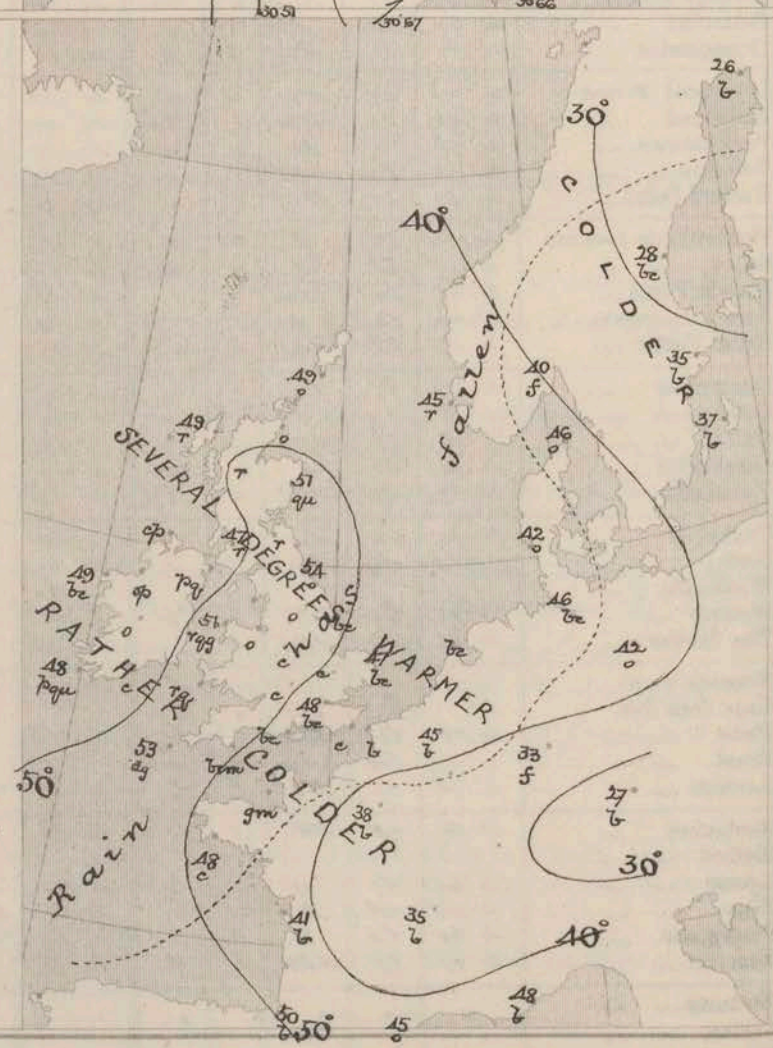
RAINFALL—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of January.)

STATIONS.	TEMPERATURE.				RAINFALL (Inches.)
	Daily Max.	Daily Min.	Dry.	Wet.	
Sumburgh Head.....	42.9	35.4	39.4	38.2	3.65
Stornoway	43.0	34.2	39.0	37.8	5.17
Wick	42.2	33.2	37.9	36.4	1.97
Nairn	41.9	32.7	36.6	35.0	2.02
Aberdeen	42.4	33.3	37.1	35.4	2.34
Leith	44.6	33.7	38.2	36.8	1.98
Shields	43.1	34.7	38.0	36.7	1.79
York	43.2	33.1	36.8	35.9	1.88
Loughborough	43.5	32.9	36.5	35.5	2.08
Ardrossan	44.4	36.4	39.8	38.5	4.53
Donaghadee	44.4	36.3	39.9	39.1	3.03
Holyhead	45.9	39.0	41.7	40.3	3.49
Liverpool	43.9	35.0	38.7	37.1	2.23
Parsonstown	46.0	34.6	39.0	37.9	3.09
Valencia	49.8	40.5	44.3	43.3	6.79
Roshe's Point	47.9	39.7	43.2	42.0	5.03
Pembroke	45.8	39.9	42.8	41.2	3.92
Scilly	49.1	43.3	46.5	45.0	3.93
Jersey	46.0	38.7	41.7	40.4	3.24
Hurst Castle	45.3	37.0	40.4	39.7	3.10
Dover	43.7	36.6	39.4	38.2	2.68
LONDON	44.8	34.4	37.9	36.8	2.20
Oxford	43.8	34.4	37.5	36.5	2.33
Cambridge	43.9	32.0	36.5	35.7	1.57
Yarmouth	41.9	34.5	37.7	36.9	2.06

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



GENERAL SITUATION AT 8 A.M.

PRESSURE	<p>Highest, 30.50 in: to 30.75 in: over Germany and France.</p> <p>Lowest, 29.5 in: and less, in a large low pressure area lying to the northward of Scotland and travelling northwards.</p> <p>Gradients somewhat steep generally, except over France and Germany.</p> <p>Barometer falling in the north of Scotland and in the southwest of France, rising over Ireland and England.</p>
TEMPERATURE	<p>Highest, 54° at Shields and Liverpool, 53° at Nairn, Leith, York and Loughborough, 50° at Cambridge, Oxford, Tralee Point, and Kinsale, 48° at Balmalcolm.</p> <p>Lowest, (1) 26° at Haparanda, 28° at Helsingfors, 35° at Stockholm; (2) 27° at Munich, 33° at Wiesbaden, 35° at Lyons.</p> <p>The daily maximum over England and Ireland yesterday were as high as 51° to 56°.</p>
WIND	<p>S⁴ and SW⁴ over the whole of Western Europe — fresh or strong in our Islands and in the west of Norway, moderate or light in France and on the eastern shores of the North Sea.</p> <p>In South Germany and the south of France the wind is E⁴, moderate.</p>
WEATHER	<p>Varies greatly. Fine and bright over France, Holland and Sweden, and (temporarily) in several parts of the United Kingdom.</p> <p>Cloudy, squally, and showery in many other parts of our Islands; appearance of sky changeable and showerlike.</p> <p>Rainfall was heavy in Ireland yesterday, less so over Great Britain.</p>
SEA	<p>Still moderate or slight in the northeast and east, rough elsewhere, and very high on our southwest coast.</p>

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

There is no indication of the advance of any important depression at present.

FORECASTS

For the 24 hours ending at NOON on 8TH JAN^Y 1890.

DISTRICTS.	FORECASTS.	DISTRICTS.	FORECASTS
0 SCOTLAND NORTH	SW ⁴ breezes, fresh or strong; squally, showery, mild.	6 SCOTLAND WEST	SW ⁴ breezes, strong; squally, showery, mild.
1 SCOTLAND EAST		7 ENGLAND N.W.	
2 ENGLAND N.E.	S ⁴ and SW ⁴ winds, fresh or strong; mild, some showers, bright intervals.	8 ENGLAND S.W.	
3 ENGLAND EAST		9 IRELAND NORTH	
4 MIDLAND COUNTIES		0 IRELAND SOUTH	
5 ENGLAND SOUTH			
		WARNINGS	The SOUTH CONE has been lowered this morning in the extreme west.

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

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

YESTERDAY'S 2 P.M. REPORTS.

THER: WIND								THER: WIND							
BAR:		D.	W.	D.	F.	WEA.	SEA	BAR:		D.	W.	D.	F.	WEA.	SEA
Skudesnaes ...	29.96	45	43	WSW	4	0	6	Holyhead ...	29.90	50	49	S	5	odg	5
Sumburgh Head	29.62	46	44	SSW	3	0	6	Valencia ...	29.74	54	53	S	7	om	6
Stornoway ...	29.45	45	45	SW	7	7	6	Scilly ...	30.07	54	53	SSW	7	om	7
Aberdeen ...	29.78	45	42	S	4	Cq	4	Jersey ...	30.35	54	53	S	5	ogm	5
Shields ...	29.96	48	45	S	3	m	2	Dungeness ...	30.29	51	51	SW	5	C	4
Ardrossan ...	29.76	48	48	S	3	om	2	London ...	30.25	56	54	SSW	4	0	*
Malin Head ...	29.33	50	48	S	8	0	5	Yarmouth ...	30.21	46	46	SSW	4	ofd	4
Mullaghmore ...	29.64	53	50	S	7	omg	6	Rochefort ...	30.56	53	50	SE	4	bc	2
Belmullet ...	29.60	51	51	SSW	6	0	*								

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

Weather fine over Southwestern, Southern, Central, and Eastern Europe, but hazy in several places; temporarily bright over some parts of the British Islands also, cloudy, squally, and showery elsewhere, and very unsettled over the Northwestern countries generally. Heavy rain in Ireland later, and smaller quantities over France, the Netherlands, Denmark and Northern Europe.

Temperature very high for the time of year over the Western and Northwestern countries, still freezing in the east and southeast. Lowest morning values 6° at Hermannstadt, 17° at Cracow and Lemberg, and 23° at Warsaw and Moscow; highest 51° to 53° over the southern parts of the Mediterranean, 57° at Corunna and Bilbao, 53° at Lorient, Scilly, and Hurst Castle, 52° at Jersey and Valencia, 51° in London, and 47° as far north as Sumburgh Head. Daily maxima as high as 54° to 61° in the west of France and 51° to 58° over Ireland and England. Frost over Germany at night.

Wind light from the E. on the northern side of the Mediterranean, and from the NE. in Spain, very light and variable over Central, Southern and Eastern Europe, S. and SW. over all the more northern countries, and fresh to a gale in force. Fresh S. gales experienced at several western stations later, and strong equally breezy in many other places.

Barometer highest, 30.6 ins. and more, over all the Southwestern, Southern, and Southeastern parts of the Continent; lowest, 29.4 ins. and less, over the Shetland Islands and off the west of Norway, and 29.7 ins. and less off the west of Ireland; gradient moderately steep over all the eastern and northern countries. Slight secondary disturbances skirting the coast of our Islands later, but barometer rising in most other places.

SUMMARY OF CHANGES IN THE WEATHER OVER NORTH WESTERN EUROPE FOR 24 HOURS ENDING MONDAY 6TH JANUARY 1890.

Weather fine as a whole over E., SE., central and S. Europe as well as at many of the Mediterranean stations, dull elsewhere very rough, stormy and wet over the British Islands, as a whole, though clear temporarily at 8 a.m. in several parts of Scotland. Continuing rough, squally and rainy over the United Kingdom for some hours, but tending to improve towards night in many places.

Temperature continuing below the freezing point over Russia, southeastern and central Europe, lowest morning readings being 9° at Hermannstadt, 16° at Kharkov, 20° at Cracow, and 22° at Lemberg. High over the British Islands and on the Atlantic coasts of Europe generally, highest morning values 57° at Corunna, 53° at Bilbao and Valencia, 52° at Scilly, and 50° to 51° at many other stations in the southwest of our Islands and Brittany. Rising to above 50° in nearly all parts of the United Kingdom during the day, to 56° at Hurst Castle and to 54° at Pwll Point.

Wind blowing a gale from between S. and SW. over the United Kingdom and on coasts of Brittany, less strong in other parts of Western Europe. Light S. and SW. over Ireland, the Gulf of Bothnia, the Baltic, Germany and north of France, E. in the south of France, light and variable elsewhere. Wind veering to SW. over British Islands later, and gale moderating in many places but spreading further northward.

Barometer highest, 30.2 inches to 30.6 inches and more in very large high pressure system covering all the southeastern half of Europe; highest of all 30.64 inches at Odena; lowest 29.0 inches to 29.7 inches and less in deep depression lying off the northwest of the British Islands. Gradients steep over the United Kingdom and North Sea. Depression moving northeastwards later and brisk recovery of pressure commencing in British 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 *Wednesday, 8th January, 1890.*
Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.

Issued by the Meteorological Office, 65, Victoria Street, London. R. H. SCOTT, Secretary.																		
STATIONS.	YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
	BAROM.	TEMP.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Weather.	Sea. (0 to 9.)	SHADE TEMP.		Amount of Rainfall.	
	Reading at 32° F. and Sea Level.	Dry.	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 ...	29.80	33	SW	2	0	29.44	- .44	34	34	+ 8	SW	4	r	*	37	23	0.32	
Hernösand ...	29.82	36	S	6	0	29.86	- .15	36	35	+ 8	Z	0	b	*	41	27	-	
Stockholm ...	30.13	43	SW	2	0	30.12	- .10	45	43	+ 10	W	4	0	*	45	34	-	
Wisby ...	30.25	44	WSW	4	c	30.26	- .06	42	41	+ 5	WSW	4	0	*	45	36	0.04	
Bodö ...	29.40	45	E	4	r	29.40	- .26	41	39	- 1	SW	4	0	3	45	39	0.24	
BRITISH ISLANDS.																		
Christiansund	29.59	46	SW	9	r	29.66	- .09	46	41	- 2	SW	5	c	5	48	45	0.32	
Skudesnaes ...	30.02	45	S	6	0	30.12	+ .10	44	43	- 1	S	6	0	6	46	43	-	
Christiania Fjord (Færder)	30.02	42	SSW	6	0	30.12	+ .03	40	40	0	SW	6	b	4	43	39	-	
Skagen (The Seaw)	30.16	45	WSW	3	bc	30.22	+ .07	42	42	- 4	WSW	2	b	3	48	?	-	
Fanö ...	30.33	40	WSW	4	c	30.34	+ .02	40	40	- 2	WSW	3	f	2	45	37	-	
Sumburgh Head	29.66	46	WSW	4	b	29.82	+ .32	46	44	- 3	SW	4	c	6	50	45	0.03	
Stornoway ...	29.61	49	SW	6	0	29.82	+ .35	43	43	- 6	SW	4	r	5	49	42	0.15	
Wick ...	29.72	46	W	5	b	29.93	+ .37	42	41	- 6	W	2	b	1	49	39	-	
Nairn ...	29.83	45	SW	4	r	29.91	+ .37	40	38	- 13	Z	0	b	1	53	39	0.13	
Aberdeen ...	29.91	46	SSW	4	bq	30.02	+ .34	43	41	- 8	S	2	bc	3	53	43	-	
Leith ...	30.00	49	WSW	4	bc	30.02	+ .29	47	43	- 6	SW	2	b	*	55	39	0.01	
Shields ...	30.08	51	SW	4	c	30.12	+ .17	45	43	- 9	Z	0	m	2	56	42	-	
Spurn Head ...	30.22	47	SSW	4	c	30.22	+ .04	44	43	- 6	S	3	bc	3	52	43	-	
York ...	30.19	53	SSW	2	0	30.18	+ .07	47	46	- 6	SSE	1	bc	*	54	43	-	
Loughborough	30.26	52	SW	3	0	30.22	+ .02	47	47	- 6	SE	2	bw	*	54	44	-	
Ardrossan ...	29.97	48	SW	3	b	29.99	+ .24	47	46	0	SSE	4	0	3	48	46	-	
Malin Head ...	29.84	43	SSW	6	bq	29.77	+ .12	48	43	- 1	SSE	4	0	3	47	41	0.08	
Mullaghmore ...	29.89	47	SSW	6	b	29.69	- .06	48	45	+ 1	SSE	7	cgm	6	49	42	0.22	
Belmullet ...	29.89	48	SW	7	b	29.86	- .16	47	46	- 2	SW	6	0	*	49	45	0.33	
Donaghadee ...	30.02	47	SW	3	b	29.92	+ .12	49	48	0	SW	5	c	3	51	47	0.01	
Liverpool (Bidston)	30.19	51	S	2	0	30.09	+ .04	48	46	- 6	SE	3	c	3	55	44	-	
Holyhead ...	30.15	49	SSW	4	c	30.00	+ .03	49	48	- 2	SSE	6	cgm	5	51	47	0.05	
Parsonstown ...	30.04	45	Z	0	b	29.74	- .12	49	47	+ 2	SE	3	c	*	51	43	0.01	
Valencia ...	30.03	52	S	6	cu	29.59	- .30	51	48	+ 3	SSE	6	omu	6	52	46	0.29	
Roche's Point...	30.11	50	WSW	4	b	29.77	- .22	51	48	+ 2	SSW	7	c	5	51	48	0.10	
Pembroke (St. Ann's Hd.)	30.22	50	SSW	4	0	30.01	- .06	50	50	- 1	S	6	cq	7	51	49	0.03	
Scilly ...	30.23	51	SSW	5	om	30.03	- .15	52	51	- 1	SSW	8	ogm	7	53	50	0.02	
Prawle Point...	30.35	51	SSW	4	0	30.22	- .10	51	50	+ 1	S	5	cmu	4	52	49	0.01	
Jersey (St. Aubin's)	30.46	50	SSE	4	c	30.35	- .10	47	46	0	SE	4	bcm	4	50	40	-	
Hurst Castle ...	30.37	52	SSW	6	c	30.29	- .08	49	48	- 1	SSW	6	c	5	52	48	-	
Dungeness ...	30.39	49	SW	4	b	30.34	- .09	47	46	- 1	SW	4	m	3	51	46	-	
London ...	30.39	51	SW	3	0	30.31	- .06	49	48	+ 1	S	2	0	*	57	48	-	
Oxford ...	30.35	51	S	4	0	30.26	- .06	49	48	- 1	S	2	op	*	54	48	0.01	
Cambridge ...	30.34	50	S	2	0	30.28	- .05	49	48	- 1	S	1	0	*	57	48	-	
Yarmouth ...	30.33	49	SW	3	bc	30.31	- .01	43	43	- 4	SSW	3	f	3	50	42	0.01	
Cuxhaven ...	30.49	44	SW	3	bc	30.44	- .02	38	38	- 8	SW	4	b	*	48	38	-	
Berlin ...	30.60	41	SSE	2	b	30.52	- .09	37	36	- 5	SSW	2	b	*	48	36	-	
Wiesbaden ...	30.55	32	SW	1	b	30.55	- .14	28	27	- 5	Z	0	b	*	37	27	-	
Munich ...	30.67	32	SW	1	b	30.58	- .17	24	23	- 3	SE	3	b	*	41	?	-	
The Helder ...	30.42	46	SSW	2	bc	30.38	- .06	42	41	- 2	S	1	c	*	48	41	-	
FRANCE AND BELGIUM.																		
Brussels (9 a.m.)	?	?	?	?	?	30.44	- .13	40	38	- 5	SSW	1	b	*	55	39	-	
Cape Gris Nez	?	?	?	?	?	?	?	41	40	- 8	SSW	3	b	3	50	41	-	
Paris ...	30.54	43	S	1	b	30.47	- .11	32	32	- 6	SSE	1	b	*	?	31	-	
Brest ...	?	53	W	2	0	?	?	32	31	0	SW	8	c	*	55	43	0.04	
Lorient ...	30.47	51	SSW	3	0	30.36	- .09	50	49	+ 2	S	3	0	6	54	48	-	
Rocheport ...	30.58	46	SSE	1	b	30.47	- .09	39	39	- 2	S	1	m	2	52	32	-	
Belfort ...	30.58	31	NW	1	b	30.53	- .13	28	22	- 3	SSE	1	b	*	52	24	-	
Lyons ...	30.66	42	W	1	b	30.58	- .13	32	32	- 3	ESE	1	b	*	50	32	-	
Nice ...	30.61	50	SE	2	b	30.53	- .13	46	37	- 2	C	4	b	*	59	43	-	
Perpignan ...	30.63	48	Z	0	b	30.51	- .16	35	34	- 10	SW	2	b	*	55	34	-	
Biarritz ...	30.50	51	E	3	b	30.39	- .12	46	46	- 4	Z	0	b	5	59	41	0.24	
Corunna ...	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	
Lisbon ...	30.49	53	N	2	c	30.51	?	43	42	?	NNE	3	b	6	57	43	-	

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

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

WEATHER CHARTS

for 8 a.m. on Wednesday, 8th January, 1890.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP

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

Changes since previous morning are stated in words.

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

— = forces above 10; — = forces 8 to 10;

— = forces 5 to 7; — = forces 1 to 4.

⊙ = dead calm.

SEA DISTURBANCE—Where considerable, is shown thus:

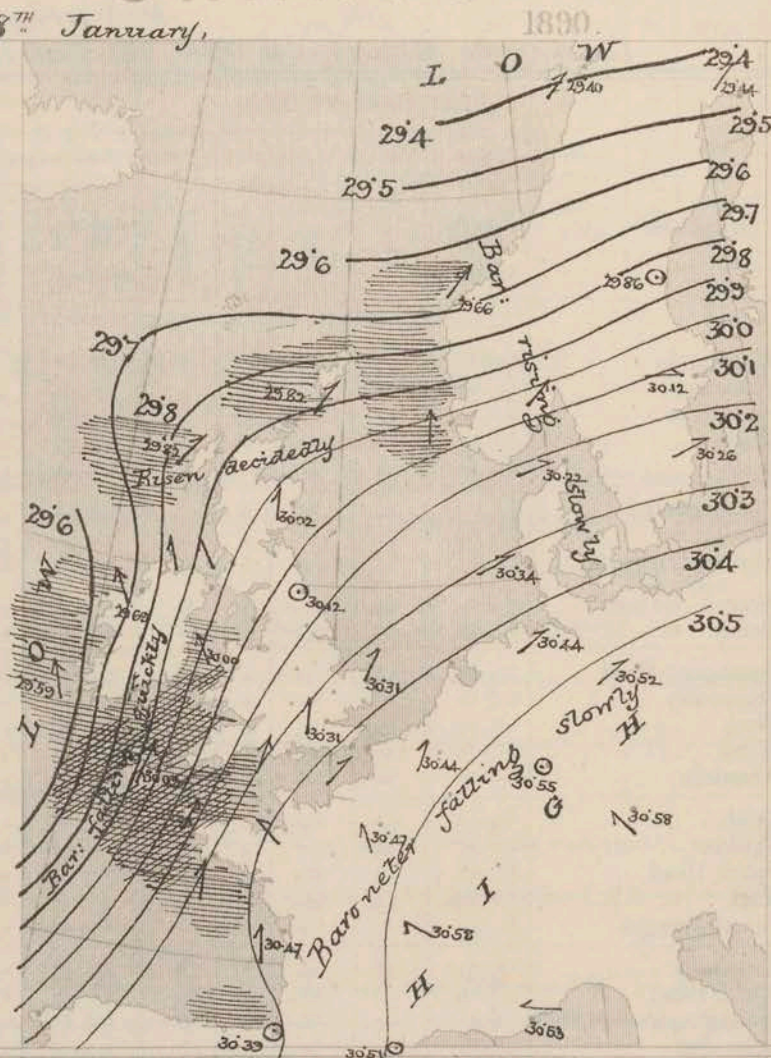
— = Rough. — = High.

MEAN HEIGHT OF THE BAROMETER

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

During the 15 Years: 1871–1885.

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



TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

TEMPERATURE—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

WEATHER—is shown by letters of the Beaufort Scale.

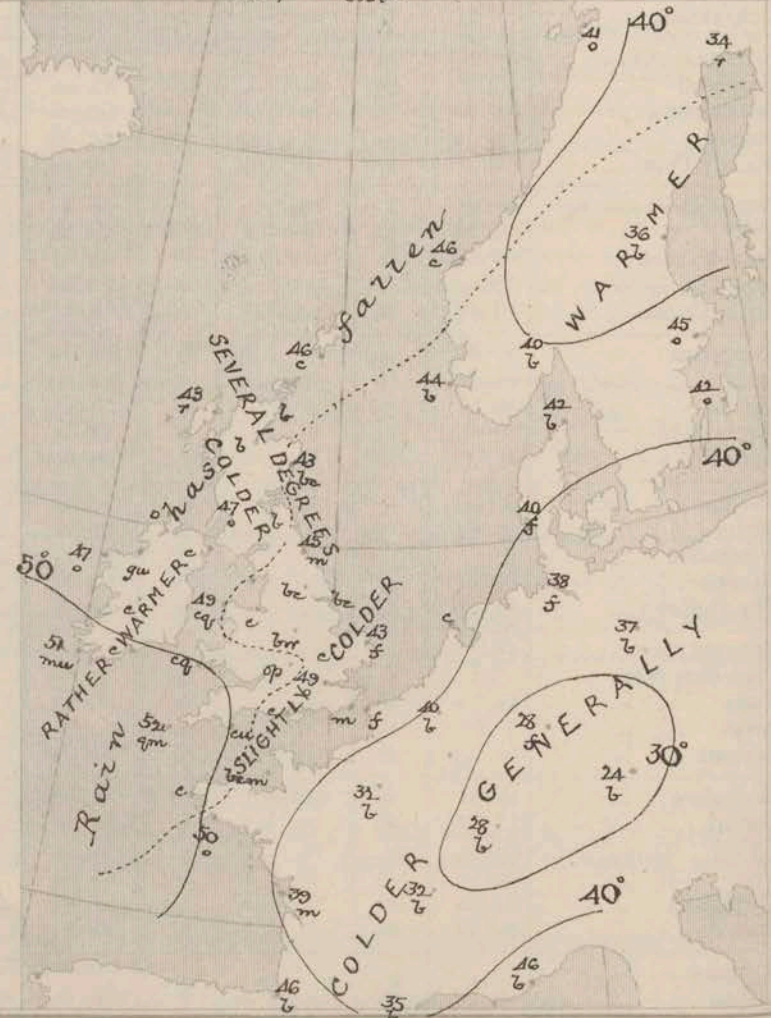
RAINFALL—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of January.)

STATIONS.	TEMPERATURE.				RAINFALL. (Inches.)
	Daily Max.	Daily Min.	at 8 a.m.		
			Dry.	Wet.	
Sumburgh Head.....	42.9	35.4	39.4	38.2	3.66
Stornoway.....	43.0	34.2	39.0	37.8	5.17
Wick.....	42.2	33.2	37.9	36.4	1.97
Nairn.....	41.9	32.7	36.6	35.0	2.02
Aberdeen.....	42.4	33.3	37.1	35.4	2.34
Leith.....	44.0	33.7	38.2	36.8	1.98
Shields.....	43.1	34.7	38.0	36.7	1.79
York.....	43.2	33.1	36.8	35.9	1.88
Loughborough.....	43.5	32.9	36.5	35.5	2.08
Ardrossan.....	44.4	35.4	39.8	38.5	4.53
Donaghadee.....	44.4	36.3	39.9	39.1	3.03
Holyhead.....	45.9	39.0	41.7	40.3	3.40
Liverpool.....	43.9	35.0	38.7	37.1	2.23
Parsonstown.....	46.0	34.6	39.0	37.9	3.09
Valencia.....	49.8	40.5	44.3	43.3	6.79
Roche's Point.....	47.9	39.7	43.2	42.0	5.03
Pembroke.....	45.8	39.9	42.8	41.2	3.92
Silly.....	49.1	43.3	46.5	45.0	3.93
Jersey.....	46.0	38.7	41.7	40.4	3.24
Hurst Castle.....	45.3	37.0	40.4	39.7	3.10
Dover.....	49.7	36.6	39.4	38.2	2.68
LONDON.....	44.8	34.4	37.9	36.8	2.20
Oxford.....	43.8	34.4	37.5	36.5	2.33
Cambridge.....	43.9	32.6	36.5	35.7	1.57
Yarmouth.....	41.9	34.5	37.7	36.9	2.06

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



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30.4 in. to nearly 30.6 in. in a high pressure area over France and Germany.
Lowest, 29.4 in. and less over Lapland — 29.6 in. and less, in a new depression off the west of Ireland.
Gradient steep for S winds in the west, moderate for W winds over Scandinavia.
Barometer falling fast in the west, rising in Scotland, almost steady on our east coast.

TEMPERATURE

Highest, 52° at Seilly, 51° at Howle Point, Rocher Point and Valencia, 50° at Lorient and Alesbroke, 49° in London, and at Oxford and Paris.
Lowest, 24° at Munich, 28° at Belfort and Wiesbaden, 32° at Paris, 34° at Haparanda, 36° at Kemijärvi and 37° at Berlin.
It had risen decidedly in Ireland, fallen fast in Scotland and moderately in London.

WIND

Light to moderate from the E. over the southern parts of France and Germany.
Moderate to fresh from S.W. to W. in Denmark, Norway and Sweden.
Mainly S. elsewhere — strong and squally on our western coasts, light to moderate in the northeast and east.

WEATHER

Fine over the Continent as a whole, and on our northeast and east coasts.
Dull elsewhere, with rain at some western stations, and a threatening appearance at Valencia.
Rain has fallen generally in the west and north, and lightning occurred in the night at Wick and Malin Hd.

SEA

High in the southwest, rough at most northern and western stations, moderate in the Channel, slight on our east coast, smooth in the northeast.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The depression advancing in the west is apparently a large and deep system, and threatens to cause gales on our southwestern western, and northern coasts. Our eastern and southeastern coasts may not be so much affected.

FORECASTS

For the 24 hours ending at NOON on 9th JAN 1890.

DISTRICTS.

FORECASTS.

0	SCOTLAND NORTH	S ² winds, increasing to a gale; rainy, squally, mild.
1	SCOTLAND EAST	
2	ENGLAND N.E.	S ² winds, increasing; squally, rainy, mild.
3	ENGLAND EAST	
4	MIDLAND COUNTIES	
5	ENGLAND SOUTH	

DISTRICTS.

FORECASTS

6	SCOTLAND WEST	S ² and S.W. gales, and strong winds; very rough, squally and rainy.
7	ENGLAND N.W.	
8	ENGLAND S.W.	
9	IRELAND NORTH	
10	IRELAND SOUTH	

WARNINGS

The SOUTH CONE has been hoisted this morning in districts 0.1.6 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:	THER:		WIND		WEA.	SEA		BAR:	THER:		WIND		WEA.	SEA
		D.	W.	D.	F.					D.	W.	D.	F.		
Skudesnaes ...	29.95	46	45	S	8	O	6	Holyhead ...	30.09	51	49	SSW	5	oggm	6
Sumburgh Head ...	29.59	47	46	WSW	6	r	6	Valencia ...	30.01	51	48	SW	6	rapp	6
Stornoway ...	29.57	49	49	SW	6	c	5	Scilly ...	30.23	53	52	SSW	6	om	6
Aberdeen ...	29.82	49	45	SW	5	bg	4	Jersey ...	30.45	49	48	SSW	4	c	3
Shields ...	30.02	54	50	SSW	5	O	2	Dungeness ...	30.39	51	48	SW	6	bc	4
Ardrossan ...	29.90	48	47	SW	4	bc	3	London ...	30.36	56	52	S	3	6	*
Malin Head ...	29.77	47	45	S	6	6	3	Yarmouth ...	30.32	50	48	SSW	4	bc	3
Mullaghmore ...	29.85	48	44	SSW	6	c	5	Rochefort ...	30.56	52	49	SSW	3	6	2
Belmullet ...	29.82	49	47	SW	8	O	*								

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

Weather fair at nearly all the Continental stations, and over the eastern half of England, cloudy, squally, and changeable over the western and northern parts of the United Kingdom and Norway, showery in several places. Some rain later in last named regions, but amount not large.

Temperature continuing very high for the time of year in extreme west and northwest, and above the freezing point over France, Germany and the Baltic. Frost still holding over Russia, Austria and South Germany, and recommencing in north of Sweden; lowest morning readings, 9° at Hermannstadt, 21° at Vienna, 23° at Kharkov, 25° at Moscow, and 26° at Haparanda; highest 58° at Malta, 57° at Oran, 55° at Algiers, and 54° at Tunis, and 50° to 54° over the greater part of England. Daily maxima 50° to 57° over England and east of Scotland.

Wind extremely light and variable over eastern, southeastern, and central Europe, as well as over Spain; S⁶ to SW² over the western and northern countries, strong to a gale in many places. Wind backing in Ireland later, no other change of importance.

Barometer highest, 30.6 ins: and more, over southwestern, southern, and central Europe, and exceeding 30.8 ins: over considerable portion of Austria-Hungary; lowest, 29.5 ins: and less, in low pressure system to the northwest of the British Isles; gradient somewhat steep over United Kingdom, Channel, and North Sea, moderate or slight elsewhere. Barometer rising in west and north of our Islands later, no important change elsewhere.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

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

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

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

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

DAILY WEATHER REPORT.

for *Thursday, 9th January, 1890.*
Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.

Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.																		
STATIONS.	YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
	BAROM :	TEMP.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Sea. (0 to 4.)	SHADE TEMP.				
	Reading at 32° F. and Sea Level.	Dry.	Dir.	Force. (0 to 12.)		Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Dir.	Force. (0 to 12.)		Max.	Min.	Amount of Rainfall.		
SCANDINAVIA.																		
Haparanda ...	29.49	36	SW	4	b	29.67	+ .23	30	29	- .4	msw	4	b	*	36	30	-	
Hernösand ...	29.94	36	Z	0	c	29.88	+ .02	32	31	- .4	Z	0	0	*	46	?	-	
Stockholm ...	30.11	38	W	4	b	30.02	- .10	35	34	- .10	S	2	0	*	46	?	-	
Wisby ...	30.30	39	SW	4	b	30.08	- .18	37	36	- .5	SW	4	0	*	45	37	-	
Bodö ...	29.53	37	SW	7	r	29.69	+ .29	36	36	- .5	SW	2	0	*	41	36	0.28	
Christiansund	29.43	42	msw	5	r	29.50	- .16	42	41	- .4	E	4	r	5	?	39	1.06	
Skudesnaes ...	29.84	43	SSE	7	o	29.57	- .55	44	41	0	S	8	0	6	45	43	0.32	
Christiania Fjord (Fjærd)	30.19	40	SW	4	f	29.76	- .36	39	39	- .1	S	7	r	4	41	37	-	
Skagen (The Scaw)	30.19	41	SW	2	f	29.82	- .40	40	40	- .2	SW	5	r	4	43	37	0.08	
Fanø ...	30.21	37	S	4	f	30.02	- .32	40	39	0	SW	4	b	*	43	36	0.04	
BRITISH ISLANDS.																		
Sumburgh Head	29.74	46	SE	3	o	29.29	- .53	42	42	- .4	Z	0	0	4	47	41	0.59	
Stornoway ...	29.46	43	S	2	o	29.61	- .21	43	43	0	msw	5	r	5	46	39	1.00	
Wick ...	29.60	47	S	5	o	29.46	- .47	44	42	+ .2	msw	3	0	2	47	39	0.03	
Nairn ...	29.53	46	SW	1	c	29.59	- .32	44	43	+ .4	SSW	5	0	2	50	39	0.03	
Aberdeen ...	29.67	47	SE	6	ogqr	29.60	- .42	43	39	0	SW	4	bcq	4	47	42	0.18	
Leith ...	29.57	50	SSW	5	b	29.63	- .19	43	41	- .4	SSW	5	0	*	51	32	0.18	
Shields ...	29.75	51	S	5	c	29.93	- .19	45	41	0	SW	4	c	2	51	42	-	
Spurn Head ...	29.95	47	SSE	6	c	30.13	- .09	39	38	- .5	SSW	5	bc	4	47	37	-	
York ...	29.89	50	S	4	bc	30.08	- .10	41	38	- .6	SW	4	b	*	55	39	-	
Loughborough	29.99	50	SSW	6	c	30.19	- .03	39	38	- .8	SW	4	b	*	52	38	-	
GERMANY & HOLLAND.																		
Ardrrossan ...	29.53	48	SSE	4	qyp	29.69	- .10	45	43	- .2	msw	4	0	4	50	43	0.09	
Malin Head ...	29.46	44	SW	7	ogyp	29.83	+ .06	41	40	- .4	S	4	0	3	48	41	0.11	
Mullaghmore ...	29.67	45	msw	5	ogyp	29.83	+ .14	45	42	- .3	SSW	5	og	4	50	41	0.23	
Belmullet ...	29.74	45	W	9	op	29.75	+ .19	47	47	0	S	6	r	*	48	43	0.43	
Donaghadee ...	29.62	43	SW	4	r	29.97	+ .05	41	41	- .8	SW	4	bc	*2	51	41	0.05	
FRANCE AND BELGIUM.																		
Liverpool (Bidston)	29.84	48	SSW	6	b	30.10	+ .01	41	38	- .7	SSW	3	c	3	52	41	0.01	
Holyhead ...	29.82	46	SW	7	cqyp	30.06	+ .06	47	44	- .2	SSW	4	ogm	4	51	42	0.04	
Parsonstown ...	29.86	41	SW	1	bc	29.94	+ .20	44	42	- .5	SE	2	c	*	50	36	0.09	
Valencia ...	30.02	46	msw	5	bc	29.85	+ .26	51	50	0	SSE	7	rm	*6	51	43	0.28	
Roche's Point...	30.02	46	W	4	b	29.96	+ .19	50	49	- .1	SSW	6	r	5	52	42	-	
PORTUGAL.																		
Pembroke (St. Ann's Hd.)	30.03	48	SW	7	bc	30.10	+ .09	49	48	- .1	S	5	cu	6	51	47	0.03	
Scilly ...	30.14	49	msw	6	cq	30.10	+ .07	50	50	- .2	S	6	ogm	6	52	45	0.03	
Prawle Point ...	30.18	47	W	6	b	30.25	+ .03	48	47	- .3	S	5	cu	4	51	44	0.05	
Jersey (St. Aubin's)	30.25	49	SSW	4	opm	30.36	+ .01	46	45	- .1	SSW	5	bm	4	50	44	0.22	
Hurst Castle ...	30.17	50	SW	7	om	30.33	+ .04	49	47	0	SW	5	c	4	52	44	0.07	
SPAIN.																		
Dungeness ...	30.20	48	SW	4	c	30.32	- .02	45	43	- .2	W	3	bc	2	48	42	-	
London ...	30.16	50	SSW	4	op	30.29	- .02	39	37	- .10	S	2	b	*	51	37	0.06	
Oxford ...	30.13	47	SSW	2	c	30.27	+ .01	37	36	- .12	SW	1	b	*	51	37	0.02	
Cambridge ...	30.09	49	SW	2	o	30.27	- .01	35	34	- .14	S	1	b	*	55	33	-	
Yarmouth ...	30.14	44	SSW	4	b	30.21	- .10	38	37	- .5	msw	3	b	*3	45	36	-	
ITALY.																		
Cuxhaven ...	30.41	41	SW	3	f	30.19	- .25	38	37	0	SW	2	b	*	42	36	-	
Berlin ...	30.40	40	SSE	2	f	30.27	- .25	33	32	- .4	SSW	3	b	*	45	32	-	
Wiesbaden ...						30.46	- .09	31	30	+ .3	Z	0	f	*	32	28	-	
Munich ...	30.45	30	*Z	*0	*m	30.48	- .10	26	25	+ .2	SW	3	b	*	41	?	-	
The Helder ...	30.21	38	S	2	b	30.22	- .16	42	40	0	SW	2	b	*?	?	?	-	
NETHERLANDS.																		
Brussels (9 a.m.)						30.39	- .05	41	41	+ .1	SSW	2	f	*	50	40	-	
Cape Gris Nez		45	*SW	*4	*c	?	?	44	42	+ .3	W	3	b	*3	50	41	-	
Paris ...	30.39	36	SW	1	b	30.46	- .01	39	39	+ .7	SSW	1	0	*	46	?	-	
Brest ...	?	50	W	2	b	?	?	51	49	- .1	SSW	6	0	*1	54	41	0.08	
Lorient ...	30.28	50	msw	5	b	30.38	+ .02	48	47	- .2	S	3	c	6	52	45	0.08	
FRANCE AND BELGIUM.																		
Rochefort ...	30.43	47	S	3	b	30.52	+ .05	43	43	+ .4	SSE	3	c	1	55	32	0.12	
Belfort ...	30.38	36	N	1	b	30.46	- .07	28	22	0	W	1	b	*	51	24	-	
Lyons ...	30.46	43	SW	1	b	30.54	- .04	36	32	+ .4	W	1	b	*	51	31	-	
Nice ...	30.46	48	E	4	b	30.37	- .16	46	37	0	E	4	b	*1	59	45	-	
Perpignan ...	30.46	45	Z	0	b	30.46	- .05	36	34	+ .1	SW	1	b	*	53	32	-	
Biarritz ...	30.45	52	WNW	3	b	30.49	+ .10	47	44	+ .1	SW	1	b	*	57	43	-	
PORTUGAL.																		
Coruana ...	*	*	*	*	*													
Lisbon ...	*	*	*	*	*													

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

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

WEATHER CHARTS

for 8 a.m. on

Thursday, 9th January,

1890.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP

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

Changes since previous morning are stated in words.

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

their horbs and feathers refer to force thus—

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

→ = forces 5 to 7; → = forces 1 to 4.

⊙ = dead calm.

SEA DISTURBANCE—Where considerable, is shown thus:

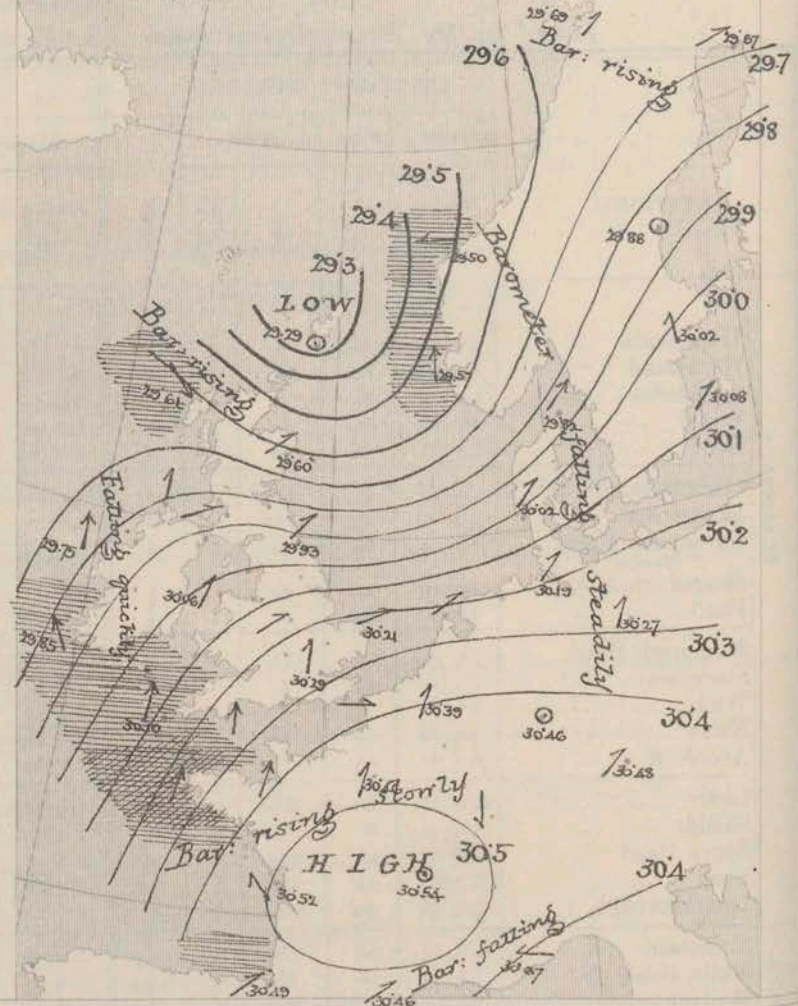
⊞ = Rough. ⊞ = High.

MEAN HEIGHT OF THE BAROMETER

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

During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS.
Sumburgh Head	29.685
Stornoway	29.687
Wick	29.725
Nairn	29.753
Aberdeen	29.790
Leith	29.829
Shields	29.886
York	29.935
Loughborough	29.967
Ardrossan	29.840
Donaghadee	29.851
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Liverpool	29.922
Parsonstown	29.886
Valencia	29.869
Roshe's Point	29.894
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Sailly	29.960
Jersey	30.010
Hurst Castle	29.997
Dover	30.017
LONDON	30.007
Oxford	29.997
Cambridge	29.992
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TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

TEMPERATURE—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

WEATHER—is shown by Letters of the Beaufort Scale.

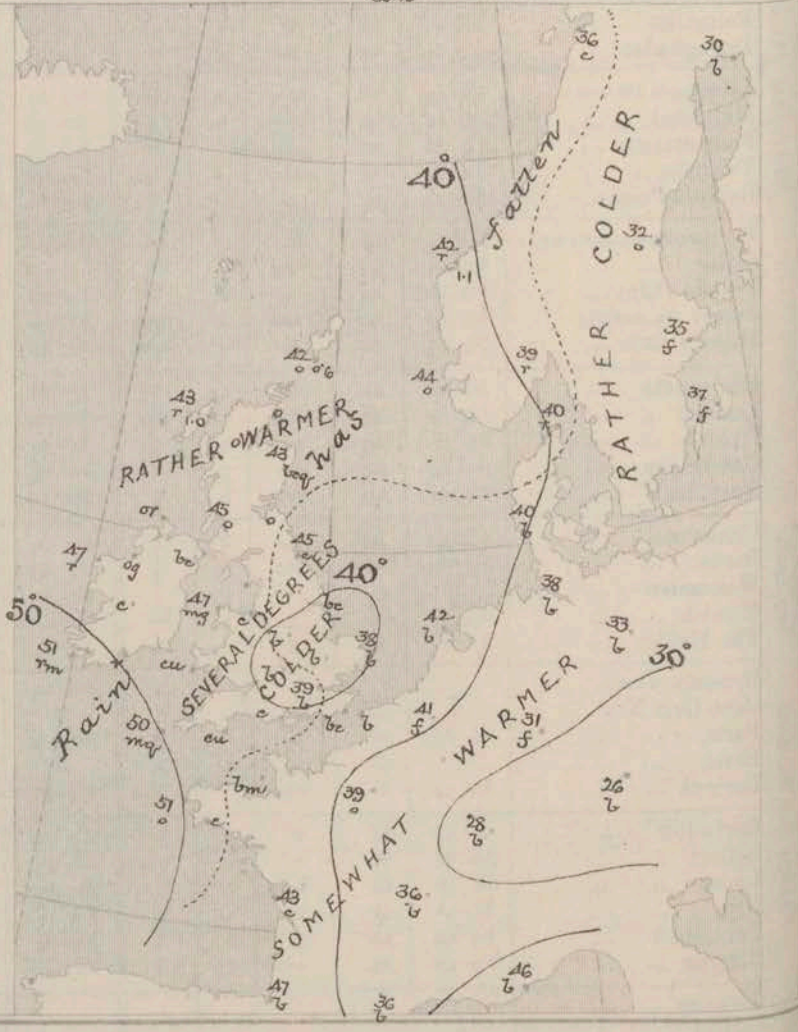
RAINFALL—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of January.)

STATIONS.	TEMPERATURE.				RAINFALL (Inches.)
	Daily Max.	Daily Min.	at 8 a.m. Dry.	Wet.	
Sumburgh Head.....	42.9	35.4	39.4	38.2	3.06
Stornoway	43.0	34.2	39.0	37.8	5.17
Wick	42.2	33.2	37.9	36.4	1.97
Nairn	41.0	32.7	36.5	35.0	2.02
Aberdeen	42.4	33.3	37.1	35.4	2.34
Leith	44.0	33.7	38.2	36.8	1.98
Shields	43.1	34.7	38.0	36.7	1.79
York	43.2	33.1	38.8	35.9	1.83
Loughborough	43.5	32.9	36.5	33.5	2.08
Ardrossan	44.4	36.1	39.8	38.5	4.53
Donaghadee	44.4	36.3	39.9	39.1	3.03
Holyhead	45.9	39.0	41.7	40.3	3.49
Liverpool	48.9	35.6	38.7	37.1	2.23
Parsonstown	46.0	34.6	39.0	37.9	5.09
Valencia	49.8	40.5	44.3	43.3	0.79
Roshe's Point	47.9	39.7	43.2	42.0	5.63
Pembroke	45.8	39.9	42.8	41.2	3.92
Sailly	49.1	43.3	46.5	45.0	3.93
Jersey	46.0	38.7	41.7	40.4	3.24
Hurst Castle	45.3	37.0	40.1	39.7	3.10
Dover	43.7	36.6	39.4	38.2	2.68
LONDON	41.5	34.4	37.0	36.8	2.20
Oxford	43.8	34.4	37.5	36.5	2.33
Cambridge	43.9	32.6	36.5	35.7	1.57
Yarmouth	41.0	34.5	37.7	36.0	2.06

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



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30.3 ins. to 30.5 ins. and more over France and South Germany.
Lowest, 29.3 ins. and less, over the Shetland Isles, 29.8 ins. and less, off the west of Ireland.
Gradient almost nil over France, rather steep over the British Isles and North Sea.
Barometer rising at our northern and eastern stations, falling fast over Ireland.

TEMPERATURE

Highest, 51° at Valencia, 50° at Rocherhaut and Lillo, 49° at Hunt Castle and Bonbroth, and 47° at Balmuccia.
Lowest, 26° at Munich, 28° at Belfast, 30° at Harpenden, 35° at Cambridge, 37° at Oxford, 39° in London and at Paris.
It went down to 37° in the screen in London, and to 29° on the grass early this morning. Slight hoar frost occurred on the grass.

WIND

Fresh NW¹ in the north of Scotland, SW³ on our northeast coast.
In Ireland and the west and south of England it has backed to the S² again and is increasing in force.
At Valencia a moderate gale from SSE already prevails.

WEATHER

Fair over the eastern half of England, equally in Scotland.
Overcast, unsettled, and rainy in Ireland.
Rain fell yesterday except on our northeast and east coasts, but the fall was large in the north and northwest only.

SEA

Still rough in the north, rough and rising in the extreme west and southwest, moderate in the Channel, smooth on our east coast.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

A new depression is evidently approaching Ireland and threatens to cause S¹ gales or strong winds, and rain on nearly all our coast.

FORECASTS

For the 24 hours ending at NOON on 10th JAN^y 1890.

DISTRICTS.

FORECASTS.

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

Wind backing to S² again and blowing hard, with rain.

S² winds, increasing in force; squally, with rain, very unsettled.

DISTRICTS.

FORECASTS

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

S¹ and SW² gales and strong winds; squally, rainy, unsettled.

WARNINGS

The SOUTH CONE is still flying except in districts 2, 3 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:	THER:		WIND		WEA.	SEA		BAR:	THER:		WIND		WEA.	SEA
		D.	W.	D.	F.					D.	W.	D.	F.		
Skudesnaes ...	30.16	44	43	SSW	6	o f	6	Holyhead ...	29.80	51	47	S	7	begm	6
Sumburgh Head ...	29.88	45	44	SSW	1	o	5	Valencia ...	29.87	48	46	W	6	bcq p	6
Stornoway ...	29.66	46	46	SE	4	r	4	Scilly ...	30.05	51	48	WSW	7	c q	6
Aberdeen ...	29.87	45	44	SSW	3	o g	4	Jersey ...	30.27	49	47	SSW	4	c	4
Shields ...	29.93	50	47	S	3	o	2	Dungeness ...	30.25	47	46	SW	4	c	3
Ardrossan ...	29.70	49	47	SSW	5	r	5	London ...	30.20	51	50	SE	3	cm	8
Malin Head ...	29.46	47	45	SSW	8	o	4	Yarmouth ...	30.20	44	43	S	4	f	4
Mullaghmore ...	29.48	49	46	S	7	o q p	6	Rocheport ...	30.43	50	46	S	4	bc	2
Belmullet ...	29.58	45	43	WSW	6	o	*								

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

Weather in morning fine and bright over Southwestern, Southern, and Central Europe and the Mediterranean, hazy and foggy over Austria, dull and quiet over Russia; very changeable and unsettled over the British Islands, North Sea and Scandinavia, with fog and mist over the Netherlands and England, rain in several places, and a threatening appearance in Ireland. Rain during day in the west and north, heavy at Christiana and Sumburgh H., and large quantities in Algeria.

Temperature remaining high over the British Islands and western and northwestern coasts of Europe—highest morning values 52° at Scilly, 51° at Howle P. and in the south of Ireland, 50° at Fowey and Penzance; rather below the freezing point at several Continental stations—the lowest values being 22° at Hummerstadt, 24° at Munich, 28° at Belfast and Mirladen, 32° at Paris and Kiev. Frosty, somewhat over the United Kingdom later; slight ground frost England at night.

Wind very light and variable over the Mediterranean, Central and Eastern Europe, S⁴ and SW² over the more northern and eastern countries; moderate over Scandinavia and the North Sea, strong to a gale in the west and south of our Islands. W³ gales felt on our western coasts later, and SE⁴ in the northeast.

Barometer exceeding 30.4 ins: over all the southern half of Europe, and exceeding 30.6 ins: over Austria-Hungary. Lowest, 29.4 ins: over Lapland, 29.6 ins: and less, off the west of Ireland, falling fast in the west, as a deep "V" shaped depression advanced north-eastward from the Atlantic towards 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 FRIDAY 10TH JANUARY.

1890.

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

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STATIONS.	YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
	BAROM.	TEMP.	WIND.			BAROMETER.		SHADE TEMP.			WIND.				SHADE TEMP.		Amount of Rainfall.	
	Reading at 32° F. and Sea Level.	Dry.	Dir.	Force. (0 to 12.)		Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Dir.	Force. (0 to 12.)			Weather.	Sea. (0 to 9.)		Max.
SCANDINAVIA.																		
Haparanda ...	29.43	30	SE	2	S	29.16	-.51	31	31	+1	2	0	0	*	36	19	0.24	
Hernösand ...	29.25	34	S	6	T	29.18	-.70	33	33	+1	NW	2	0	*	43	30	0.16	
Stockholm ...	29.49	39	SW	4	0	29.28	-.64	38	37	+3	SW	2	0	*	41	34	0.04	
Wisby ...	29.74	38	SW	6	0	29.50	-.58	37	37	+2	SW	0	0	*	43	34	—	
Bodö ...	29.30	34	ESE	2	S	29.25	-.44	33	30	-3	2	0	0	*	36	30	—	
Christiansund	29.34	40	N	1	T	29.41	-.09	37	36	-5	2	0	0	4	43	34	1.02	
Skudesnaes ...	29.52	44	SW	6	T	29.39	-.18	41	40	-3	NW	6	0	5	43	41	0.24	
Christiania Fjord (Færd)	29.44	42	SW	7	0	29.34	-.42	40	39	+1	WSW	3	0	4	43	39	—	
Skagen (The Scaw)	29.60	43	SW	8	0	29.37	-.45	37	36	-3	SW	5	0	5	43	37	0.12	
Fanö ...	29.90	41	WSW	5	0	29.43	-.59	43	42	+3	WSW	5	0	*	43	37	0.04	
BRITISH ISLANDS.																		
Sumburgh Head	29.53	41	N	2	0	29.85	+56	37	33	-5	NNE	3	0	4	46	35	0.03	
Stornoway ...	29.52	42	SE	5	T	29.68	+07	43	42	0	NNE	4	0	4	43	38	0.75	
Wick ...	29.60	40	NW	2	0	29.62	+16	42	42	-2	E	3	0	3	44	38	0.13	
Nairn ...	29.56	45	2	0	0	29.59	-.02	42	41	-2	ESE	2	0	2	45	38	0.49	
Aberdeen ...	29.66	43	SW	2	0	29.54	-.06	40	40	-3	N	3	0	4	45	40	0.51	
Leith ...	29.60	44	SW	2	0	29.50	-.33	47	45	+4	W	5	0	*	48	35	0.22	
Shields ...	29.73	43	S	3	T	29.57	-.36	45	42	0	W	7	0	2	51	39	0.35	
Spurn Head ...	29.79	43	SE	6	T	29.72	-.41	45	42	+6	WSW	7	0	5	51	38	0.12	
York ...	29.70	44	E	3	T	29.74	-.34	45	41	+4	W	6	0	*	54	40	0.20	
Loughborough	29.82	47	S	6	T	29.88	-.31	44	41	+5	W	4	0	*	54	39	0.20	
GERMANY & HOLLAND.																		
Ardrossan ...	29.52	45	ESE	3	T	29.57	-.32	47	46	+2	W	7	0	6	49	43	0.42	
Malin Head ...	29.40	48	SW	5	0	29.70	-.73	45	43	+4	WNW	8	0	5	49	40	0.25	
Mullaghmore ...	29.54	50	WSW	6	0	29.57	+14	46	41	+1	WNW	7	0	6	51	44	0.60	
Belmullet ...	29.61	49	NW	6	0	30.02	+27	46	43	-1	NW	2	0	*	51	43	0.75	
Donaghadee ...	29.51	50	SW	4	T	29.79	-.18	45	41	+4	NW	6	0	4	50	41	0.49	
FRANCE AND BELGIUM.																		
Liverpool (Bidston)	29.69	49	S	6	0	29.85	-.25	44	41	+3	W	7	0	5	52	41	0.19	
Holyhead ...	29.66	51	SW	6	0	29.93	-.13	45	42	-2	WNW	7	0	6	52	45	0.26	
Parsonstown ...	29.66	52	SW	3	0	30.04	+10	?	?	?	SW	1	0	*	53	40	0.13	
Valencia ...	29.86	53	WSW	5	0	30.15	+30	46	45	-5	WNW	1	0	2	54	45	0.28	
Roche's Point...	29.85	51	WSW	5	0	30.11	+15	46	43	-4	W	3	0	4	54	44	0.45	
Pembroke (St. Ann's Hd.)	29.80	49	SW	6	T	30.09	-.01	48	47	-1	W	5	0	5	52	47	0.16	
Scilly ...	29.99	53	SW	6	0	30.22	+12	50	49	0	WSW	3	0	5	53	48	0.12	
Prawle Point ...	30.01	52	SW	7	0	30.18	-.07	46	46	-2	WNW	4	0	3	53	45	0.15	
Jersey (St. Aubin's)	30.18	51	S	5	0	30.22	-.14	51	50	+5	WNW	4	0	4	51	44	0.22	
Hurst Castle ...	30.02	50	SW	7	0	30.12	-.21	48	46	-1	W	4	0	5	51	46	0.21	
PENINSULA.																		
Dungeness ...	30.09	46	SW	6	T	29.97	-.35	47	46	+2	W	5	0	4	50	44	0.14	
London ...	29.98	48	SE	5	T	30.00	-.29	46	43	+7	W	4	0	4	50	38	?	
Oxford ...	29.89	51	SW	5	T	30.01	-.26	44	40	+7	W	3	0	*	53	37	0.13	
Cambridge ...	29.97	48	SW	2	T	29.93	-.34	44	41	+9	W	2	0	*	53	35	0.11	
Yarmouth ...	30.00	44	SW	5	0	29.83	-.38	45	42	+7	WNW	6	0	4	50	38	0.13	
GERMANY & HOLLAND.																		
Cuxhaven ...	30.20	44	WSW	6	0	29.69	-.50	45	44	+7	WSW	6	0	*	45	?	0.42	
Berlin ...	30.29	35	SW	3	0	29.85	-.42	38	37	+5	SW	5	0	*	41	?	0.16	
Wiesbaden ...	30.44	30	S	1	0	30.10	-.36	38	37	+7	SW	1	0	*	39	?	0.04	
Munich ...	30.44	30	S	1	0	30.24	-.24	30	28	+4	SW	5	0	*	43	?	—	
The Helder ...	30.04	41	WSW	5	T	29.77	-.45	45	44	+3	SW	3	0	3	46	39	0.28	
FRANCE AND BELGIUM.																		
Brussels (9 a.m.)	?	43	SW	5	T	29.97	-.42	50	49	+9	WSW	3	0	6	50	41	0.16	
Cape Gris Nez	?	43	SW	3	0	30.07	-.29	46	45	+7	SW	3	0	*	50	39	0.16	
Paris ...	30.38	53	SW	6	0	30.07	?	51	50	0	2	0	0	5	54	43	0.08	
Brest ...	30.25	51	SW	6	T	30.25	-.13	50	50	+2	WNW	4	0	6	52	46	0.16	
Lorient ...	30.45	49	S	3	0	30.37	-.15	51	51	+8	SW	3	0	2	?	41	0.04	
Rochefort ...	30.40	38	WNW	1	0	30.25	-.21	39	33	+11	WNW	1	0	*	48	?	0.04	
Belfort ...	30.50	39	SW	1	0	30.49	-.07	30	30	-6	SE	1	0	*	49	28	—	
Nice ...	30.36	50	ESE	4	0	30.38	+01	47	38	+1	ESE	2	0	0	57	45	—	
Perpignan ...	30.45	50	W	2	0	30.43	-.03	34	32	-2	SW	1	0	*	60	33	—	
Biarritz ...	30.49	52	E	3	0	30.45	-.04	50	50	+3	SW	3	0	2	55	31	0.04	
PENINSULA.																		
Corunna ...	30.52	50	NNE	4	0	30.51	0.0	49	44	+6	NNE	3	0	5	52	?	—	
Lisbon ...																		

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

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

WEATHER CHARTS

for 8 a.m. on

Friday, 10th January,

1890.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP

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

Changes since previous morning are stated in words.

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

their barbs and feathers refer to force thus—

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

→ = forces 5 to 7; → = forces 1 to 4.

⊙ = dead calm.

SEA DISTURBANCE—Where considerable, is shown thus:

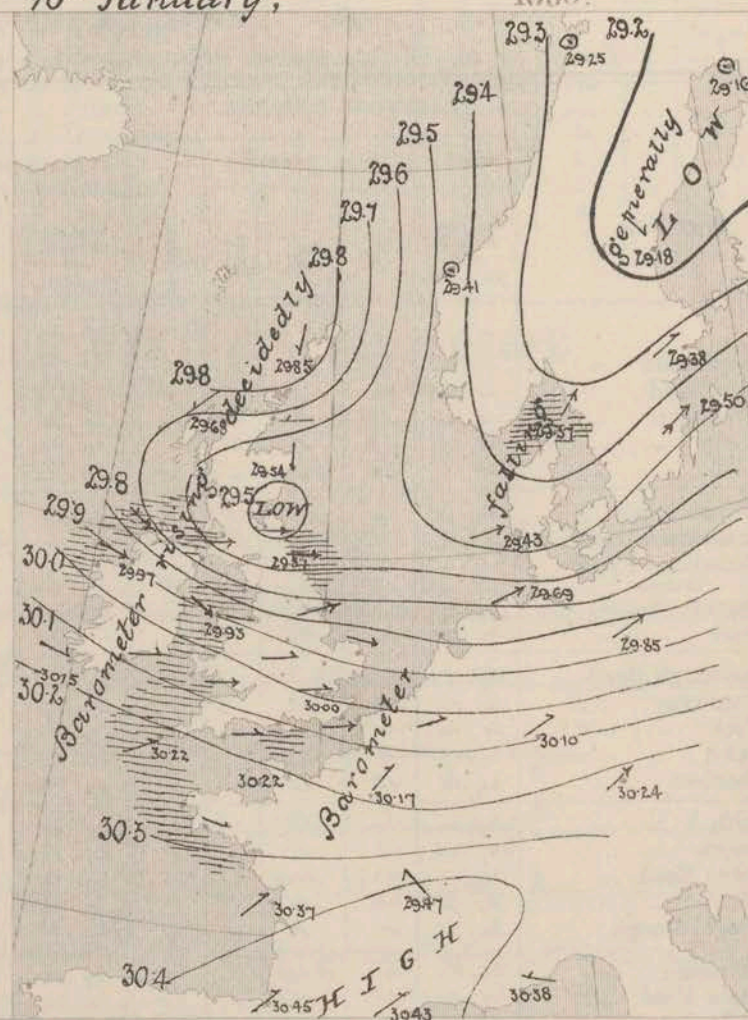
⊞ = Rough. ⊞ = High.

MEAN HEIGHT OF THE BAROMETER

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

During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS.
Sumburgh Head	29.685
Stornoway	29.687
Wick	29.725
Nairn	29.753
Aberdeen	29.790
Leith	29.829
Shields	29.886
York	29.935
Loughborough	29.967
Ardrossan	29.840
Donaghadee	29.851
Holyhead	29.896
Liverpool	29.922
Parsonstown	29.886
Valencia	29.869
Roche's Point	29.894
Pembroke	29.926
Sally	29.960
Jersey	30.010
Hurst Castle	29.997
Dover	30.017
LONDON	30.007
Oxford	29.997
Cambridge	29.992
Yarmouth	29.991



TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

TEMPERATURE—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

WEATHER—is shown by Letters of the Beaufort Scale.

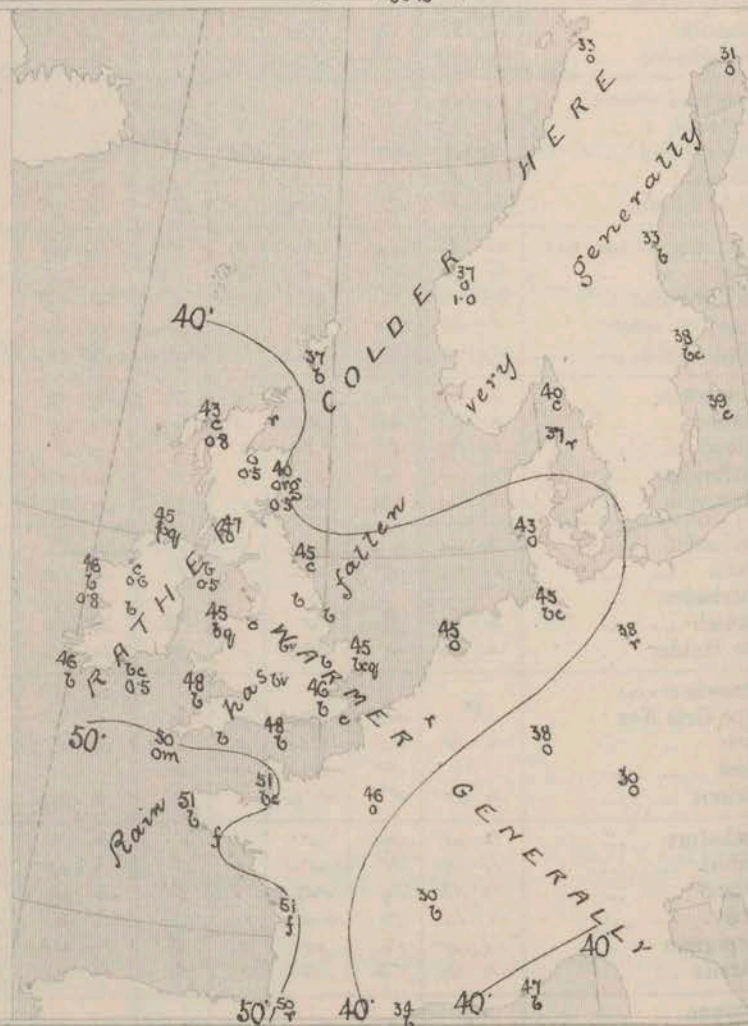
RAINFALL—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of January.)

STATIONS.	TEMPERATURE.				RAINFALL (Inches.)
	Daily Max.	Daily Min.	at 8 a.m. Dry.	Wet.	
Sumburgh Head	42.9	35.4	39.4	38.2	3.66
Stornoway	43.0	34.2	39.0	37.8	6.17
Wick	42.2	33.2	37.9	36.4	1.97
Nairn	41.9	32.7	36.6	35.0	2.02
Aberdeen	42.4	33.3	37.1	35.4	2.34
Leith	41.6	33.7	38.2	36.8	1.98
Shields	43.1	34.7	38.0	36.7	1.79
York	43.2	33.1	36.8	35.9	1.88
Loughborough	43.5	32.9	36.5	35.5	2.08
Ardrossan	44.4	36.4	39.8	38.5	4.53
Donaghadee	44.4	36.8	39.9	39.1	5.00
Holyhead	45.9	39.0	41.7	40.3	3.49
Liverpool	44.9	35.6	38.7	37.1	2.23
Parsonstown	46.0	31.6	39.0	37.9	3.09
Valencia	49.8	40.5	44.3	43.3	6.79
Roche's Point	47.9	39.7	43.2	42.0	5.03
Pembroke	45.8	39.9	42.8	41.2	3.92
Sally	49.1	43.3	46.5	45.0	3.93
Jersey	46.0	38.7	41.7	40.4	3.24
Hurst Castle	45.3	37.0	40.4	39.7	3.10
Dover	43.7	36.0	39.4	38.2	2.68
LONDON	44.8	34.4	37.9	36.8	2.20
Oxford	43.8	34.4	37.5	36.5	2.33
Cambridge	43.9	32.6	36.5	35.7	1.57
Yarmouth	41.9	34.5	37.7	36.0	2.06

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



GENERAL SITUATION AT 8 A.M.

PRESSURE	<p>Highest, 30.4 ins: and upwards, over the south of France and the Spanish Peninsula.</p> <p>Lowest, 29.5 ins: and less, in a depression near the Firth of Forth, and 29.1 ins: and less, over the Gulf of Finland.</p> <p>Barometer falling quickly in the east, and slowly over France, rising in most other places.</p>
TEMPERATURE	<p>Highest, 51° at Jersey and Rochefort, 50° at Scilly, 48° at Huntly, and 47° at Dungeness.</p> <p>Lowest, 30° at Munich and Belfort, 31° at Haparanda, 33° at Rode and Hunsrück, and 34° at Perpignan.</p>
WIND	<p>Mild light from E. and NE. in Scotland. W² over Ireland and England, blowing a gale in a few places.</p> <p>Moderate or fresh from the SW² at most of the Continental stations.</p>
WEATHER	<p>Fair in Ireland and England. Rain, in the east of Scotland and at Hagen, Berlin, Hanau, and Belfort. Dull in the west of Norway and foggy in the west of France.</p> <p>Rain fell generally yesterday, the fall being considerable at some western and northern stations.</p>
SEA	<p>Rough on most exposed parts of our coasts.</p>

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The depression in the north will probably travel away in an easterly direction and may occasion some showers in its rear in most parts of the Kingdom.

FORECASTS

For the 24 hours ending at NOON on 11TH JAN^Y 1890.

DISTRICTS.	FORECASTS.	DISTRICTS.	FORECASTS
0 SCOTLAND NORTH	E ² and NE ² winds, moderate; fair generally, but perhaps some showers.	6 SCOTLAND WEST	NW ² winds, strong; squally, some showers.
1 SCOTLAND EAST		7 ENGLAND N.W.	
2 ENGLAND N.E.	W ² and SW ² winds, moderating; fair generally, but some showers.	8 ENGLAND S.W.	W ² to SW ² winds, moderate; fair to dull and some rain.
3 ENGLAND EAST		9 IRELAND NORTH	NW ² to W ² winds, fresh or strong; squally, some showers.
4 MIDLAND COUNTIES		0 IRELAND SOUTH	W ² to SW ² winds, light to moderate; fair to dull and some rain.
5 ENGLAND SOUTH	W ² winds, moderate; fair to dull and showery.		
		WARNINGS	NONE ISSUED.

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

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

YESTERDAY'S 2 P.M. REPORTS.

	THER:		WIND		F.	WEA.	SEA		THER:		WIND		F.	WEA.	SEA
	BAR:	D.	W.	D.					BAR:	D.	W.	D.			
Skudesnaes ...	29.45	43	42	W.S.W.	7	T	6	Holyhead ...	29.82	47	46	S	6	T'mg	6
Sumburgh Head ...	29.41	45	44	N.W.	1	O	4	Valencia ...	29.70	54	53	S.W.	7	om	6
Stornoway ...	29.68	42	42	L	0	C	3	Scilly ...	30.01	53	53	S.W.	5	L	5
Aberdeen ...	29.74	45	39	S.W.	3	C	3	Jersey ...	30.27	48	47	S	5	m 27	4
Shields ...	29.89	45	43	S	4	O	2	Dungeness ...	30.25	46	44	S.W.	5	C	4
Ardrossan ...	29.61	47	46	E.S.E.	3	T	3	London ...	30.15	49	47	S.W.	3	O	*
Malin Head ...	29.58	43	43	S.E.	4	O T	2	Yarmouth ...	30.17	44	42	S.W.	4	C m	3
Mullaghmore ...	29.47	50	48	S.E.	7	O T	5	Rochefort ...	30.50	45	45	S.E.	2	m	2
Belmullet ...	29.47	51	51	W.S.W.	6	O	*								

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

Weather in morning fine and bright over the east of England, Italy, and the south of France, dull and rainy over Ireland and at some of the Algerian stations. Dull and misty over Russia and foggy over the Netherlands. Rain during day in nearly all parts of Western Europe.

Temperature still high in Ireland, but considerable fall over England. Highest morning values 51° at Valencia and Brest, 50° at Rochefort and Scilly. Rather below the freezing point over Southern Russia and the greater part of Austria, the lowest values being 23° at Budapest, 21° at Vienna, 28° at Kharkov and 31° over Bohemia. Rising somewhat over the United Kingdom during day.

Wind light and variable over Southern Europe generally. Fresh NW² in Scotland, S¹ and increasing at most of the English and Irish stations and in the west of Norway. Moderate gales and strong winds felt later on most of our western coasts.

Barometer exceeding 30.5 ins. over Central France and also over Austria and Southern Russia, and 30.6 ins. in a small anticyclone over Spain, lowest 29.3 ins. and less over the Shetland Isles, 29.5 ins. over the White Sea, and 29.8 ins. off the west of Ireland. New and somewhat deep depression appearing off our northwest coasts during day, subsequently passing in an easterly direction across 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 *Saturday, 11th January, 1890.*
Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.

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

STATIONS.	YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
	BAROM.	TEMP.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Weather.	Sea. (0 to 12.)	SHADE TEMP.		Amount of Rainfall.	
	Reading at 32° F. and Sea Level.	Dry.	Dir.	Force. (0 to 12.)		Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Dir.	Force. (0 to 12.)			Max.	Min.		
SCANDINAVIA.																		
Haparanda ...	29.26	26	NE	2	O	29.56	+ .40	20	19	- 11	ESE	4	bc	*	34	?	0.04	
Hernösand ...	29.29	30	NE	2	S	29.62	+ .44	29	27	- 4	N	4	O	*	39	28	0.04	
Stockholm ...	29.31	32	N	4	C	29.50	+ .12	32	30	- 6	NNW	6	O	*	43	30	0.08	
Wisby ...																		
Bodö ...	29.47	34	E	1	C	29.80	+ .55	35	32	+ 2	N	2	C	1	?	28	-	
Christiansund	29.65	37	NW	3	bc	29.89	+ .48	37	36	0	SW	1	C	4	37	36	0.12	
Skudesnaes ...	29.78	38	NNW	6	b	30.00	+ .61	35	34	- 6	NNE	1	O	4	?	34	-	
Christiania Fjord (Færier)	29.56	36	NNW	5	b	29.83	+ .49	37	33	- 3	WNW	2	b	2	?	34	-	
Skagen (The Scaw)	29.65	38	N	3	b	29.84	+ .47	39	36	+ 2	N	3	b	3	39	34	0.16	
Fanö ...	29.70	39	WNW	5	C	29.98	+ .55	34	33	- 9	NW	2	b	*	43	34	0.04	
Sumburgh Head	29.92	37	N	3	C	29.90	?	40	37	+ 3	SSE	2	O	3	40	33	-	
Stornoway ...	29.96	35	Z	0	f	29.71	+ .03	45	45	+ 2	SW	6	O	5	45	32	0.06	
Wick ...	29.99	32	NE	1	b	29.84	+ .22	43	42	+ 1	S	4	O	2	43	30	0.02	
Nairn ...	30.00	37	Z	0	C	29.84	+ .24	41	40	- 1	Z	0	O	1	42	33	0.08	
Aberdeen ...	30.02	36	WNW	2	b	29.95	+ .41	40	39	0	S	3	O	3	43	33	0.02	
Leith ...	30.06	42	WSW	1	C	29.98	+ .48	42	41	- 5	ESE	1	r	*	47	39	0.04	
Shields ...	30.22	44	NNW	3	C	30.07	+ .50	42	41	- 3	SW	3	r	2	48	40	0.01	
Spurn Head ...	29.99	43	WNW	4	bc	30.19	+ .47	42	41	- 3	SSW	2	om	3	46	29	-	
York ...	30.03	45	WNW	1	O	30.14	+ .40	42	41	- 3	S	1	f	*	47	40	-	
Loughborough	30.09	45	WNW	4	O	30.18	+ .30	41	40	- 3	SW	2	r	*	48	40	0.01	
BRITISH ISLANDS.																		
Ardrossan ...	30.05	43	SSE	1	b	29.96	+ .39	47	47	0	SSW	2	r	2	47	40	0.35	
Malin Head ...	30.05	44	W	3	O	29.86	+ .16	50	49	+ 5	S	4	O	2	50	41	0.11	
Mullaghmore ...	30.08	43	SW	3	O	29.94	- .03	53	52	+ 7	SSW	5	opm	3	53	41	0.04	
Belmullet ...	30.09	45	S	4	r	29.92	- .10	51	51	+ 5	WSW	4	om	*	51	44	0.23	
Donaghadee ...	30.10	44	W	4	C	29.97	+ .18	48	48	+ 3	WSW	3	C	2	48	42	0.15	
Liverpool (Bidston)	30.11	45	W	5	O	30.10	+ .25	42	41	- 2	SSE	3	r	3	47	40	0.05	
Holyhead ...	30.14	45	WNW	4	bc	30.07	+ .14	48	48	+ 3	SSW	2	fg	2	49	43	0.10	
Parsonstown ...	30.15	43	Z	0	O	30.04	00	53	52	?	SW	2	*	*	53	40	0.08	
Valencia ...	30.15	50	SSE	4	om	30.10	- .05	53	52	+ 7	WSW	5	om	5	54	44	0.09	
Roche's Point...	30.17	50	W	2	C	30.12	+ .01	52	52	+ 6	WNW	4	rm	4	53	45	0.15	
Pembroke (St. Ann's Hd.)	30.22	46	W	4	b	30.16	+ .04	50	50	+ 2	SW	5	12	5	50	46	0.04	
Scilly ...	30.24	48	WSW	4	f	30.25	+ .03	51	51	+ 1	WSW	5	12	6	53	46	0.01	
Prawle Point ...	30.23	47	S	3	b	30.23	+ .05	50	50	+ 4	SW	3	r	3	51	45	0.04	
Jersey (St. Aubin's)	30.27	49	W	4	bc	30.30	+ .08	48	46	- 3	WNW	4	om	3	52	44	0.01	
Hurst Castle ...	30.19	46	SW	4	bc	30.24	+ .12	46	45	- 2	SSW	3	O	3	50	40	-	
Dungeness ...	30.10	45	WNW	4	bc	30.23	+ .26	42	40	- 5	WNW	2	O	1	51	38	-	
London ...	30.12	47	WNW	2	O	30.23	+ .23	41	39	- 5	S	1	bc	*	50	38	-	
Oxford ...	30.21	43	W	3	O	30.22	+ .21	40	39	- 4	SSW	1	od	*	49	38	0.03	
Cambridge ...	30.08	46	W	3	O	30.21	+ .28	41	40	- 3	SW	1	r	*	50	38	-	
Yarmouth ...	29.96	45	NW	6	oggy	30.19	+ .36	40	39	- 5	W	2	bc	3	47	37	0.01	
GERMANY & HOLLAND.																		
Cuxhaven ...	29.67	42	W	6	O	30.07	+ .38	40	39	- 5	NW	4	b	*	?	40	-	
Berlin ...	29.76	43	W	6	O	29.93	+ .08	38	36	0	WNW	4	O	*	43	37	0.16	
Wiesbaden ...	*	*	*	*	*	30.19	+ .09	41	39	+ 3	NW	1	C	*	43	?	0.20	
Munich ...	30.10	40	W	6	r	30.16	- .08	38	37	+ 8	SW	5	r	*	45	30	0.04	
The Helder ...	29.89	44	NW	2	bc	30.18	+ .41	40	39	- 5	NNW	1	C	2	46	41	0.04	
FRANCE AND BELGIUM.																		
Brussels (9 a.m.)	*	*	*	*	*	30.26	+ .29	42	41	- 8	W	1	r	*	51	42	0.04	
Cape Gris Nez	?	46	WNW	6	O	?	?	43	41	- 4	WNW	1	O	2	48	43	-	
Paris ...	30.24	46	SW	1	b	30.31	+ .14	37	36	- 9	SSE	1	O	*	?	?	0.12	
Brest ...	?	49	Z	0	m	?	?	51	50	0	Z	0	m	6	54	46	0.04	
Lorient ...	30.31	48	W	1	f	30.33	+ .08	44	44	- 6	SW	1	f	5	52	41	-	
Rochefort ...	30.38	50	W	3	f	30.38	+ .01	46	46	- 5	E	3	f	2	54	41	-	
Belfort ...	30.17	39	NW	1	O	30.24	- .01	41	34	+ 2	NW	1	r	*	46	33	0.83	
Lyons ...	30.38	37	N	1	r	30.34	- .13	38	38	+ 6	W	1	b	*	42	?	0.04	
Nice ...																		
Perpignan ...	30.36	56	NW	2	r	30.23	- .20	56	52	+ 22	NW	4	O	*	64	?	-	
Biarritz ...	30.42	53	WSW	4	r	30.34	- .11	53	52	+ 3	WNW	5	f	3	55	46	0.24	
PENINSULA.																		
Corunna ...	*	*	*	*	*													
Lisbon ...	30.49	52	N	2	b	30.43	- .08	49	48	0	Z	0	O	4	54	48	-	

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

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

WEATHER CHARTS

for 8 a.m. on

Saturday, 11th January.

1890.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP

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

Changes since previous morning are stated in words.

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

their barbs and feathers refer to force thus—

— = forces above 10; — = forces 8 to 10;

— = forces 5 to 7; — = forces 1 to 4.

⊙ = dead calm.

SEA DISTURBANCE—Where considerable, is shown thus:

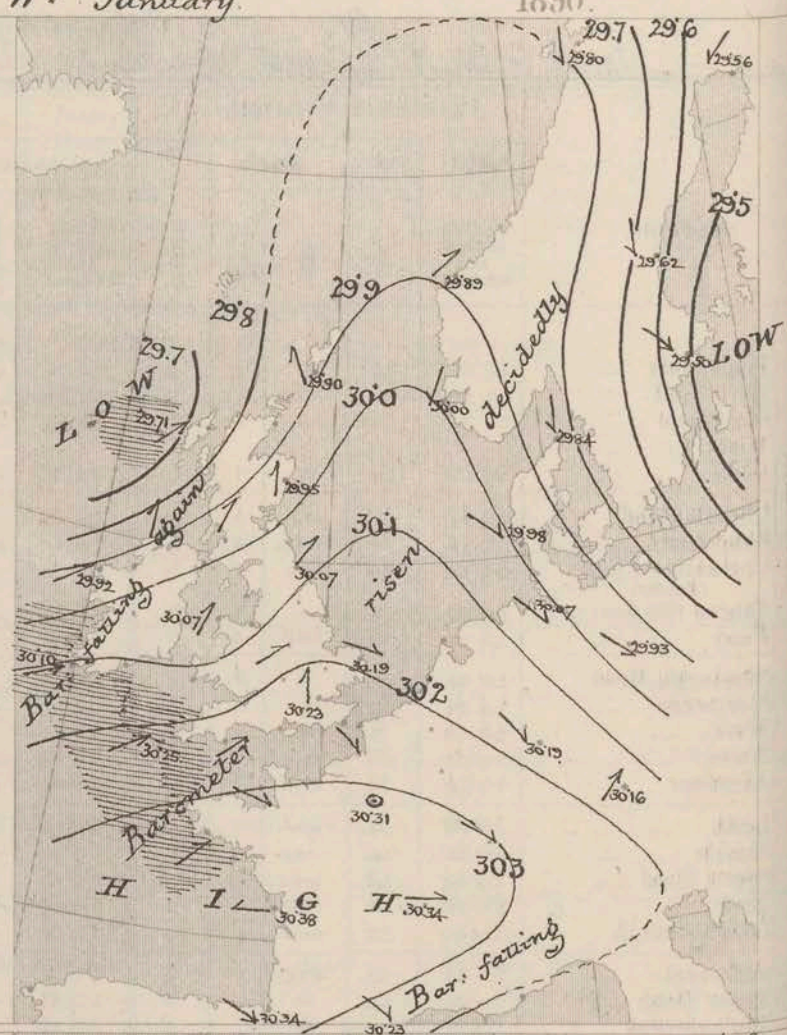
— = Rough. — = High.

MEAN HEIGHT OF THE BAROMETER

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

During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS.
Sumburgh Head	29.685
Stornoway	29.087
Wick	29.725
Nairn	29.753
Aberdeen	29.790
Leith	29.829
Shields	29.886
York	29.935
Loughborough	29.967
Ardrossan	29.840
Donaghadee	29.851
Holyhead	29.896
Liverpool	29.922
Parsonstown	29.886
Valencia	29.860
Roche's Point	29.894
Pembroke	29.926
Sailly	29.960
Jersey	30.010
Hurst Castle	29.997
Dover	30.017
LONDON	30.007
Oxford	29.997
Cambridge	29.992
Yarmouth	29.981



TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

TEMPERATURE—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

WEATHER is shown by Letters of the Beaufort Scale.

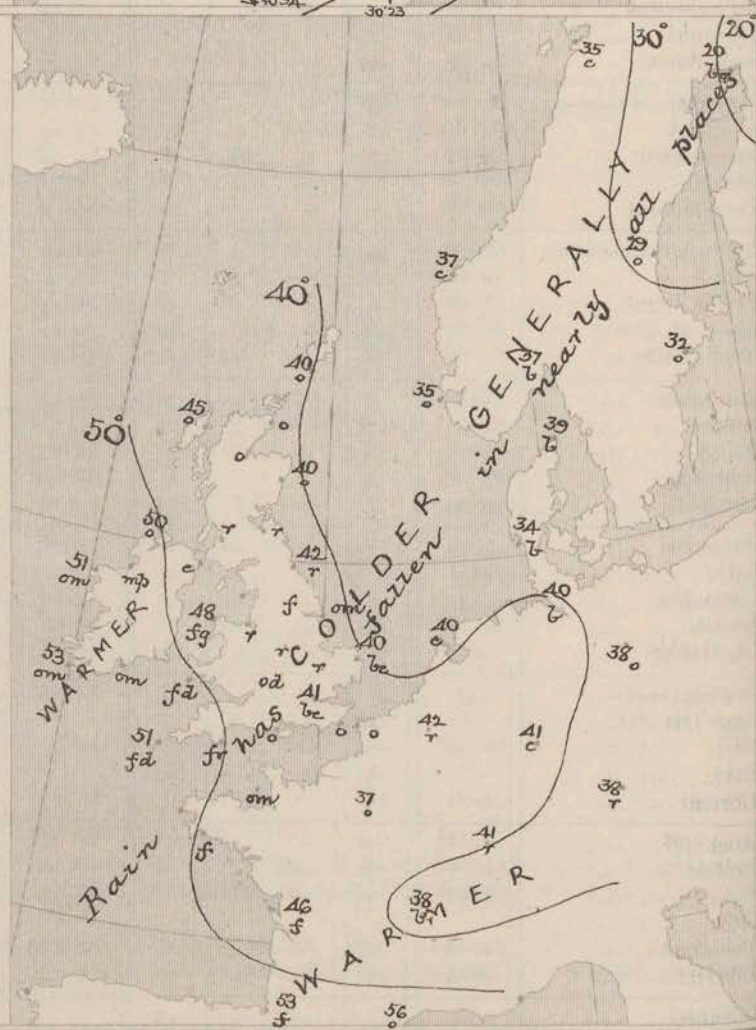
RAINFALL—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of January.)

STATIONS.	TEMPERATURE.				RAINFALL (Inches.)
	Daily Max.	Daily Min.	at 8 a.m. Dry.	Wet.	
Sumburgh Head	42.9	35.4	39.4	38.2	3.66
Stornoway	43.0	34.2	39.0	37.8	5.17
Wick	42.2	33.2	37.9	36.4	1.97
Nairn	41.6	32.7	36.6	35.0	2.02
Aberdeen	42.4	33.3	37.1	35.4	2.34
Leith	41.6	33.7	38.2	36.8	1.98
Shields	43.1	34.7	38.0	36.7	1.79
York	43.2	33.4	36.8	35.9	1.88
Loughborough	43.5	32.9	36.5	35.5	2.08
Ardrossan	44.4	36.4	39.8	38.5	4.53
Donaghadee	41.4	36.3	39.9	39.1	3.03
Holyhead	45.9	39.0	41.7	40.2	3.49
Liverpool	43.9	35.6	38.7	37.1	2.23
Parsonstown	46.0	34.6	39.0	37.9	3.09
Valencia	49.8	40.5	44.3	43.3	6.79
Roche's Point	47.9	39.7	43.2	42.0	5.63
Pembroke	45.8	39.9	42.8	41.2	3.92
Sailly	49.1	43.3	46.5	45.0	3.93
Jersey	46.0	38.7	41.7	40.4	3.24
Hurst Castle	45.3	37.0	40.4	39.7	3.10
Dover	43.7	36.0	39.4	38.2	2.68
LONDON	44.8	34.4	37.9	36.8	2.20
Oxford	43.8	34.4	37.5	36.5	2.33
Cambridge	43.0	32.6	36.5	35.7	1.57
Yarmouth	41.9	34.5	37.7	36.9	2.06

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



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30.2 in: to 30.4 in: and more, over Spain, France, and the Bay of Biscay.
 Lowest, 29.5 in: and less, over Finland and Eastern Baltic - 29.7 in: and less, in a new depression near the Hebrides.
 Gradients slight in the south, moderate elsewhere. Barometer rising in the east, falling in the west and north of our Islands.

TEMPERATURE

Highest, 56° at Perpignan, 53° at Biarritz, Valencia, Marseilles, and Mullaghmore, 50° at Barmouth and Braintree.
 Lowest, 20° at Haparanda, 32° at Stockholm, 37° at Paris, 38° at Berlin and Munich, 41° in London.
 It is now rising over our Islands, after having fallen decidedly over England during the night.

WIND

N⁴ moderate over Sweden, Denmark and the Baltic, NW⁴ in Germany and the Netherlands.
 S⁴ and SW⁴, light to moderate, over Great Britain, SW⁴ to W³ in Ireland.
 Very light and variable over France and the Iberian Peninsula.

WEATHER

Dull but fair in Norway and Sweden, clear in Denmark.
 Dull and gloomy over the British Isles and France, with fog and mist in some places, rain in several others.
 Rainfall measured this morning, though pretty general is slight.

SEA

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

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

There is no indication of any important change.

FORECASTS

For the 24 hours ending at NOON on 12TH JAN^Y 1890.

DISTRICTS.

FORECASTS.

0	SCOTLAND NORTH	S ² and SW ² breezes; dull, some rain at times.
1	SCOTLAND EAST	
2	ENGLAND N.E.	SW ² winds, light; dull, rain at times.
3	ENGLAND EAST	
4	MIDLAND COUNTIES	
5	ENGLAND SOUTH	

DISTRICTS.

FORECASTS

6	SCOTLAND WEST	W ² and S ² winds, moderate to light; rain at times.
7	ENGLAND N.W.	
8	ENGLAND S.W.	
9	IRELAND NORTH	
0	IRELAND SOUTH	

WARNINGS

NONE ISSUED.

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

YESTERDAY'S 2 P.M. REPORTS.

	BAR:	THER:		WIND		WEA.	SEA		BAR:	THER:		WIND		WEA.	SEA
		D.	W.	D.	F.					D.	W.	D.	F.		
Skudesnaes ...	29.52	39	36	W	7	c	5	Holyhead ...	30.07	46	43	W	6	bcq	6
Sumburgh Head ...	29.91	38	34	N	3	o	3	Valencia ...	30.16	51	49	SW	1	cm	1
Stornoway ...	29.92	44	43	NE	2	c	3	Scilly ...	30.24	52	51	W	4	bc	4
Aberdeen ...	29.88	42	39	W	2	c	4	Jersey ...	30.24	52	50	W	4	c	4
Shields ...	29.85	45	43	W	4	o	3	Dungeness ...	30.05	49	44	W	4	c	4
Ardrossan ...	29.94	47	46	W	4	bc	3	London ...	30.04	50	45	W	3	bc	*
Malin Head ...	29.96	46	43	W	5	o	3	Yarmouth ...	29.85	47	43	W	6	cq	4
Mullaghmore ...	30.06	47	42	W	5	bc	4	Rochefort ...	30.39	53	53	W	4	bc	2
Belmullet ...	30.10	48	46	W	2	bc	*								

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

Weather in morning was fine, bright and quiet over the extreme southeastern, southern and southwestern parts of Europe only, temporarily bright but unsettled in the western and southern parts of the British Islands, dull and unsettled over the northern half of Europe generally, with rain in several places, equally over the northern parts of Great Britain and Ireland. Rain fell subsequently over the western countries, but amounts measured were small.

Temperature changing irregularly. Highest 54° to 57° over the southeastern parts of the Mediterranean, 56° at Coruna, 51° at Rochefort and 50° at Lillo; lowest, below the freezing point over South Germany, Austria and Southern Russia, as well as at Laperanda and Archangel. Lowest readings of all 22° at Hermanstadt, 26° at Kiev, and 27° at Khar'kov. Beginning to rise over Ireland later, but rather cold over England at night.

Wind, very light at variable over the Mediterranean and all the southern and southeastern parts of Europe, but strong from South West over the Baltic and Germany, from West over the North Sea and England and from North West in some parts of Ireland; a moderate to fresh gale reported at several English and Irish stations. Moderate W. breeze felt over the Shetlands and northern half of Scotland. S. air appearing in Ireland later.

Barometer highest 30.2 inches to 30.6 inches over all the southern half of Europe, lowest 29.2 inches and less in a depression over the north of Sweden, 29.5 inches and less in a small secondary disturbance lying over the Irish of Foth. Gradients rather steep over Western Russia, North Germany, England and Ireland. Disturbances passing away eastwards later, but new depression beginning to approach Ireland towards night.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

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

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

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

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DAILY WEATHER REPORT.

for Sunday 12th JANUARY 1890.
 Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.

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STATIONS.		YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
		BAROM. Reading at 32° F. and Sea Level.	TEMP. Dry.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Weather.	Sea. (0 to 5.)	SHADE TEMP.		Amount of Rainfall.	
				Force. (0 to 12.)	Dirac.		Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Dirac.	Force. (0 to 12.)			Max.	Min.		
SCANDINAVIA.																			
Haparanda		29.81	14	N	2	b	29.93	+ .37	14	13	- 6	Z	0	0	*	27	12	-	
Hernösand		29.94	23	Z	0	b	29.95	+ .33	12	12	- 17	Z	0	0	*	37	?	-	
Stockholm		29.86	31	NNW	6	0	29.91	+ .41	28	25	- 4	N	4	0	*	34	?	-	
Widby		29.83	35	NNW	8	0	29.89	- .20	32	30	- 5	NNW	6	0	*	37	28	-	
Bodö		29.91	30	SE	1	0	29.60	- .20	30	26	- 5	ENE	4	0	2	35	25	-	
Christiansund		29.85	34	ESE	1	0	29.49	- .40	34	33	- 3	E	6	r	4	37	24	0.08	
Skudesnaes		29.99	39	ESE	4	bc	29.60	- .40	41	39	+ 6	SSE	8	0	6	?	34	-	
Christiania Fjord (Færder)		30.03	36	NNW	2	b	29.86	+ .03	37	35	- 0	SSE	5	C	2	37	32	-	
Skagen (The Scaw)		30.03	40	Z	0	b	29.88	+ .04	36	35	- 3	S	2	C	1	39	30	-	
Fanö		30.10	37	WSW	1	C	29.86	- .12	36	36	+ 2	SSE	4	r	*	41	34	0.04	
Sumburgh Head		29.65	45	SSE	4	r	29.50	- .40	45	45	+ 5	W	4	r	6	45	40	0.14	
Stornoway		29.61	50	W	4	0	29.75	+ .04	42	42	- 3	NW	4	C	4	52	39	0.10	
Wick		29.66	47	SW	2	0	29.7	- .12	40	38	- 3	NW	5	crsp	3	47	38	0.05	
Nairn		29.69	51	WSW	2	C	29.75	- .09	41	40	- 0	W	4	C	2	53	39	0.16	
Aberdeen		29.79	43	SSW	3	0	29.79	- .10	42	38	+ 2	W	5	bg	4	48	40	0.13	
Leith		29.85	53	WSW	2	0	29.90	- .08	42	41	- 0	W	3	b	*	53	38	0.12	
Shields		29.93	49	SSW	2	0	29.95	- .12	44	41	+ 2	SW	4	bm	2	53	41	0.05	
Spurn Head		30.00	45	SSW	3	om	30.01	- .15	45	43	+ 3	W	6	b	4	48	41	0.02	
York		30.00	50	S	1	0	30.04	- .10	45	41	+ 3	W	3	b	*	53	41	0.07	
Loughborough		30.00	50	SW	2	0	30.12	- .06	47	45	+ 6	WNW	4	0	*	50	41	0.02	
BRITISH ISLANDS.																			
Ardrossan		29.88	49	W	4	b	30.01	+ .05	46	43	- 1	WNW	5	b	4	49	43	0.11	
Malin Head		29.81	50	SSW	5	op	29.98	+ .12	45	42	- 5	W	5	bm	4	52	43	0.04	
Mullaghmore		29.88	52	SW	5	0	30.09	+ .15	43	42	- 10	SW	4	com	6	54	43	0.04	
Belmullet		29.87	51	SW	5	0	30.11	+ .19	48	46	- 3	WSW	6	C	*	52	47	0.06	
Donaghadee		29.93	53	SW	3	0	30.09	+ .12	42	42	- 6	SW	3	b	2	53	39	0.03	
Liverpool (Biston)		30.02	52	SW	2	0	30.13	+ .03	45	42	+ 3	W	5	b	4	53	42	0.02	
Holyhead		30.02	50	SW	3	omg	30.16	+ .09	45	43	- 3	W	4	b	4	51	45	0.01	
Parsonstown		30.00	54	SW	1	0	30.19	+ .15	39	38	- 4	SW	1	b	*	52	39	0.02	
Valencia...		30.06	54	SW	6	omg	30.26	+ .16	44	43	- 9	WNW	1	b	1	55	42	0.02	
Roche's Point...		30.10	53	WSW	4	0	30.27	+ .15	44	42	- 8	WNW	1	b	4	54	41	0.04	
Pembroke (St. Ann's Hd.)		30.12	50	SW	4	f	30.27	+ .11	47	43	- 3	NW	4	b	4	50	47	0.03	
Scilly		30.22	51	WSW	4	f	30.31	+ .06	50	50	- 1	WNW	4	bm	5	52	49	0.01	
Prawle Point		30.21	50	WSW	4	f	30.28	+ .05	49	48	- 1	WNW	3	com	2	51	48	0.15	
Jersey (St. Aubin's)		30.27	51	W	4	adm	30.30	- .00	52	51	+ 4	WNW	4	om	3	52	46	0.06	
Hurst Castle		30.18	48	WSW	3	C	30.21	- .03	50	48	+ 4	WNW	4	bc	2	50	45	0.02	
Dungeness		30.14	48	WSW	4	m	30.07	- .16	48	48	+ 6	W	4	r	3	48	40	0.06	
London		30.14	50	SSW	2	0	30.14	- .09	49	47	+ 8	W	2	b	*	52	41	-	
Oxford		30.11	49	W	4	0	30.17	- .05	47	45	+ 7	W	3	bv	*	51	40	0.01	
Cambridge		30.10	48	SW	2	0	30.13	- .08	48	47	+ 7	WNW	1	b	*	51	39	0.05	
Yarmouth		30.09	44	W	2	cam	30.03	- .16	48	47	+ 8	NW	4	bc	3	48	39	0.02	
GERMANY & HOLLAND.																			
Cuxhaven		30.14	37	W	3	0	30.01	- .06	37	36	- 2	S	3	r	*	41	36	0.02	
Berlin		30.09	35	WNW	4	b	30.13	+ .20	33	32	- 5	W	1	C	*	43	30	-	
Wiesbaden		*	*	*	*	*	30.17	- .02	36	35	- 5	NW	2	r	*	43	36	0.04	
Munich		30.27	33	Z	0	0	30.24	+ .08	34	33	- 4	SW	3	0	*	39	32	0.04	
The Helder		30.13	41	S	1	r	29.92	- .26	44	44	+ 4	SW	2	f	3	45	39	0.12	
FRANCE AND BELGIUM.																			
Brussels (9 a.m.)		*	*	*	*	*	30.09	- .17	47	47	+ 5	SW	2	r	*	47	42	0.04	
Cape Gris Nez		?	45	SW	4	f	?	- .03	48	48	+ 5	W	4	0	4	52	43	0.12	
Paris		30.29	44	S	1	f	30.28	- .03	46	46	+ 9	SSW	2	0	*	46	43	0.04	
Brest		?	50	WNW	2	m	?	?	53	51	+ 2	NNW	2	m	5	54	48	0.08	
Lorient		30.32	48	NW	3	f	30.33	- .00	50	50	+ 6	WNW	3	f	5	50	43	-	
Rochefort		30.39	46	W	2	f	30.40	+ .02	48	47	+ 2	? S	2	f	2	48	41	0.02	
Belfort		30.27	40	W	1	0	?	?	42	?	+ 1	W	1	s	*	48	34	-	
Lyons		30.32	38	NNW	3	b	30.35	+ .01	38	36	- 0	N	1	m	*	48	37	-	
Nice		30.06	48	SE	2	b	30.08	+ .03	44	38	+ 2	E	4	b	1	57	39	-	
Perpignan		30.19	57	NW	4	0	30.26	+ .03	54	49	- 4	NW	4	0	*	61	52	-	
Biarritz		30.38	52	NW	4	f	30.43	+ .09	52	52	- 1	NNW	4	r	3	55	50	0.20	
PENINSULA.																			
Corunna		*	*	*	*	*	30.45	- .04	51	51	+ 5	SW	1	f	0	55	49	-	
Lisbon		30.36	56	N	5	b	30.34	- .09	50	49	+ 1	Z	0	b	3	59	49	-	

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

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

WEATHER CHARTS

for 8 a.m. on

Sunday, 12th January,

1890.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP

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

Changes since previous morning are stated in words.

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

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

→ = forces 5 to 7; → = forces 1 to 4.

⊙ = dead calm.

SEA DISTURBANCE—Where considerable, is shown thus:

→ = Rough, → = High.

MEAN HEIGHT OF THE BAROMETER

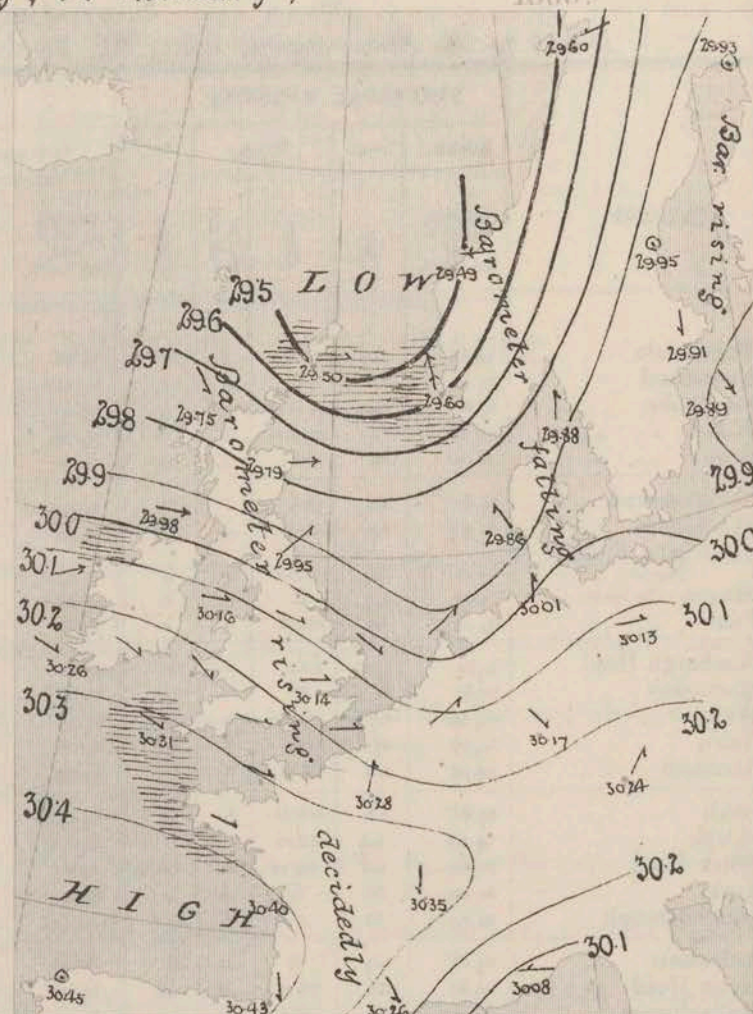
at 8.0 a.m. for the month of January.

During the 15 Years: 1871—1885.

STATIONS.

MEAN READINGS.

STATIONS.	MEAN READINGS.
Sumburgh Head	29.685
Stornoway	29.687
Wick	29.725
Nairn	29.753
Aberdeen	29.790
Leith	29.829
Shields	29.886
York	29.935
Loughborough	29.987
Ardrossan	29.840
Donaghadee	29.851
Holyhead	29.896
Liverpool	29.922
Parsonstown	29.886
Valencia	29.869
Roche's Point	29.894
Pembroke	29.926
Silly	29.960
Jersey	30.010
Hurst Castle	29.997
Dover	30.017
LONDON	30.007
Oxford	29.997
Cambridge	29.992
Yarmouth	29.981



TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

TEMPERATURE—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

WEATHER—is shown by Letters of the Beaufort Scale.

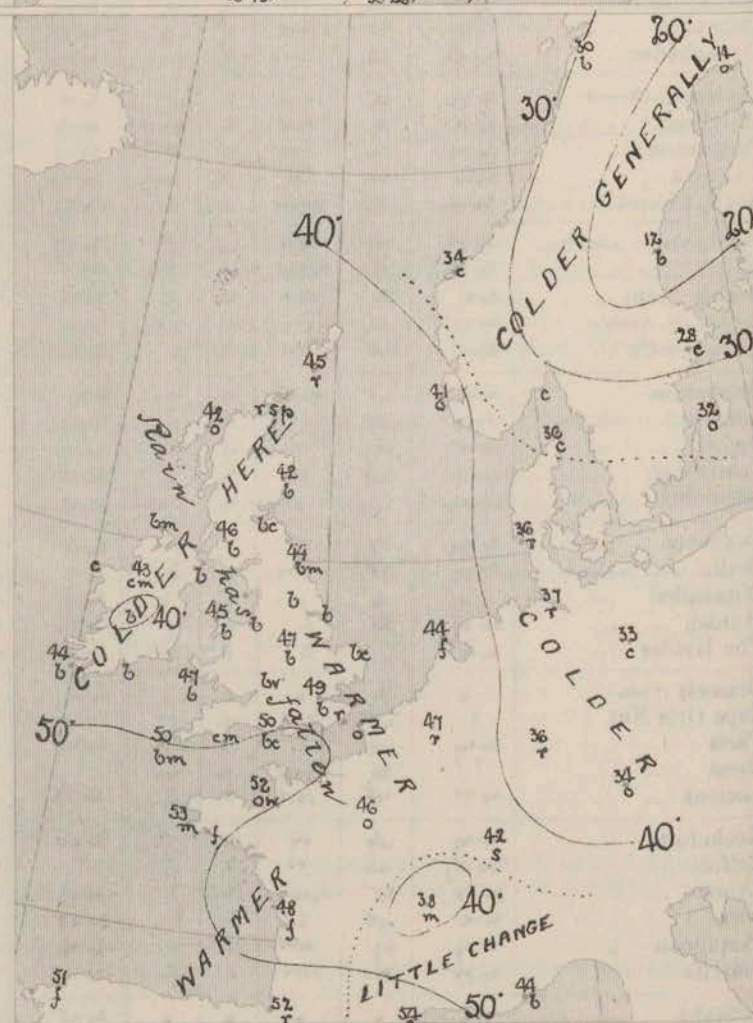
RAINFALL—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of January.)

STATIONS.	TEMPERATURE.				RAINFALL (Inches.)
	Daily Max.	Daily Min.	at 8 a.m.		
			Dry.	Wet.	
Sumburgh Head.....	42.9	35.4	39.4	38.2	3.66
Stornoway.....	43.0	34.2	39.0	37.8	5.17
Wick.....	41.2	33.2	37.9	36.4	1.97
Nairn.....	41.9	32.7	36.6	35.0	2.02
Aberdeen.....	42.4	33.3	37.1	35.4	2.34
Leith.....	41.6	33.7	38.2	36.8	1.98
Shields.....	43.1	34.7	38.0	36.7	1.79
York.....	43.2	33.1	36.8	35.9	1.83
Loughborough.....	43.5	32.0	36.5	35.5	2.08
Ardrossan.....	44.4	36.1	39.8	38.5	4.53
Donaghadee.....	44.4	36.3	39.9	39.1	3.03
Holyhead.....	45.9	39.0	41.7	40.3	3.49
Liverpool.....	43.9	35.6	38.7	37.1	2.23
Parsonstown.....	46.0	34.0	39.0	37.9	3.09
Valencia.....	49.8	40.5	44.3	43.3	6.70
Roche's Point.....	47.9	39.7	43.2	42.0	5.63
Pembroke.....	45.8	39.9	42.8	41.2	3.92
Silly.....	49.1	43.3	46.5	45.0	3.93
Jersey.....	46.0	38.7	41.7	40.4	3.24
Hurst Castle.....	45.3	37.0	40.4	39.7	3.10
Dover.....	43.7	36.6	39.4	38.2	2.68
LONDON.....	44.8	34.4	37.9	36.8	2.26
Oxford.....	43.8	34.4	37.5	36.5	2.33
Cambridge.....	43.9	32.6	36.5	35.7	1.57
Yarmouth.....	41.9	34.5	37.7	36.9	2.06

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



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30.2 in: to nearly 30.5 in: over South Germany, France, the Bay of Biscay and Spain.
Lowest, 29.5 in: and less, in a depression lying off the west coast of Norway—30.1 in: and less, over the Gulf of Genoa.
Gradients moderately steep over the northern district and also over the south of France, slight elsewhere.
Barometer rising at the western and southern stations, falling in the extreme north and east.

TEMPERATURE

Highest, 54° at Perpignan, 53° at Brest, 52° at Jersey, 50° at Seilly, Hunt-Castle and Dieppe.
Lowest, 12° at Helsingfors, 14° at Haparanda, 18° at Stockholm, 30° at Hode, and 33° at Berlin.
It has decreased over Ireland, but increased over England since yesterday.
The decrease in Ireland appears to be spreading eastwards towards England.

WIND

Moderate to strong from between W. and NW. over the United Kingdom—light in the north of France
S on the eastern shores of the North Sea—E in the north-west of Norway.
Light and variable over Spain and the south of France.

WEATHER

Squally, with sleet showers in Scotland, foggy and rainy over the Netherlands.
Fine and bright over England and Ireland—foggy in the east of France and north of Spain.
Rain has fallen during some part of the 24 hours in all parts of the Kingdom, but the amounts reported are small.

SEA

Rough on our extreme north and north-west coasts, rather so about the mouth of the Channel, moderate to smooth elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

FORECASTS

For the 24 hours ending at NOON on 13th JAN^y 1890.

DISTRICTS.

FORECASTS.

DISTRICTS.

FORECASTS

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

NONE ISSUED.

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

NONE ISSUED.

WARNINGS

NONE ISSUED.

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

YESTERDAY'S 2 P.M. REPORTS.

		THER.		WIND						THER.		WIND					
	BAR.	D	W.	D	F	WEA	SEA		BAR.	D	W.	D	F	WEA	SEA		
Skudesnaes ...	30.04	38	35	E	2	o	2	Holyhead ...	30.04	50	50	SW	3	omg	2		
Sumburgh Head ...	29.75	44	43	SSE	4	o	5	Valencia ...	30.07	55	54	SW	6	om	5		
Stornoway ...	29.66	52	52	SW	4	c	4	Scilly ...	30.22	51	51	WSW	4	f	5		
Aberdeen ...	29.85	42	41	S	3	ogm	3	Jersey ...	30.27	50	49	WSW	3	f	3		
Shields ...	29.95	45	44	SSW	2	o	2	Dungeness ...	30.19	48	45	WNW	3	c	2		
Ardrossan ...	29.89	47	47	W	4	r	3	London ...	30.15	49	48	SSW	2	om	3		
Mulin Head ...	29.84	51	51	SSW	4	o	3	Yarmouth ...	30.11	44	43	SW	2	cd	3		
Mullaghmore ...	29.90	54	52	SW	5	c	4	Rochefort ...	30.39	45	45	N	2	m	2		
Belmullet ...	29.91	51	51	WSW	4	o	*										

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

For Continental Information see Tuesday's Report.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

WEATHER.—Peaufort 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, 13th January,* 1890.
Issued by the Meteorological Office, 63, Victoria Street, London. *R. H. SCOTT, Secretary.*

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

STATIONS.	YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
	BAROM. Reading at 32° F. and Sea Level.	TEMP. Dry.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Weather.	Sea. (0 to 12.)	SHADE TEMP.			
			Dir.	Force. (0 to 12.)		Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Dir.	Force. (0 to 12.)			Max.	Min.	Amount of Rainfall.	
SCANDINAVIA.																		
Haparanda ...	29.93	18	E	2	O	29.88	-.05	19	?	+5	SSE	2	O	*	19	3	-	
Hernösand ...	29.88	24	Z	0	O	29.88	-.04	19	19	+7	Z	0	O	*	27	-	-	
Stockholm ...	29.89	26	Z	0	O	29.98	+.07	24	23	-4	Z	0	O	*	32	23	-	
Wisby ...	29.89	32	W	4	O	30.01	+.12	32	31	0	N	2	O	*	34	28	-	
Bodö ...	29.55	31	ESE	2	O	29.60	.00	30	27	0	ESE	2	O	*	?	25	-	
Christiansund	29.69	40	SW	4	T	29.52	+.03	39	35	+5	ESE	4	O	4	39	?	0.24	
Skudesnaes ...	29.91	41	NW	4	O	29.73	+.13	42	39	+1	SSE	8	O	6	?	36	-	
Christiania Fjord (Færder)	29.83	35	SSE	3	O	29.94	+.08	31	31	-6	WSW	2	f	3	55	30	-	
Skagen (The Scaw)	29.89	36	S	1	T	29.98	+.10	36	35	0	SSW	2	O	4	37	34	0.39	
Fanö ...	29.93	41	NW	4	C	30.06	+.20	37	37	+1	WSW	2	C	*	43	34	0.39	
Sumburgh Head	29.80	41	WSW	2	O	29.32	-.18	45	43	0	WSW	3	C	6	46	41	0.15	
Stornoway ...	29.71	47	SW	6	O													
Wick ...	29.80	42	S	2	O	29.43	-.19	42	40	+2	NW	3	C	2	48	34	0.03	
Nairn ...	29.94	43	SSW	3	C	29.46	-.39	45	40	+4	SSW	3	C	2	53	39	0.06	
Aberdeen ...	30.01	42	S	2	O	29.56	-.23	47	43	+5	SW	4	O	4	50	42	-	
Leith ...	30.06	45	W	3	O	29.66	-.24	48	45	+6	WSW	4	C	*	51	38	0.01	
Shields ...	30.15	43	Z	0	M	29.76	-.19	51	48	+7	SW	3	O	*	52	40	-	
Spurn Head ...	30.22	42	WSW	3	O	29.94	-.07	44	43	-1	SSW	5	C	4	46	38	-	
York ...	30.23	43	SSW	1	O	29.89	-.15	45	43	0	S	3	O	*	50	37	-	
Loughborough	30.28	41	SW	1	O	30.01	-.11	47	46	0	SW	4	O	*	52	35	-	
BRITISH ISLANDS.																		
Ardrossan ...	30.00	46	WNW	3	O	29.74	-.27	47	45	+1	SW	4	C	4	49	44	0.07	
Malin Head ...	29.89	44	S	6	O	29.69	-.29	44	41	-1	SW	5	C	4	50	40	0.05	
Mullaghmore ...	29.90	47	S	7	C	29.81	-.28	45	42	+2	SW	6	O	6	52	43	0.06	
Belmullet ...	29.87	51	SW	5	O	29.83	-.28	46	42	-2	W	7	O	*	53	42	0.20	
Donaghadee ...	30.08	44	WSW	3	O	29.81	-.28	45	44	+3	W	5	O	3	51	41	0.01	
Liverpool (Bidston)	30.25	43	S	2	O	29.92	-.21	50	49	+5	WSW	5	O	4	52	38	0.01	
Holyhead ...	30.20	46	SSW	3	O	29.92	-.24	48	?	+3	WSW	4	rgm	4	50	44	0.04	
Parsonstown ...	30.08	45	SE	1	O	29.93	-.26	45	43	+6	SW	1	C	*	54	38	0.11	
Valencia ...	30.06	52	S	7	omqu	30.03	-.23	46	43	+2	W	2	C	4	53	37	0.08	
Roche's Point...	30.17	50	S	5	O	30.04	-.23	48	46	+4	W	4	O	4	53	44	0.25	
Pembroke (St. Ann's Hd.)	30.27	47	S	3	O	30.02	-.25	50	50	+3	SSW	6	rf	5	50	46	0.05	
Scilly ...	30.30	49	SSW	4	C	30.15	-.16	51	51	+1	SW	5	od	6	53	47	0.02	
Prawle Point ...	30.36	47	W	3	O	30.18	-.10	50	50	+1	SW	5	mu	4	53	43	0.04	
Jersey (St. Aubin's)	30.49	49	WNW	3	O	30.29	-.01	48	47	-4	SSW	3	odm	3	55	46	-	
Hurst Castle ...	30.35	43	WNW	3	O	30.16	-.05	49	48	-1	SW	5	odm	3	51	42	-	
Dungeness ...	30.27	44	NW	3	M	30.17	+.10	48	46	0	SW	5	O	3	53	39	-	
London ...	30.33	45	W	1	O	30.13	-.01	47	46	-2	S	4	C	*	51	35	-	
Oxford ...	30.34	42	Z	0	O	30.10	-.07	48	47	+1	SSW	3	C	*	53	36	-	
Cambridge ...	30.27	40	W	2	O	30.09	-.04	46	45	-2	SW	2	O	*	52	32	-	
Yarmouth ...	30.22	48	NW	3	O	30.08	+.05	43	42	-5	SW	4	C	3	49	36	-	
GERMANY & HOLLAND.																		
Cuxhaven ...	29.83	38	NW	7	T	30.13	+.12	38	37	+1	WSW	3	f	*	42	37	0.34	
Berlin ...	29.70	40	WSW	3	T	30.08	+.05	34	33	+1	N	4	O	*	39	?	0.28	
Wiesbaden ...	*	*	*	*	*	30.29	+.12	39	37	+3	W	2	O	*	46	36	0.28	
Munich ...	30.12	38	W	6	C	30.28	+.04	35	33	+1	W	6	O	*	39	34	0.16	
The Helder ...	30.21	43	WNW	2	O	30.14	+.22	40	39	-4	SSW	2	O	3	45	36	0.04	
FRANCE AND BELGIUM.																		
Brussels (9 a.m.)	*	*	*	*	*	30.28	+.19	37	36	-10	SW	3	O	*	52	36	0.04	
Cape Gris Nez	?	46	WSW	2	O	?	?	44	43	-4	WSW	4	C	4	50	41	-	
Paris ...	30.36	44	N	1	O	30.36	+.08	32	32	-14	S	1	O	*	?	31	-	
Brest ...	?	51	WSW	1	O	?	?	51	49	-2	W	4	O	7	54	46	0.04	
Lorient ...	30.42	49	SSW	1	O	30.34	+.01	49	49	-1	SW	3	O	5	52	46	0.04	
Rochefort ...	30.45	50	WNW	3	O	30.44	+.04	49	49	+1	SSE	2	f	2	52	43	-	
Belfort ...	30.32	42	NW	1	T	30.35	?	35	30	-7	NW	1	O	*	44	29	0.16	
Lyons ...	30.38	40	NNE	1	f	30.42	+.07	40	39	+2	WNW	1	O	*	47	?	0.08	
Nice ...	30.12	48	E	2	C	30.03	-.05	43	38	-1	E	4	O	1	55	41	-	
Perpignan ...	30.27	54	NW	6	C	30.28	+.02	52	48	-2	NW	4	O	*	61	51	-	
Biarritz ...	30.46	51	N	3	O	30.40	+.03	50	49	-2	Z	0	m	?	55	48	0.16	
Corunna ...	*	*	*	*	*													
Lisbon ...	*	*	*	*	*													

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

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

GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30.2 ins: to 30.4 ins: and more, over France, the Bay of Biscay, and north of Spain.

Lowest, 29.4 ins: and less, in a depression lying over the north of Scotland.

Gradients are moderate over the British Islands and North Sea, slight over France.

Barometer has begun to rise again in the west of Ireland, but is falling over Great Britain.

TEMPERATURE

Highest, 51° at Perpignan, 51° at Scilly and Shields, 50° at Brixia, Poulke Point, and Liverpool, 47° at Aberdeen.

Lowest, 19° at Haparanda and Hernösand, 24° at Stockholm, 30° at Rode, 32° at Paris, and 37° at Bussars.

It has changed fitfully during the past 24 hours. In London it stood at about 51° at 2 pm yesterday, fell to 35° at night, and rose to 47° again by 8½ today.

WIND

SW^{ly} to W^{ly}, fresh to strong over the British Islands, and has blown a gale on many parts of our western and northern coasts during the night. At Skudermø it is S^{ly} and in the northwest of Norway SE^{ly}.

Few variable winds prevail over the southern half of France.

WEATHER

Changeable and unsettled in most places; cloudy, misty, and raining in many parts of England, but finer in Scotland and Ireland — where, however, rain fell yesterday. On the Continent also the weather has been showery at most stations.

SEA

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

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

It is probable that as the new depression in the north passes off the sky will clear gradually in most places, but strong squally breezes are still probable in the west and north, with passing showers.

FORECASTS

For the 24 hours ending at NOON on 14TH JAN^Y 1890.

DISTRICTS.

FORECASTS.

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

SW^{ly} and W^{ly} winds, fresh or strong; squally, some showers, colder.

SW^{ly} and W^{ly} winds, freshening; squally, some showers, becoming rather colder.

DISTRICTS.

FORECASTS

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

W^{ly} and SW^{ly} winds, strong; squally, showery, unsettled.

WARNINGS

The SOUTH CONE was hoisted last evening except in districts 3 to 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:	THER:		WIND		WEA.	SEA		BAR:	THER:		WIND		WEA.	SEA
		D.	W.	D.	F.					D.	W.	D.	F.		
Skudesnaes ...	29.73	41	40	W	2	0	4		Holyhead ...	30.23	48	45	W	3	3
Sumburgh Head									Valencia ...						
Stornoway ...	29.86	45	45	SW	2	0	3		Scilly ...						
Aberdeen ...									Jersey ...	30.36	54	52	W	3	3
Shields ...									Dungeness ...	30.25	49	45	W	2	2
Ardrossan ...									London ...						
Malin Head ...	30.02	47	45	SSW	5	6	5		Yarmouth ...						
Mullaghmore ...									Rochefort ...	30.45	50	50	W	3	2
Belmullet ...	30.02	49	47	SSW	5	6	*								

GENERAL REMARKS ON THE WEATHER OVER EUROPE

DURING THE PAST 24 HOURS.

Weather fine and bright at most of the Mediterranean stations, and in Spain as well as over the greater part of the British Isles; cloudy, changeable and unsettled elsewhere, with rain and sleet showers in Scotland, rain over the Netherlands, snow in many parts of Austria, and also at St Petersburg, rain during day at many Continental stations, and later on in Ireland also.

Temperature very changeable in the northwest; highest, 44° to 53° over the southwest of our Islands, the west of France and north of Spain, as well as over the southern parts of the Mediterranean, lowest over Sweden and Finland, and below the freezing point over the Baltic and northern parts of Russia, as well as in some parts of Austria and Germany.

Wind fresh from the W and NW over the United Kingdom, S. on the eastern shores of the North Sea, and E. in the north of Norway. Another cyclonic circulation of moderate breezes over Russia and a third over the Mediterranean. Wind backing to S. in Ireland later, and rising to a gale.

Barometer highest 30.2 ins. to 30.5 ins. over Spain, the west of France and south Germany; lowest 29.5 ins. and less, in two depressions, one off the west of Norway, the other over central Russia, and 30.0 ins. and less, in a third system lying near Palermo; barometer rising fast over England and the North Sea subsequently, but new depression approaching Ireland from the Atlantic.

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

FROM THE 5TH TO 11TH JANUARY 1890.

From Sunday to Thursday barometric pressure was continuously highest over France and Germany, lowest off our northwest coasts, and the gradients over the United Kingdom were steep. Some large and deep depressions advanced in a northeasterly direction outside our western and northern coasts, causing S. to SW. gales or strong winds in all parts of the Kingdom, with very mild, showery weather. At our western stations the rainfall was heavy, and the gales were on some occasions very strong, but in the east and southeast the winds were less strong and the rainfall was comparatively slight.

On Friday the depressions began to take a more easterly course, and while a large 'V' shaped system travelled across Scandinavia, a smaller one moved over Scotland and the North Sea from the west, causing strong W. to NW. breezes over England and Ireland, and a gale in some places, while moderate E. winds were felt in Scotland. Temperature fell and became very changeable, and the air was drier than of late.

At the close of the week, however, these disturbances were passing away, but a new depression had appeared off our northwestern coasts, and S.W. to S. winds were again prevalent with high temperatures, and showers in most places.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

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

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

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

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

DAILY WEATHER REPORT.

for TUESDAY 14TH JANUARY. 1890.

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

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

STATIONS.	YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
	BAROM. Reading at 32° F. and Sea Level.	TEMP. Dry.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Sea. (0 to 9.)	SHADE TEMP.		Amount of Rainfall.		
			Force. (0 to 12.)	Dirac.		Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Dirac.	Force. (0 to 12.)		Max.	Min.			
SCANDINAVIA.																		
Haparanda ...	29.79	14	S	4	m	29.58	-.20	15	15	-4	S	4	S	*	21	12	0.20	
Hernösand ...	29.66	31	S	8	o	29.57	-.21	30	29	+11	S	0	o	*	34	16	0.00	
Stockholm ...	29.84	31	SW	2	o	29.66	-.22	33	33	+9	WSW	2	f	*	?	23	-	
Wisby ...	29.94	32	SW	4	c	29.73	-.28	37	36	+5	WSW	4	o	*	?	30	0.00	
Bodö ...	29.35	23	E	4	m	29.25	-.35	31	29	+1	ENE	2	h	2	34	25	-	
Christiansund ...	29.69	41	SE	4	h	29.53	+0.1	39	36	0	SW	5	c	5	43	36	0.16	
Skudesnaes ...	29.70	43	WSW	4	bc	29.84	+0.11	42	41	0	SE	4	o	5	45	41	0.20	
Christiania Fjord (Færder) ...	29.65	40	S	3	m	29.81	-.13	37	36	+6	WSW	3	h	3	?	?	-	
Skagen (The Scaw) ...	29.73	40	WSW	4	h	29.91	-.07	38	37	+2	WNW	2	h	3	?	34	0.00	
Fanö ...	29.89	39	W	4	h	30.06	0.0	36	36	-1	W	4	h	*	41	36	0.04	
Sumburgh Head ...	29.48	40	W	5	cqf													
Stornoway ...	29.56	42	W	7	c													
Wick ...	29.61	38	W	6	h	29.59	+0.16	42	40	0	SW	4	c	2	45	35	0.05	
Nairn ...	29.70	38	SW	2	h	29.64	+0.18	43	41	-2	SW	1	c	2	45	36	0.09	
Aberdeen ...	29.79	39	SW	2	h	29.77	+0.21	41	39	-6	S	3	c	3	47	36	-	
Leith ...	29.86	42	WSW	4	bc	29.84	+0.18	45	42	-3	SW	2	o	*	48	40	-	
Shields ...	29.96	44	SW	3	h	29.96	+0.20	41	40	-10	SW	4	c	2	52	37	-	
Spurn Head ...	30.04	43	WSW	2	h	30.09	+0.15	38	37	-6	SW	4	bc	4	48	37	-	
York ...	30.03	43	W	1	h	30.08	+0.19	38	35	-10	S	1	h	*	52	33	-	
Loughborough ...	30.10	44	WSW	2	h	30.15	+0.14	36	36	-11	SE	2	om	*	53	33	-	
BRITISH ISLANDS.																		
Ardrossan ...	29.91	45	SW	4	bc	29.80	+0.06	46	45	-1	S	5	o	5	47	41	0.02	
Malin Head ...	29.85	40	SW	5	bc	29.61	-.08	43	43	-1	S	6	o	4	45	40	0.03	
Mullaghmore ...	29.94	42	SW	5	h	29.64	-.17	47	46	+2	SW	6	o	5	47	41	0.05	
Belmullet ...	29.93	46	W	5	o	29.51	-.22	51	51	+5	SW	10	T	*	51	44	0.30	
Donaghadee ...	29.98	40	SW	3	h	29.84	+0.03	46	45	+1	SW	5	c	3	47	40	-	
Liverpool (Bidston) ...	30.08	44	WSW	3	h	30.04	+0.12	41	39	-9	SE	2	bc	3	50	39	-	
Holyhead ...	30.08	45	WSW	1	h	29.96	+0.04	47	46	-1	SW	4	cmqg	4	50	44	0.01	
Parsonstown ...	30.05	43	SW	1	h	29.79	-.14	48	47	+3	SE	2	o	*	49	38	-	
Valencia ...	30.09	48	WSW	3	bc	29.81	-.22	52	51	+6	S	8	om	7	52	42	0.05	
Roche's Point ...	30.10	49	W	3	bc	29.93	-.11	50	50	+2	SW	7	T	5	52	45	0.15	
Pembroke (St. Ann's Hd.) ...	30.16	47	WSW	3	h	30.05	+0.03	48	48	-2	S	5	df	4	50	?	0.03	
Scilly ...	30.19	49	WSW	4	h	30.12	-.03	50	49	-1	SW	6	ofd	6	52	48	0.05	
Prawle Point ...	30.21	47	W	3	h	30.19	+0.01	50	50	0	SW	4	f	4	50	46	0.16	
Jersey (St. Aubin's) ...	30.26	51	W	4	omd	30.28	-.01	49	48	+1	S	3	odm	3	52	47	0.06	
Hurst Castle ...	30.18	49	WSW	4	odm	30.23	+0.07	48	46	-1	SW	4	c	3	50	39	0.04	
Dungeness ...	30.11	49	WSW	5	m	30.24	+0.07	42	42	-6	W	2	f	3	49	35	-	
London ...	30.18	51	SW	2	om	30.23	+0.10	38	38	-9	SE	1	f	*	54	37	0.01	
Oxford ...	30.19	43	SW	3	h	30.20	+0.10	37	37	-11	S	2	f	*	51	37	0.01	
Cambridge ...	30.12	43	SW	2	h	30.21	+0.12	37	37	-9	S	1	f	*	54	33	0.01	
Yarmouth ...	30.06	48	WNW	2	c	30.18	+0.10	38	37	-5	SW	2	h	3	50	35	0.02	
GERMANY & HOLLAND.																		
Cuxhaven ...	30.04	?	SW	3	f	30.15	+0.02	38	37	0	W	3	c	*	41	37	0.00	
Berlin ...	30.15	35	SW	3	o	30.09	+0.01	41	40	+7	WNW	4	o	*	41	32	0.16	
Wiesbaden ...	*	*	*	*	*	30.27	-.02	40	39	+1	SW	1	c	*	46	37	0.04	
Munich ...	30.23	35	W	2	h	30.30	+0.02	35	34	0	SW	6	T	*	39	32	0.16	
The Helder ...	30.06	44	WNW	2	c	30.22	+0.01	39	39	-1	S	1	f	1	?	37	0.12	
FRANCE AND BELGIUM.																		
Brussels (9 a.m.) ...	*	*	*	*	*	30.29	+0.01	44	44	+7	WSW	2	o	*	47	?	0.12	
Cape Gris Nez ...	?	48	W	3	?	?	?	43	41	-1	SW	3	f	3	50	41	?	
Paris ...	30.31	46	SW	1	c	30.34	-.02	46	46	+14	SW	1	o	*	48	?	-	
Brest ...	?	51	W	5	f	?	?	49	49	-2	SW	3	o	5	54	48	0.04	
Lorient ...	30.23	49	WSW	3	o	30.30	-.04	47	47	-2	SW	1	m	6	50	46	0.04	
Rochefort ...	30.42	50	W	2	f	30.41	-.03	47	47	-2	S	2	f	2	54	39	0.00	
Belfort ...	30.29	39	NW	1	bc	30.34	-.01	42	36	+7	NW	1	o	*	45	35	-	
Lyons ...	30.40	37	N	1	f	30.44	+0.02	34	34	-6	E	1	om	*	49	28	-	
Nice ...	30.14	49	W	0	h	30.23	+0.20	45	39	+2	ENE	2	bc	1	57	41	-	
Perpignan ...	30.29	53	NW	4	bc	30.28	0.0	51	46	-1	W	3	h	*	59	?	-	
Biarritz ...	30.41	50	W	0	m	30.34	-.06	43	41	-.7	E	3	f	5	54	41	-	
PENINSULA.																		
Corunna ...	*	*	*	*	*	30.27	-.08	43	42	-4	NNE	4	h	?	59	43	-	
Lisbon ...	30.30	52	N	3	h	30.27	-.08	43	42	-4	NNE	4	h	?	59	43	-	

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

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

WEATHER CHARTS

for 8 a.m. on

Tuesday, 14th January,

1890.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP

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

Changes since previous morning are stated in words.

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

their barbs and feathers refer to force thus—

— = forces above 10; — = forces 8 to 10;

— = forces 5 to 7; — = forces 1 to 4.

☉ = dead calm.

SEA DISTURBANCE—Where considerable, is shown thus:

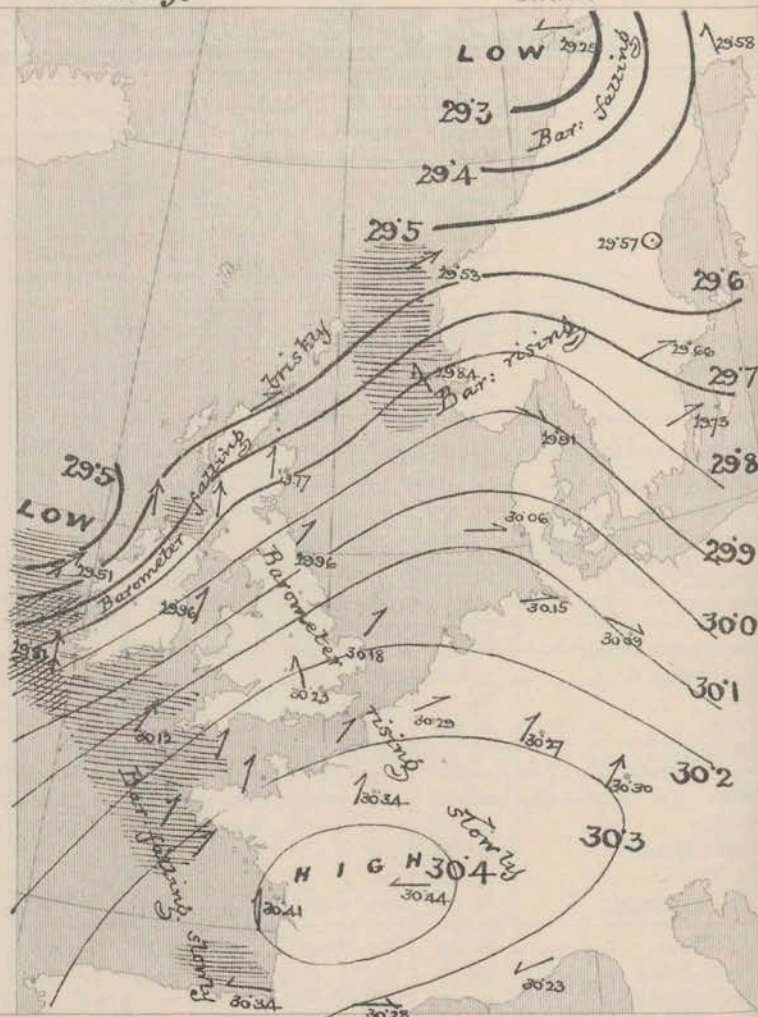
— = Rough. — = High.

MEAN HEIGHT OF THE BAROMETER

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

During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS.
Sumburgh Head	29.685
Stornoway	29.687
Wick	29.725
Nairn	29.753
Aberdeen	29.790
Leith	29.829
Shields	29.886
York	29.935
Loughborough	29.967
Ardrossan	29.840
Donaghadee	29.861
Holyhead	29.800
Liverpool	29.922
Parsonstown	29.886
Valencia	29.809
Roche's Point	29.894
Pembroke	29.926
Scilly	29.960
Jersey	30.010
Hurst Castle	29.997
Dover	30.017
LONDON	30.007
Oxford	29.997
Cambridge	29.992
Yarmouth	29.981



TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

TEMPERATURE—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

WEATHER is shown by Letters of the Beaufort Scale.

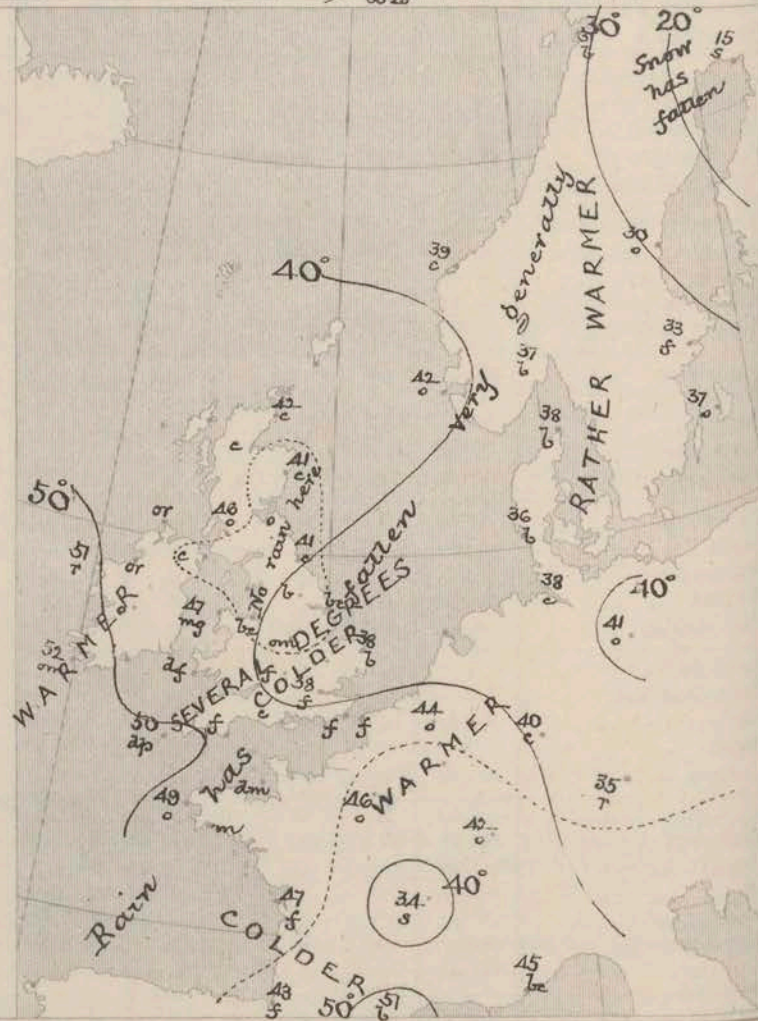
RAINFALL—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of January.)

STATIONS.	TEMPERATURE.				RAINFALL. (Inches.)
	Daily Max.	Daily Min.	at 8 a.m. Dry.	at 8 a.m. Wet.	
Sumburgh Head	42.9	35.4	39.4	38.2	3.06
Stornoway	43.0	34.2	39.0	37.8	5.17
Wick	42.2	33.2	37.9	36.4	1.97
Nairn	41.9	32.7	36.6	35.0	2.02
Aberdeen	42.4	33.3	37.1	35.4	2.34
Leith	44.6	33.7	38.2	36.8	1.98
Shields	43.1	34.7	38.0	36.7	1.79
York	43.2	33.1	36.8	35.9	1.83
Loughborough	43.5	32.9	36.5	35.5	2.08
Ardrossan	44.4	36.4	39.8	38.5	4.63
Donaghadee	44.4	36.3	39.9	39.1	3.03
Holyhead	45.0	39.0	41.7	40.2	3.49
Liverpool	43.9	35.6	38.7	37.1	2.23
Parsonstown	46.0	34.6	39.0	37.9	3.09
Valencia	49.8	40.5	44.3	43.3	6.79
Roche's Point	47.9	39.7	43.2	42.0	5.63
Pembroke	45.8	39.9	42.8	41.2	3.92
Scilly	49.1	43.3	46.5	45.0	3.93
Jersey	46.0	38.7	41.7	40.4	3.24
Hurst Castle	45.3	37.0	40.1	39.7	3.10
Dover	43.7	36.6	39.4	38.2	2.68
LONDON	44.8	34.4	37.9	36.8	2.20
Oxford	43.8	34.4	37.5	36.5	2.33
Cambridge	43.9	32.6	36.5	35.7	1.57
Yarmouth	41.9	34.5	37.7	36.9	2.06

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



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30.2 in: to 30.4 in: and more, over France, Spain, and the Bay of Biscay.
Lowest, 29.3 in: and less, over the northwest of Norway, 29.5 in: and less, off our extreme northwest coast.
Gradients rather steep over Ireland and Scotland, slight over France.
Barometer falling fast in northwest, rising east and southeast.

TEMPERATURE

Highest, 52° at Valencia, 51° at Balmuccia, 50° at Scilly, 48° at Jersey, 48° at Hunt Castle.
Lowest, 15° at Haparanda, 30° at Helsingfors, 31° at Bodo, 35° at Munich and York, and 36° in London.
It has fallen fast over England, risen in Ireland during the night, and is now rising quickly at the English stations also.

WIND

S. to SW throughout our Islands and the Channel; light or moderate in force at the eastern and southern stations, strong in the west, and blowing a gale in the extreme west of Ireland.
Over France it is light and variable, and in Denmark N.W.

WEATHER

Fine over the North Sea, very foggy and hazy over England and the coast of France, dull and rainy in the west of our Islands.
A good deal of cloud prevails over Central France, and rain is falling at Muenich.

SEA

High off the coast of Ireland, rough at several other western and south-western stations, moderate or slight elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The depression in the northwest is likely to move northwards during the day, and to cause SW^{ly} gales or strong winds on the Scotch coast. Our south and east coasts are not threatened at present.

FORECASTS

For the 24 hours ending at NOON on 15th JAN^y 1890.

DISTRICTS.

FORECASTS.

† 0	SCOTLAND NORTH	S ^{ly} and SW ^{ly} winds, strong to a gale; squally, rain at times.
† 1	SCOTLAND EAST	
2	ENGLAND N.E.	S ^{ly} and SW ^{ly} winds, freshening; fair and milder.
3	ENGLAND EAST	
4	MIDLAND COUNTIES	
5	ENGLAND SOUTH	

DISTRICTS.

FORECASTS

† 6	SCOTLAND WEST	Same as Nos 0 and 1.
7	ENGLAND N.W.	
8	ENGLAND S.W.	SW ^{ly} breezes, strong; squally, showery.
9	IRELAND NORTH	
0	IRELAND SOUTH	S ^{ly} and SW ^{ly} winds, strong and squally to moderate and fair
	WARNINGS	
		The SOUTH CONE has been rehoisted this morning in districts 0.1. and 6.

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

YESTERDAY'S 2 P.M. REPORTS.

	BAR:	THER:		WIND		WEA.	SEA		BAR:	THER:		WIND		WEA.	SEA
		D.	W.	D.	F.					D.	W.	D.	F.		
Skudesnaes ...	29.61	45	44	S	7	P	6		Holyhead ...	30.42	48	44	WSPW	4	bc
Sumburgh Head ...	29.32	44	42	WSPW	6	o p g s	6		Valencia ...	30.08	50	46	WSPW	4	bc m
Stornoway ...	29.52	39	39	W	5	th f	5		Scilly ...	30.17	50	49	WSPW	5	o
Aberdeen ...	29.67	44	38	SW	4	bc	3		Jersey ...	30.26	52	51	SW	4	bc
Shields ...	29.87	49	43	SW	4	bc	2		Dungeness ...	30.11	49	48	WSPW	6	m
Ardrossan ...	29.85	43	41	W	4	bc f	3		London ...	30.08	54	52	SW	4	o
Malin Head ...	29.80	45	39	W	7	bc	5		Yarmouth ...	30.01	50	48	WSPW	4	bc
Mullaghmore ...	29.91	45	42	SW	5	c	5		Rochefort ...	30.43	53	52	SPSE	2	f
Belmullet ...	29.92	48	45	SW	6	bc	*								

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

Weather fine and bright over Spain and at most of the Mediterranean stations, and clearing up over Ireland and some parts of Scotland; foggy over France, misty and damp in the Channel, dull and unsettled elsewhere. Snow reported at Moscow, continuing changeable and unsettled over the United Kingdom during succeeding day, but fine and bright at intervals.

Temperature still exceeding 50° over the southeastern and southern parts of the Mediterranean, and ranging from 49° to 51° in the west of France and southwest of England; below the freezing point over eastern and northern Europe, the lowest readings of all being 8° at Kuopio and below 20° over Finland generally, the N. of Sweden and S. of Hungary. Rising to considerably above 50° over the British Isles and France later, and to 59° at Perpignan and Lisbon.

Wind S^W to W^W over the British Islands, the Channel and North Sea - moderate at the E. stations, strong to a gale in the NW. Light N^W to W^W over Russia, Poland and S. Germany, E^W on the N. shores of the Mediterranean, very variable elsewhere. W^W gale in N. of Scotland later, but wind subsequently moderating generally.

Barometer - highest 30.20 ins. to about 30.45 ins. over Spain, the Bay of Biscay, France and W. Germany, and exceeding 30.0 ins. in a ridge extending N. to near Stockholm; lowest 29.44 ins. and less in a depression off the N. of Scotland, 29.6 ins. and less in a shallow system over central Russia and 30.0 ins. and less in another lying over Sardinia and Corsica. Northern depression moving N. later.

General remarks on the weather for the 24 hours ending at 8 a.m. on January 11th 1890

Weather fair and bright in the Algerian and most of the other Mediterranean coasts, as well as the eastern shores of the North Sea; very cloudy, dull and unsettled elsewhere - foggy in the west of France, at the mouth of the Channel and in several parts of Great Britain, dull and unsettled elsewhere, with snow and rain at the Russian stations. Rain or snow falling very generally later, but not in large quantities.

Temperature very changeable over northwestern Europe; below the freezing point in many parts of Russia and in Hungary, the lowest readings of all being 12° at Archangel, 20° at Haparanda, and 28° at Kharkov and Buda Pesth; the highest, 50° and more in the west of our Islands and at Biarritz, as well as over the southeastern parts of the Mediterranean; highest of all 55° at Malta, 53° at Valencia and Biarritz. Daily maximum exceeding 50° over our Islands, and exceeding 60° over several parts of southern Europe.

Wind N^W over Sweden and the Baltic, NW^W to W^W over Germany, SW^W to SE^W over central Russia, W^W and SW^W in our Islands, but not strong, NE^W to NW^W over southern Europe, N^W winds becoming stronger over the Baltic later, and blowing a gale at Wisby.

Barometer - highest 30.2 ins. to 30.5 ins. in an anticyclone covering France, Spain, and about 29.1 ins. in a large depression lying over the Baltic Provinces, 29.7 ins. in another off the northwest of Scotland, and 30.1 ins. and less in a third, lying over Corsica and the Gulf of Genoa. N^W disturbances moving eastwards later, that in South moving Southeastward.

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, 15th January, 1890.*
 Issued by the Meteorological Office, 63, Victoria Street, London. *R. H. SCOTT, Secretary.*

Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.																		
STATIONS.	YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
	BAROM :	TEMP.	WIND.		Weather.	BAROMETRIC.		SHADE TEMP.			WIND.		Weather.	Sea. (0 to 4.)	SHADE TEMP.		Amount of Rainfall.	
	Reading at 32° F. and Sea Level.	Dry.	Dir.	Force. (0 to 12.)		Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Dir.	Force. (0 to 12.)			Max.	Min.		
SCANDINAVIA.																		
Haparanda ...																		
Hernösand ...	29.63	18	Z	0	S	29.11	- .46	33	33	+ 3	SSW	8	T	*	37	14	0.08	
Stockholm ...	29.78	30	Z	0	6	29.22	- .44	35	34	+ 2	S	8	O	*	36	28	0.04	
Wisby ...	29.92	36	SW	4	6	29.38	- .35	37	37	0	SSW	8	T	*	39	32	0.08	
Bodö ...	29.33	34	E	2	bc	29.02	- .23	36	32	+ 5	ESE	4	O	2	?	28	-	
Christiansund	29.23	40	SE	5	O	29.11	- .42	41	38	+ 2	WNW	8	T	6	41	37	0.43	
Skudesnaes ...	29.38	41	S	9	T	29.53	- .31	42	39	0	WNW	8	O	6	43	37	0.63	
Christiania Fjord (Færd)	29.71	40	WSW	5	O	29.07	- .74	44	41	+ 7	W	8	C	6	?	?	-	
Skagen (The Scaw)	29.78	39	SW	6	O	29.25	- .66	42	?	+ 4	NW	9	6	6	43	?	0.16	
Fanö ...	29.83	38	S	6	T	29.74	- .32	40	39	+ 4	WNW	6	6	*	45	36	0.04	
Sumburgh Head	29.00	44	SSW	3	T	29.58	+ .02	42	39	+ 1	W	4	bc	6	45	40	0.13	
Stornoway ...																		
Wick ...	29.03	42	NW	4	O	29.72	+ .13	38	36	- 4	W	3	C	2	48	34	0.25	
Nairn ...	29.13	45	WSW	4	T	29.78	+ .14	38	35	- 5	Z	0	6	1	52	31	0.35	
Aberdeen ...	29.17	50	SSW	8	cq [†]	29.84	+ .07	37	34	- 4	S	3	bc	4	51	36	0.20	
Leith ...	29.33	45	SSW	5	T	29.90	+ .06	41	38	- 4	WSW	2	O	*	52	36	0.16	
Shields ...	29.57	41	SSW	8	O	30.00	+ .04	41	38	0	SW	2	m	2	52	38	0.04	
Spurn Head ...	29.77	49	SSW	7	6	30.02	- .07	40	39	+ 2	WSW	3	bc	4	50	36	-	
York ...	29.77	51	SW	3	O	30.03	- .05	38	37	+ 3	SW	2	bc	*	53	35	0.02	
Loughborough	29.90	50	SW	6	O	30.06	- .09	45	43	+ 9	SW	1	O	*	52	36	0.01	
BRITISH ISLANDS.																		
Ardrossan ...	29.35	50	SSW	6	O	29.90	+ .10	43	42	- 3	SW	3	C	3	50	42	0.33	
Malin Head ...	29.37	43	WNW	7	OT	29.83	+ .22	38	37	- 5	S	4	O	3	51	38	0.40	
Mullaghmore ...	29.56	46	W	7	T	29.87	+ .23	42	39	- 5	SSW	4	C	4	53	38	0.28	
Belmullet ...	29.64	44	WNW	5	O	29.81	+ .30	44	43	- 7	SSW	4	O	*	52	31	0.36	
Donaghadee ...	29.48	53	WSW	7	C	29.94	+ .10	35	35	- 11	SSW	2	bc	2	54	34	0.24	
Liverpool (Bidston)	29.77	51	SW	6	C	30.03	- .01	42	41	+ 1	SW	1	O	2	53	39	0.05	
Holyhead ...	29.80	50	SSW	7	mry	29.99	+ .03	42	42	- 5	Z	0	ogm	O	50	40	0.07	
Parsonstown ...	29.68	53	SW	3	O	29.92	+ .13	42	41	- 6	SE	1	T	*	54	36	0.07	
Valencia ...	29.80	54	SW	8	ogm	29.92	+ .11	51	50	- 1	SSW	6	om	6	54	44	0.15	
Roche's Point...	29.86	51	WSW	7	C	29.97	+ .04	50	50	0	WSW	5	rm	5	53	45	0.15	
Pembroke (St. Ann's Hd.)																		
Scilly ...	30.07	50	SSW	7	O	30.12	.00	49	49	- 1	SW	5	C	5	51	48	0.02	
Prawle Point ...	30.13	48	WSW	6	T	30.17	- .02	48	48	- 2	SSW	4	m	3	50	47	-	
Jersey (St. Aubin's)	30.23	49	SSW	4	O	30.22	- .06	50	48	+ 1	WSW	3	ogm	3	51	47	0.08	
Hurst Castle ...	30.14	49	SW	6	C	30.16	- .07	49	47	+ 1	WSW	4	og	3	50	45	0.01	
Dungeness ...	30.14	48	SW	5	O	30.14	- .10	48	46	+ 6	W	4	C	3	49	41	0.03	
London ...	30.09	49	SW	5	og	30.12	- .11	48	46	+ 10	W	2	og	*	52	38	-	
Oxford ...	30.02	49	SW	5	O	30.10	- .10	47	46	+ 10	SSW	4	od [†]	*	51	37	-	
Cambridge ...	30.01	50	SW	3	T	30.09	- .12	46	45	+ 9	Z	0	T	*	51	35	0.03	
Yarmouth ...	29.98	48	SW	5	C	30.05	- .13	45	45	+ 7	W	1	f	3	48	37	0.01	
GERMANY & HOLLAND.																		
Cuxhaven ...	30.19	41	SW	5	f	29.88	- .27	43	42	+ 5	W	6	bc	*	45	?	-	
Berlin ...	30.25	39	SW	2	O	29.97	- .12	39	38	- 2	SW	3	O	*	41	34	-	
Wiesbaden ...	*	*	*	*	*	30.21	- .06	46	44	+ 6	WSW	2	O	*	46	39	-	
Munich ...	30.38	38	Z	0	T	30.28	- .02	34	34	- 1	SW	4	C	*	39	34	0.08	
The Helder ...	30.01	43	SSW	5	f	30.03	- .19	44	43	+ 5	WSW	2	C	3	45	39	0.04	
FRANCE AND BELGIUM.																		
Brussels (9 a.m.)	*	*	*	*	*	30.18	- .11	46	45	+ 2	WSW	2	T	*	49	?	-	
Cape Gris Nez	?	45	SW	5	O	?	?	47	46	+ 4	W	4	O	3	?	41	0.04	
Paris ...	30.32	49	SSW	1	O	30.30	- .04	44	42	- 2	S	1	O	*	51	43	-	
Brest ...	?	49	S	4	O	?	?	52	49	+ 3	SW	1	O	5	54	48	0.04	
Lorient ...	30.26	48	S	8	f	30.25	- .05	50	48	+ 3	WSW	2	O	5	50	46	0.04	
PENIN- SULA.																		
Rochefort ...	30.37	50	SE	2	O	30.36	- .05	42	41	- 5	SSW	3	C	2	52	34	-	
Belfort ...	30.31	40	NW	1	O	30.28	- .06	40	34	- 2	NW	1	O	*	45	30	-	
Lyons ...	30.40	40	ESE	1	O	30.38	- .06	37	37	+ 3	E	1	f	*	42	?	-	
Nice ...	30.26	46	NE	2	6	30.28	+ .05	42	39	- 3	E	2	6	1	55	41	-	
Perpignan ...	30.29	47	SE	1	6	30.32	+ .04	41	40	- 10	NW	2	O	*	62	36	-	
Biarritz ...	30.25	50	E	4	6	30.34	.00	52	49	+ 9	W	6	O	4	57	39	-	
Corunna ...	*	*	*	*	*													
Lisbon ...	30.28	54	NW	2	6	30.30	+ .03	46	43	+ 3	NNE	4	6	6	59	?	-	

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

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

WEATHER CHARTS

for 8 a.m. on

Wednesday, 15th January,

1890.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP

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

Changes since previous morning are stated in words.

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

their barbs and feathers refer to force thus—

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

— = forces 5 to 7; — = forces 1 to 4.

⊙ = dead calm.

SEA DISTURBANCE—Where considerable, is shown thus:

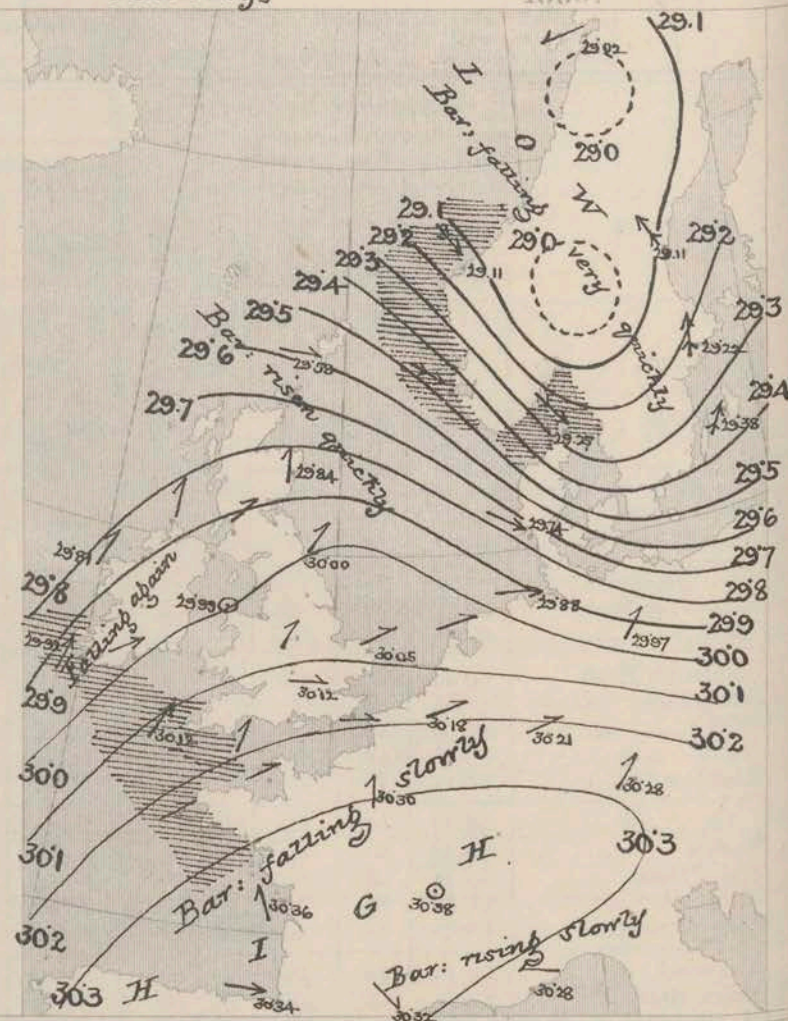
— = Rough. — = High.

MEAN HEIGHT OF THE BAROMETER

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

During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS.
Sumburgh Head	29.685
Stornoway	29.687
Wick	29.723
Nairn	29.753
Aberdeen	29.790
Leith	29.829
Shields	29.886
York	29.935
Loughborough	29.987
Ardrossan	29.840
Donaghadee	29.851
Holyhead	29.896
Liverpool	29.922
Parsonstown	29.886
Valencia	29.869
Roche's Point	29.894
Pembroke	29.926
Sally	29.969
Jersey	30.010
Hurst Castle	29.997
Dover	30.017
LONDON	30.007
Oxford	29.997
Cambridge	29.992
Yarmouth	29.981



TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

TEMPERATURE—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

WEATHER is shown by letters of the Beaufort Scale.

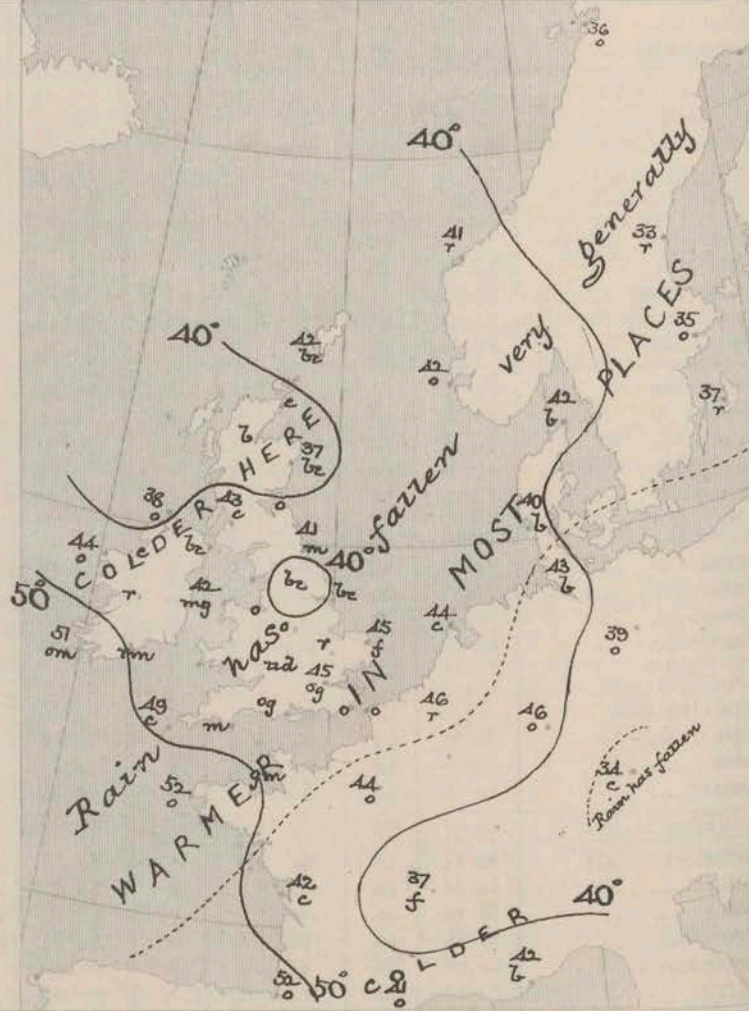
RAINFALL—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of January.)

STATIONS.	TEMPERATURE.				RAINFALL. (Inches.)
	Daily Max.	Daily Min.	at 8 a.m.		
			Dry.	Wet.	
Sumburgh Head.....	42.0	35.4	39.4	38.2	3.66
Stornoway.....	43.0	34.2	39.0	37.8	5.17
Wick.....	42.2	33.2	37.9	36.4	1.97
Nairn.....	41.9	32.7	36.6	35.0	2.02
Aberdeen.....	42.4	33.3	37.1	35.4	2.34
Leith.....	44.6	33.7	38.2	36.8	1.98
Shields.....	43.1	34.7	38.0	36.7	1.79
York.....	43.2	33.1	36.8	35.9	1.88
Loughborough.....	43.5	32.9	36.6	35.5	2.08
Ardrossan.....	44.4	36.4	39.8	38.5	4.53
Donaghadee.....	44.4	36.3	39.9	39.1	3.03
Holyhead.....	45.9	39.0	41.7	40.3	3.49
Liverpool.....	48.9	35.6	38.7	37.1	2.23
Parsonstown.....	46.0	34.6	39.0	37.9	3.09
Valencia.....	49.8	40.5	44.3	43.3	6.79
Roche's Point.....	47.9	39.7	43.2	42.0	6.63
Pembroke.....	45.8	39.9	42.8	41.2	3.92
Sally.....	49.1	43.3	46.5	45.0	3.93
Jersey.....	46.0	38.7	41.7	40.4	3.24
Hurst Castle.....	45.3	37.0	40.4	39.7	3.10
Dover.....	43.7	35.0	39.4	38.2	2.68
LONDON.....	44.8	34.4	37.9	36.8	2.20
Oxford.....	43.8	34.4	37.5	36.5	2.33
Cambridge.....	43.9	32.6	36.5	35.7	1.57
Yarmouth.....	41.9	34.5	37.7	36.9	2.06

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



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30.20 in: to nearly 30.40 in: over Spain, France, and the Bay of Biscay.
 Lowest, 29.10 in: and less, over Scandinavia, 29.8 in: and less, off the northwest of Ireland.
 Gradient were steep over Denmark and the southern parts of Sweden and Norway, moderate over the United Kingdom.
 Barometer beginning to fall again in Ireland, rising in the north and east.

TEMPERATURE

Highest, 51° at Biarritz and Brest, 51° at Valencia, 50° at Rocherbourg and Jersey, 48° in London.
 Lowest, 33° at Helsingfors, 34° at Munich, 37° at Aberdeen, 38° at Wick, Harbin and York.
 It has risen decidedly over England, the North Sea and Scandinavia since yesterday, fallen in Ireland.

WIND

Blowing a gale from S. in Sweden, from W. and NW. in the Skager Rack, and from NW. in the southwest of Norway.
 Light from between SW. and W. over the eastern half of England, but was S. on our western coast, strong and increasing at Valencia.
 Over France and Spain it was light and variable.

WEATHER

Fine and bright at Lisbon and Nice and also in Scotland.
 Dull generally elsewhere, with rain in Sweden and several parts of Ireland, and misty drizzle over some parts of England.

SEA

Rough in the north and also on our southwestern coast, but had gone down considerably elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

A new depression appears to be approaching our west and northwest coasts from the Atlantic; of its size and depth very little is known at present, but it has been deemed inadvisable to lower any of the Storm signals at present.

[Communication with Stormway is still interrupted.]

FORECASTS

For the 24 hours ending at NOON on 16th JAN^y 1890.

DISTRICTS.

FORECASTS.

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

Wind becoming S^W and increasing again; fine to unsettled and showery.

W^W winds, light, dull to fair, then S^W breezes, increasing; less settled again.

DISTRICTS.

FORECASTS

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

S^W and SW^W winds, increasing in force, unsettled, squally.

WARNINGS

The SOUTH CONE is still flying except in districts 3.445.

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

YESTERDAY'S 2 P.M. REPORTS.

	BAR:	THER:		WIND		WEA.	SEA		BAR:	THER:		WIND		WEA.	SEA
		D.	W.	D.	F.					D.	W.	D.	F.		
Skudesnaes ...	29.78	43	42	S	8	0	6		Holyhead ...	29.84	49	48	SSW	6	2 qm
Sumburgh Head ...	29.32	45	43	SW	5	0	6		Valencia ...	29.78	53	51	SSW	7	0 m
Stornoway ...	29.14	43	43	SW	3	r	4		Scilly ...	30.09	50	49	SSW	7	0 m
Aberdeen ...	29.43	43	42	SSE	7	0 q	6		Jersey ...	30.27	48	47	SSW	5	0
Shields ...	29.69	45	43	SSW	6	0	2		Dungeness ...	30.18	48	48	SW	4	0
Ardrossan ...	29.49	49	48	S	6	0	6		London ...	30.13	52	51	SW	4	0
Malin Head ...	29.32	51	49	S	9	0	5		Yarmouth ...	30.11	44	43	SW	4	0
Mullaghmore ...	29.46	51	50	SSW	8	0 q	6		Rocheport ...	30.40	50	50	S	3	0
Belmullet ...	29.44	52	51	SW	10	0	*								

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

Weather fine and bright over Spain and at the Mediterranean stations, temporarily bright over the North Sea, and east of England, dull generally elsewhere. Foggy in many parts of France and England and also in Austria; rain falling at our western stations, snow in many parts of Finland and the Baltic Provinces, sleet in Germany. Rain during the day over the greater part of Western Europe, but amounts not very large.

Temperature still above 50° at Brindisi, Malta, some of the Algerian stations and Barcelona; also at Valencia (Ireland) and Corunna, and touching 50° at Rocher, Scilly and Brawley Point. Below the freezing point over Poland, Hungary, and Southern Russia, and as low as 18° at St Petersburg, 15° at Haparanda, 7° at Kuopio, and -15° at Archangel. Rising quickly over England and the North Sea later, exceeding 50° at most stations, and touching 62° at Perpignan; falling somewhat over Ireland.

Wind very variable; mainly E or NE over the Mediterranean, S to W over the northern half of Europe; moderate to fresh in most places, strong on our own western coast, a gale in the extreme west of Ireland. S and SW galls extending over the Irish Sea, Scotland, and Scandinavia later, and equally breezy to our southeastern coasts.

Barometer highest, 30.2 ins. to 30.4 ins. and more, over Spain, France, southeast of England, western Germany and the lowest, 29.3 ins. and less, off the northwest of Norway, 29.5 ins. and less, off our own northwestern coasts, and 29.9 ins. and less, in shallow depressions lying over Southern Russia and near Malta. Deep depression reaching our northern coasts later and travelling towards 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 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, 16th January, 1890.*
Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.

STATIONS.	YESTERDAY EVENING.						8 A.M. TO DAY.										PAST 24 HOURS.		
	BAROM.	TEMP.	WIND.		Weather.		BAROMETER.		SHADE TEMP.			WIND.		Weather.	Sea.		SHADE TEMP.		Amount of Rainfall.
	Reading at 32° F. and Sea Level.	Dry.	Dir.	Force (0 to 12.)			Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Dir.	Force (0 to 12.)				Max.	Min.	
SCANDINAVIA.																			
Haparanda ...	29.44	24	SE	2	S		29.74	+ .35	23	23	- 8	SE	0	b	*		28	19	0.20
Hernösand ...	29.37	35	N	2	b		29.80	+ .69	32	30	- 1	SE	0	b	*		36	14	0.20
Stockholm ...	29.37	33	NW	6	m		29.82	+ .60	29	?	- 6	NW	1	o	*		29	28	0.20
Wisby ...	29.44	40	NW	9	bc		29.83	+ .45	37	35	0	NW	6	b	*		41	36	0.12
Bodo ...	29.27	32	E	2	o		29.71	+ .69	32	28	- 4	E	2	c	1		36	30	-
CHRISTIANIA.																			
Christiansund ...	29.64	40	NW	5	c		29.73	+ .62	40	37	- 1	E	4	o	5		41	37	0.04
Skudesnaes ...	29.67	38	SE	0	bc		29.91	+ .38	41	40	- 1	SE	6	o	5		43	?	-
Christiania Fjord (Farder) ...	29.75	41	NW	7	b		29.99	+ .92	37	36	- 7	SSW	2	b	3		45	36	-
Skagen (The Scaw) ...	29.85	40	NW	5	b		30.00	+ .75	39	38	- 3	SE	0	b	3		43	37	-
Faro ...	30.04	38	NW	3	b		30.08	+ .34	39	39	- 1	SE	1	o	*		43	37	-
IRELAND.																			
Sumburgh Head ...	29.66	43	SW	3	c		29.86	- .02	49	47	+ 7	SSW	4	c	6		49	42	0.02
Stornoway ...																			
Wick ...	29.64	42	S	4	o		29.87	- .15	48	47	+ 10	SSW	4	bc	3		48	35	-
Nairn ...	29.66	43	SE	0	o		29.89	- .19	52	48	+ 14	SW	1	c	1		52	35	-
Aberdeen ...	29.78	41	S	2	o		29.73	- .11	47	45	+ 10	S	2	cq	3		49	37	-
SCOTLAND.																			
Leith ...	29.80	46	SW	4	b		29.75	- .15	51	51	+ 10	SSW	3	c	*		51	40	-
Shields ...	29.91	43	SW	3	c		29.88	- .12	49	46	+ 8	SSW	3	c	2		49	39	-
Spurn Head ...	30.01	46	S	3	o		30.00	- .02	44	43	+ 4	S	3	b	3		46	39	0.01
York ...	29.99	47	SSE	1	m		29.97	- .06	44	44	+ 6	S	1	b	5		47	37	0.01
Loughborough ...	30.06	49	NW	2	o		30.05	- .01	46	45	+ 1	S	3	bc	*		52	44	0.01
ENGLAND.																			
Ardrossan ...	29.78	48	SE	3	cm		29.73	- .17	49	48	+ 6	S	4	o	5		49	42	0.01
Malin Head ...	29.64	49	S	7	og		29.87	- .26	51	50	+ 13	S	5	og	3		51	38	-
Mullaghmore ...	29.68	50	SW	8	c		29.85	- .32	54	51	+ 12	SSW	8	om	6		54	41	0.01
Belmullet ...	29.66	49	SW	6	om		29.49	- .32	53	51	+ 9	SW	10	o	*		53	42	0.20
Donaghadee ...	29.81	50	SW	3	o		29.75	- .19	50	49	+ 15	SW	5	o	3		50	35	0.02
IRELAND.																			
Liverpool (Biston) ...	29.98	51	SW	3	c		29.96	- .07	49	47	+ 7	SE	2	o	3		52	42	-
Holyhead ...	29.96	48	SW	5	cgm		29.89	- .10	50	50	+ 8	SSW	5	mg	5		51	42	0.10
Parsonstown ...	29.83	49	SE	1	bc		29.72	- .20	53	51	+ 11	SW	3	mg	3		54	41	0.02
Valencia ...	29.81	51	SSE	8	omga		29.65	- .27	54	52	+ 3	SSE	8	ogm	7		54	50	0.06
Roche's Point ...	29.93	50	SW	5	r		29.82	- .15	52	51	+ 2	SSW	7	o	5		52	50	0.10
IRELAND.																			
Pembroke (St. Ann's Hd.) ...	30.02	48	SSW	5	o		29.98	- .10	50	50	+ 1	SSW	5	rm	5		50	48	0.06
Scilly ...	30.09	49	SSW	5	bcgm		30.02	- .10	51	51	+ 2	S	6	om	6		53	48	0.02
Prawle Point ...	30.17	48	WSW	3	c		30.12	- .05	50	50	+ 2	SSW	6	cmu	4		50	47	0.02
Jersey (St. Aubin's) ...	30.22	50	SW	3	og		30.22	0.00	49	48	- 1	S	4	om	3		51	48	-
Hurst Castle ...	30.16	49	SW	4	od		30.16	0.00	51	49	+ 2	SSW	5	og	3		51	46	0.01
ENGLAND.																			
Dungeness ...	30.16	48	W	4	r		30.16	+ .02	48	47	0	WSW	4	o	3		51	46	0.06
London ...	30.14	49	SW	3	o		30.14	+ .02	48	46	0	SSW	2	o	*		52	46	-
Oxford ...	30.13	48	SW	3	o		30.11	+ .01	48	47	+ 1	SSW	2	og	*		51	45	-
Cambridge ...	30.11	49	SW	2	o		30.12	+ .03	46	45	0	SW	1	o	*		51	43	-
Yarmouth ...	30.10	49	W	2	c		30.11	+ .06	47	46	+ 2	WSW	2	c	3		49	44	-
GERMANY & HOLLAND.																			
Cuxhaven ...	30.08	41	W	2	c		30.15	+ .27	43	42	0	W	3	f	*		43	41	-
Berlin ...	30.08	39	NW	4	b		30.18	+ .21	34	33	- 5	NW	3	f	*		46	34	0.08
Wiesbaden ...	*	*	*	*	*		30.32	+ .11	44	42	- 2	SW	2	f	*		48	?	-
Munich ...	30.31	38	W	2	o		30.34	+ .06	36	35	+ 2	SW	5	o	*		43	34	-
The Helder ...	30.13	44	SW	2	f		30.16	+ .13	44	43	0	SW	2	c	2		45	43	-
FRANCE AND BELGIUM.																			
Brussels (9 a.m.) ...	*	*	*	*	*		30.28	+ .10	45	44	- 1	SSW	1	o	*		48	45	0.04
Cape Gris Nez ...	?	48	W	3	f		?	?	43	42	- 4	SSW	3	f	3		50	41	0.04
Paris ...	30.27	46	SSW	1	o		30.34	+ .04	41	39	- 3	SSW	2	o	*		47	39	-
Brest ...	?	51	WSW	3	o		?	?	51	49	- 1	SW	4	o	5		54	48	0.04
Lorient ...	30.25	50	SW	3	o		30.23	- .02	50	50	0	SSW	2	o	5		50	48	-
SPAIN.																			
Rochefort ...	30.37	44	SE	3	o		30.37	+ .01	44	43	+ 2	SSW	4	o	2		50	37	-
Belfort ...	30.26	41	NW	1	o		30.29	+ .01	42	33	+ 2	NW	1	o	*		46	39	-
Lyons ...	30.38	38	N	1	f		30.39	+ .01	35	35	- 2	N	2	f	*		45	35	-
Nice ...	30.27	46	SE	2	o		30.25	- .03	39	38	- 3	ENE	4	b	1		54	37	-
Perpignan ...	30.28	44	W	2	b		30.28	- .04	32	31	- 9	SW	2	b	*		59	30	-
Biarritz ...	30.32	50	NW	3	b		30.31	- .03	44	43	- 8	E	3	o	3		55	43	-
PORTUGAL.																			
Corunna ...	*	*	*	*	*														
Lisbon ...	*	*	*	*	*														

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

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

WEATHER CHARTS

for 8 a.m. on

Thursday, 16th January,

1890

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP

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

Changes since previous morning are stated in words.

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

their barbs and feathers refer to force thus—

— forces above 10; — forces 8 to 10;

— forces 5 to 7; — forces 1 to 4.

⊙ = dead calm.

SEA DISTURBANCE—Where considerable, is shown thus:

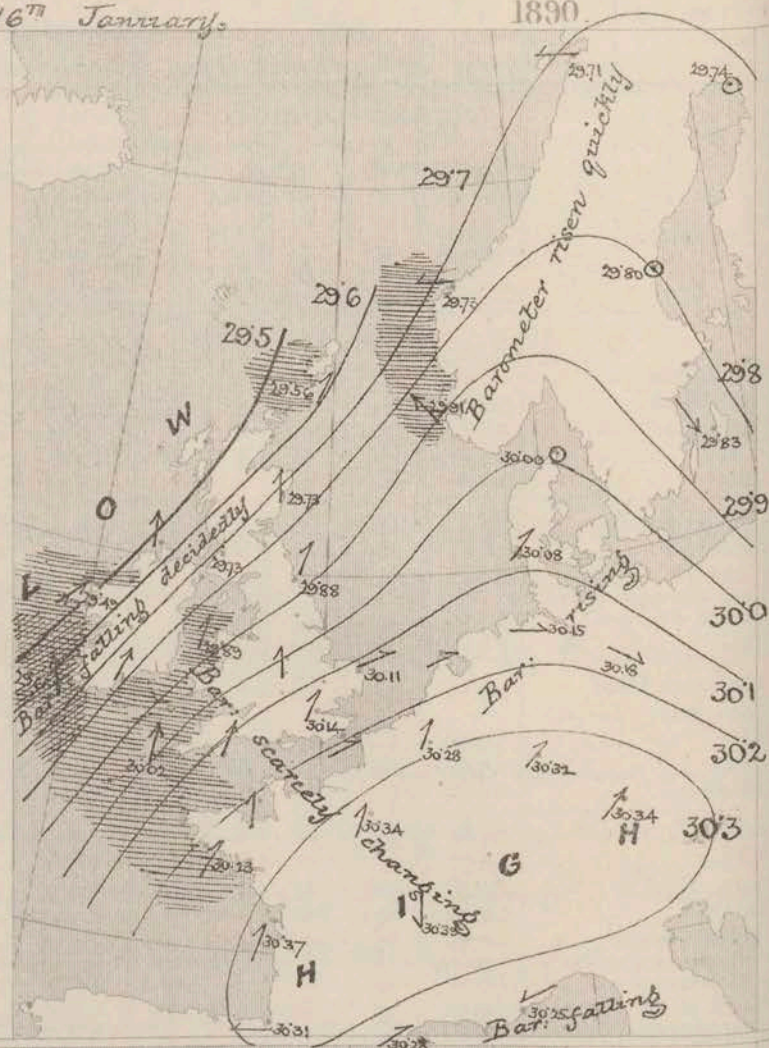
— Rough. — High.

MEAN HEIGHT OF THE BAROMETER

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

During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS.
Sumburgh Head	29.685
Stornoway	29.687
Wick	29.725
Nairn	29.753
Aberdeen	29.790
Leith	29.829
Shields	29.886
York	29.935
Loughborough	29.967
Ardrossan	29.840
Donaghadee	29.851
Holyhead	29.896
Liverpool	29.922
Parsonstown	29.886
Valencia	29.809
Roche's Point	29.894
Pembroke	29.920
Sally	29.960
Jersey	30.010
Hurst Castle	29.997
Dover	30.017
LONDON	30.007
Oxford	29.997
Cambridge	29.992
Yarmouth	29.981



TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

TEMPERATURE—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

WEATHER is shown by Letters of the Beaufort Scale.

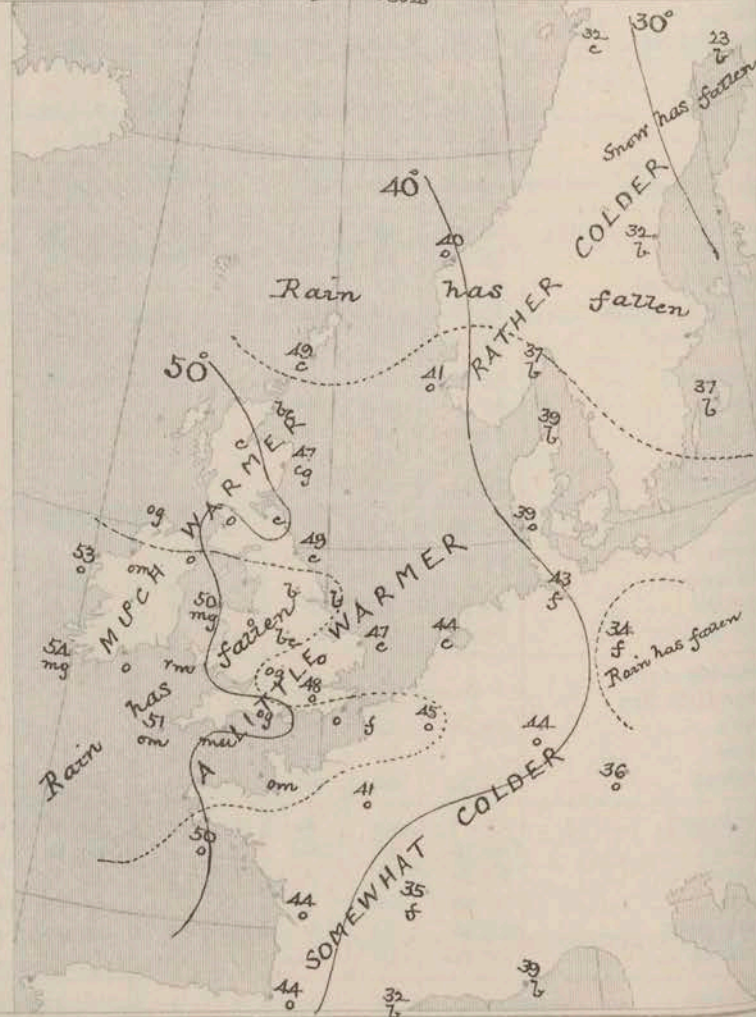
RAINFALL—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of January.)

STATIONS.	TEMPERATURE.				RAINFALL (Inches.)
	Daily Max.	Daily Min.	at 8 a.m. Dry.	Wet.	
Sumburgh Head	42.9	35.4	39.4	38.2	3.66
Stornoway	43.0	34.2	39.0	37.8	5.17
Wick	42.2	33.2	37.9	36.4	1.97
Nairn	41.9	32.7	36.6	35.0	2.02
Aberdeen	42.4	33.3	37.1	35.4	2.34
Leith	41.6	33.7	38.2	36.8	1.98
Shields	43.1	34.7	38.0	36.7	1.79
York	43.2	33.1	36.8	35.9	1.83
Loughborough	43.5	32.9	36.5	35.5	2.68
Ardrossan	44.4	36.4	39.8	38.5	4.53
Donaghadee	44.4	36.3	39.9	39.1	3.03
Holyhead	45.0	39.0	41.7	40.2	3.49
Liverpool	43.0	35.6	38.7	37.1	2.23
Parsonstown	46.0	34.6	39.0	37.9	3.09
Valencia	45.8	40.5	44.3	43.3	0.79
Roche's Point	47.9	39.7	43.2	42.0	5.63
Pembroke	45.8	39.9	42.8	41.2	3.92
Sally	49.1	43.3	46.5	45.0	3.93
Jersey	46.0	38.7	41.7	40.4	3.24
Hurst Castle	45.3	37.0	40.4	39.7	3.10
Dover	43.7	36.0	39.4	38.2	2.68
LONDON	44.8	34.4	37.0	36.8	2.20
Oxford	43.8	34.4	37.5	36.5	2.33
Cambridge	43.9	32.6	36.5	35.7	1.57
Yarmouth	41.9	34.5	37.7	36.9	2.06

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



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30.2 in: to nearly 30.4 in: in an anticyclone lying over France and Germany.
 Lowest, 29.5 in: and less, off our extreme northwest coasts.
 Gradients slight over the Continent, moderate over England, steep over Ireland and Scotland.
 Barometer falling in west, most at Valencia, rising in southeast and east.

TEMPERATURE

Highest, 54° at Valencia and Mullaghmore, 53° at Belmullet, 52° at Rockpoint and Naas, 51° at Sully and Malin H., 49° at Lumburg Head, 48° in London.
 Lowest, 23° at Haparanda, 32° at Bodø, Hønsand and Keflavik, 34° at Berlin, 35° at Lyons, 36° at Munich, 39° in Denmark, and 41° at Paris.
 It remains very high for the time of year over the British Islands generally.

WIND

S² throughout over Islands and the greater part of France, light to moderate in the east, strong in the west - a gale in the extreme west.
 A strong S² gale was felt over Caithness last night.

WEATHER

Fair generally over the northeastern and eastern parts of Great Britain.
 Dull and gloomy elsewhere, misty on our southwestern coasts with a threatening appearance in places.
 Some rain fell yesterday at all our western stations.

SEA

High at Valencia, rough at Seaburgh H. and Sully, rather so over the Irish Sea, slight in Straits of Dover.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The fall of the barometer at Valencia appears to have been accelerated (early since) this morning, and it appears likely that a new depression is approaching Ireland, which will cause S² gales on all our southwestern, western, and northern coasts shortly.

FORECASTS

For the 24 hours ending at NOON on 17th JAN^y 1890.

DISTRICTS.

FORECASTS.

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

S² winds, increasing to a gale;
 very mild, rainy.
 S² and SW² winds, freshening greatly;
 becoming squally and rainy, very mild.

DISTRICTS.

FORECASTS

- 1 SCOTLAND WEST
- 2 ENGLAND N.W.
- 3 ENGLAND S.W.
- 4 IRELAND NORTH
- 5 IRELAND SOUTH

S² and SW² gales and strong winds;
 squally, rainy, mild.

WARNINGS

The SOUTH CONE has been rehoisted this morning in Scotland, and is now up except in districts 2, 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:	THER:		WIND				SEA		BAR:	THER:		WIND				SEA
		D.	W.	D.	F.	WEA.					D.	W.	D.	F.	WEA.		
Skudesnaes ...	29.76	43	41	WNW	4	c		5		Holyhead ...	29.96	49	48	SW	5	o g m	4
Sumburgh Head ...	29.67	44	42	W	4	o		5		Valencia ...	29.88	52	51	SSW	6	o a m	6
Stornoway ...										Scilly ...	30.11	52	51	SSW	5	c	5
Aberdeen ...	29.84	40	38	S	2	c m		4		Jersey ...	30.25	51	48	SW	3	o	3
Shields ...	29.95	43	40	SSW	3	c		2		Dungeness ...	30.15	49	48	W	5	c	3
Ardrossan ...	29.85	46	45	SE	3	o		2		London ...	30.14	52	50	SW	4	o	3
Mulin Head ...	29.68	45	44	S	6	c		4		Yarmouth ...	30.08	47	46	WSW	3	c m	3
Mullaghmore ...	29.72	51	50	SSW	6	a m		5		Rochefort ...	30.39	44	43	SE	3	o	2
Belmullet ...	29.69	50	49	SW	6	o		*									

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

Weather still fine and bright over the Mediterranean and Southern Europe, as well as in Scotland, the northeast of England and over the North Sea, dull and gloomy elsewhere; fog very prevalent in Austria Hungary and the southern part of France, misty rain in the southeast and west of our Islands, and heavier rains over Scandinavia, and the Baltic, as well as in the Netherlands. Slight rain fell during the day in the east and south of our Islands and the north of France, as well as over the Baltic, snow in Sweden, where, however, it cleared later.

Temperature changing fitfully, but not greatly over the northern and northwestern countries; exceeding 50° at Brindisi, Malta and Algiers, as well as at Biarritz and Valencia, and as high as 48° in London and 46° at Brussels; below the freezing point over Finland, Russia, Poland, and Austria Hungary, and as low as 19° at Budapest and St. Petersburg, 20° at Moscow, 21° at Hammarstad and 22° at Charkov. No important change later.

Wind very light and variable over the southern half of Europe, strong and variable in the north; — S³ to SE¹ gales over the Baltic and Finland, NW³ to W¹ gales and strong winds over Norway, Denmark, and Holstein, SW¹ and S³ breezes, light to fresh over the British Isles. S³ gales in Ireland and the north of Scotland later, and freshening S³ winds over the Irish Sea.

Barometer highest, 30.2 ins: to 30.3 ins: and more, over the southern half of Europe and Algeria, and exceeding 30.4 ins: over Spain; lowest 29.1 ins: and less, in a complex depression over Scandinavia, and 29.8 ins: and less, off the northeast of Ireland. Scandinavian depression moving eastwards to Finland later, and fresh fall of barometer commencing over the western parts of the British Isles.

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, 17th January, 1890.*
Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.

Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.																		
STATIONS.	YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
	BAROM :	TEMP.	WIND.			BAROMETER.		SHADE TEMP.			WIND.				SHADE TEMP.			
Reading at 32° F. and Sea Level.	Dry.	Dirce.	Force. (0 to 12.)	Weather.	Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Dirce.	Force. (0 to 12.)	Weather.	Sea. (0 to 1.)	Max.	Min.	Amount of Rainfall.		
SCANDINAVIA.																		
Haparanda ...	30.09	13	SE	2	0	30.26	+0.52	5	4	-18	Z	0	0	*	25	?	-	
Hernösand ...	30.07	21	Z	0	0	30.33	+0.53	30	29	-2	SSW	2	0	*	37	18	-	
Stockholm ...	30.10	32	NW	2	0	30.18	+0.36	32	31	+3	E	2	0	*	37	28	-	
Wisby ...	30.13	37	NW	4	0	30.15	+0.32	37	36	0	WSW	2	0	*	37	34	-	
Bodö ...	29.83	34	E	2	0	29.87	+0.16	38	35	+6	ESE	4	1	2	?	28	0.04	
Christiansund ...	29.78	44	ESE	2	0	29.82	+0.09	41	38	+1	ESE	2	0	4	45	39	-	
Skudesnaes ...	29.98	44	SE	6	0	29.98	+0.07	45	43	+4	SSW	6	0	5	45	?	-	
Christiania Fjord (Færdar)	30.05	40	S	3	1	30.09	+0.10	40	40	+3	SSW	3	1	2	?	?	-	
Skagen (The Seaw)	30.10	40	SW	1	0	30.13	+0.13	41	41	+2	WSW	2	0	2	41	37	-	
Fanø ...	30.17	40	SW	2	0	30.18	+0.10	41	41	+2	SW	2	0	*	41	39	-	
Sumburgh Head	29.57	47	SSW	2	0	29.56	-0.01	47	46	-2	SSW	5	0	6	50	45	-	
Stornoway ...	29.55	50	S	5	0	29.58	+0.01	47	45	-1	S	4	0	3	52	45	-	
Wick ...	29.55	53	SSW	4	0	29.58	-0.01	46	43	-6	Z	0	0	1	53	41	0.06	
Nairn ...	29.71	49	SSW	5	0	29.71	-0.02	48	45	+1	SSW	3	0	4	51	47	-	
Aberdeen ...	29.71	49	SSW	5	0	29.71	-0.02	48	45	+1	SSW	3	0	4	51	47	-	
Leith ...	29.76	52	SSW	2	0	29.72	-0.03	50	50	-1	S	2	0	*	55	50	-	
Shields ...	29.89	50	SSW	2	0	29.86	-0.02	47	45	-2	S	3	0	2	55	44	-	
Spurn Head ...	30.01	48	SSW	4	0	29.97	-0.03	45	44	+1	E	5	0	4	49	43	-	
York ...	29.97	52	S	3	0	29.95	-0.02	48	45	+4	S	3	0	*	53	43	-	
Loughborough	30.04	51	S	2	0	30.00	-0.05	47	45	+1	S	4	0	*	53	45	-	
BRITISH ISLANDS.																		
Ardrossan ...	29.69	50	SSW	5	0	29.70	-0.03	49	48	0	SSW	4	0	4	50	47	0.06	
Malin Head ...	29.43	52	S	8	0	29.55	-0.02	42	41	-9	S	6	0	4	54	42	-	
Mullaghmore ...	29.46	52	SSW	7	0	29.58	+0.03	42	41	-10	S	6	0	6	56	42	0.17	
Belmullet ...	29.41	50	SSW	7	0	29.52	+0.03	42	41	-11	SW	6	0	*	55	40	0.76	
Donaghadee ...	29.69	51	SSW	6	0	29.74	-0.01	45	45	-5	S	3	0	2	53	42	0.02	
Liverpool (Bidston)	29.92	51	S	3	0	29.88	-0.08	47	46	-2	S	3	0	3	57	47	0.04	
Holyhead ...	29.84	50	S	6	0	29.82	-0.07	49	48	-1	S	4	0	4	51	48	0.11	
Parsonstown ...	29.60	52	SE	2	0	29.70	-0.02	42	40	-11	Z	0	0	*	55	42	0.02	
Valencia ...	29.86	52	S	7	0	29.65	-0.01	47	45	-7	SSW	6	0	6	55	43	0.14	
Roche's Point...	29.68	51	S	8	0	29.75	-0.07	48	45	-4	WSW	3	0	4	52	46	0.20	
Pembroke (St. Ann's Hd.)	29.89	50	SSW	6	0	29.85	-0.10	49	49	-1	S	5	0	5	50	49	0.06	
Seilly ...	29.91	52	S	7	0	29.89	-0.13	49	49	-2	SSW	5	0	5	53	48	0.10	
Prawle Point ...	30.07	50	SSW	6	0	29.99	-0.13	48	47	-2	SSW	6	0	4	51	47	-	
Jersey (St. Aubin's)	30.17	50	S	4	0	30.14	-0.08	43	40	-6	S	5	0	4	51	42	-	
Hurst Castle ...	30.13	50	SW	6	0	30.08	-0.08	47	44	-4	SSW	6	0	5	51	45	-	
Dungeness ...	30.16	48	SW	4	0	30.15	-0.01	45	43	-3	SW	5	0	4	50	44	-	
London ...	30.14	48	SSW	3	0	30.10	-0.04	45	43	-3	S	3	0	*	54	45	-	
Oxford ...	30.09	48	S	3	0	30.06	-0.05	46	44	-2	S	3	0	*	52	46	-	
Cambridge ...	30.12	47	SW	1	0	30.07	-0.05	45	44	-1	S	1	0	*	54	44	-	
Yarmouth ...	30.11	45	SSW	3	0	30.12	+0.01	45	44	-2	SSW	4	0	3	49	43	-	
GERMANY & HOLLAND.																		
Cuxhaven ...	30.21	41	SW	1	0	30.25	+0.10	42	41	-1	SSW	1	0	*	44	41	-	
Berlin ...	30.26	39	NW	1	0	30.33	+0.15	40	39	+6	SE	1	0	*	?	?	-	
Wiesbaden ...	*	*	*	*	*	30.27	-0.05	41	39	-3	SW	2	0	*	46	41	-	
Munich ...	30.35	34	Z	0	0	30.29	-0.05	33	38	-3	E	4	0	*	37	30	-	
The Helder ...	30.19	45	SSW	2	0	30.21	+0.05	42	42	-2	SSW	1	0	1	45	41	-	
FRANCE AND BELGIUM.																		
Brussels (9 a.m.)	*	*	*	*	*	30.25	-0.03	41	39	-4	S	2	0	*	46	41	-	
Cape Gris Nez	?	47	S	3	0	?	?	41	40	-2	S	3	0	3	48	39	-	
Paris ...	30.30	42	S	1	0	30.24	-0.10	38	36	-3	SE	2	0	*	?	37	-	
Brest ...	?	50	SW	7	0	?	?	50	49	-1	S	7	0	7	54	48	-	
Lorient ...	30.16	49	S	4	0	30.11	-0.12	46	45	-4	S	4	0	5	50	45	-	
Rochefort ...	30.28	45	SE	4	0	30.22	-0.15	36	36	-8	SE	4	0	2	48	27	-	
Belfort ...	30.25	41	SW	1	0	?	?	41	34	-1	SE	1	0	*	46	36	-	
Lyons ...	30.31	34	N	1	0	30.31	-0.08	31	31	-4	SE	1	0	*	37	31	-	
Nice ...	30.20	46	WSW	2	0	30.26	+0.01	41	40	+2	ESE	5	0	1	52	?	-	
Perpignan ...	30.23	46	W	1	0	30.02	-0.26	42	42	+10	SW	2	0	*	58	?	-	
Biarritz ...	30.15	49	ESE	5	0	30.13	-0.18	39	36	-5	SE	3	0	3	54	36	-	
Corunna ...	*	*	*	*	*	30.21	?	45	44	?	W	1	0	5	59	45	-	
Lisbon ...	30.21	54	Z	0	0	30.20	?	45	44	?	W	1	0	5	59	45	-	

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

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

WEATHER CHARTS

for 8 a.m. on

Friday, 17th January,

1890.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP

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

Changes since previous morning are stated in words.

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

— = forces above 10; — = forces 8 to 10;

— = forces 5 to 7; — = forces 1 to 4.

⊙ = dead calm.

SEA DISTURBANCE—Where considerable, is shown thus:

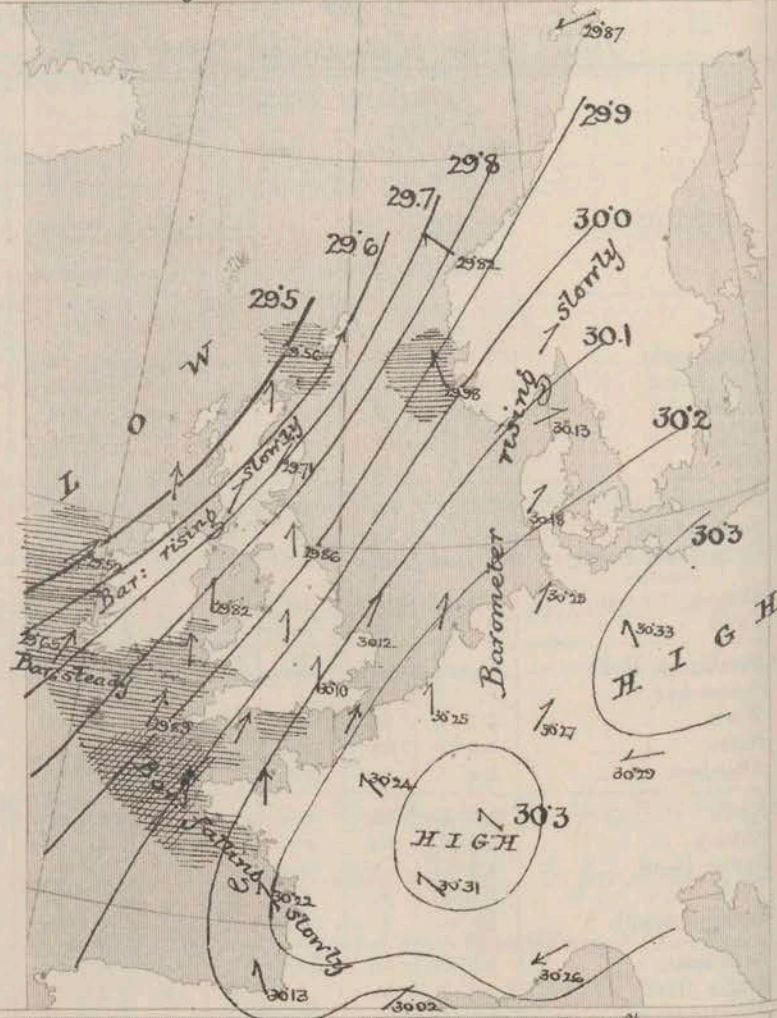
— = Rough. — = High.

MEAN HEIGHT OF THE BAROMETER

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

During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS.
Sumburgh Head	29.685
Stornoway	29.687
Wick	29.725
Nairn	29.753
Aberdeen	29.790
Leith	29.829
Shields	29.886
York	29.935
Loughborough	29.987
Ardrossan	29.840
Donaghadee	29.851
Holyhead	29.896
Liverpool	29.922
Parsonstown	29.888
Valencia	29.869
Roche's Point	29.894
Pembroke	29.926
Silly	29.960
Jersey	30.010
Hurst Castle	29.997
Dover	30.017
LONDON	30.007
Oxford	29.997
Cambridge	29.992
Yarmouth	29.981



TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

TEMPERATURE—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

WEATHER is shown by Letters of the Beaufort Scale.

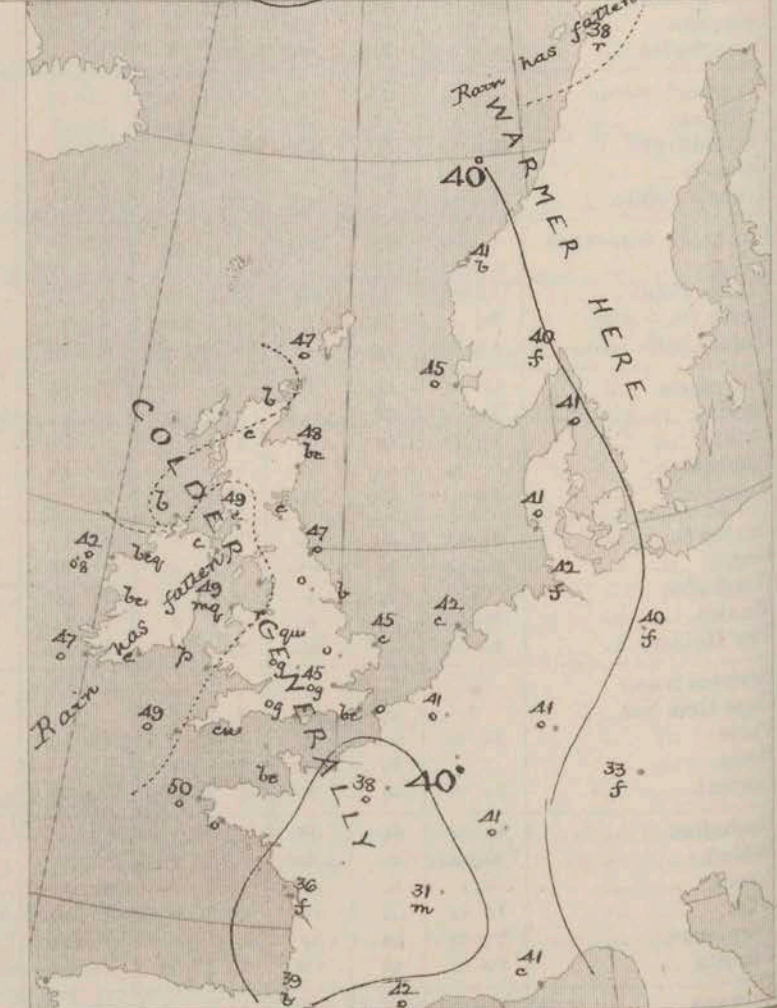
RAINFALL—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of January.)

STATIONS.	TEMPERATURE.				RAINFALL. (Inches.)
	Daily Max.	Daily Min.	at 8 a.m.		
			Dry.	Wet.	
Sumburgh Head.....	42.9	35.4	39.4	38.2	3.66
Stornoway.....	43.0	34.2	39.0	37.8	5.17
Wick.....	42.2	33.2	37.9	36.4	1.97
Nairn.....	41.9	32.7	36.6	35.0	2.02
Aberdeen.....	42.4	33.3	37.1	35.4	2.34
Leith.....	44.6	33.7	38.2	36.8	1.98
Shields.....	43.1	34.7	38.0	36.7	1.79
York.....	43.2	33.1	36.8	35.9	1.83
Loughborough.....	43.5	32.9	36.5	35.5	2.08
Ardrossan.....	44.4	36.4	39.8	38.5	4.53
Donaghadee.....	44.4	36.3	39.9	39.1	3.03
Holyhead.....	45.9	39.0	41.7	40.3	3.49
Liverpool.....	43.9	35.6	38.7	37.1	2.23
Parsonstown.....	46.0	34.6	39.0	37.9	3.09
Valencia.....	49.8	40.5	44.3	43.3	6.79
Roche's Point.....	47.9	39.7	43.2	42.0	5.63
Pembroke.....	45.8	39.9	42.8	41.2	3.92
Silly.....	49.1	43.3	46.5	45.0	3.93
Jersey.....	46.0	38.7	41.7	40.4	3.24
Hurst Castle.....	45.3	37.0	40.4	39.7	3.10
Dover.....	43.7	36.6	39.4	38.2	2.68
LONDON.....	44.8	34.4	37.9	36.8	2.20
Oxford.....	43.8	34.4	37.5	36.5	2.33
Cambridge.....	43.9	32.6	36.5	35.7	1.57
Yarmouth.....	41.9	34.5	37.7	36.9	2.06

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



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30.2 in: to 30.3 in: and more over Germany and France.
 Lowest, 29.5 in: and less, off the extreme northwest of our Islands.
 Gradients are moderate and uniform over the United Kingdom, slight over the Continent.
 Barometer rising over Norway and Germany, not changing much in our Islands.

TEMPERATURE

Highest, 50° at Brat, and also at Seeth, 47° to 49° over many other parts of the British Isles.
 Lowest, 31° at Lyons, 33° at Munich, 36° at Rochefort, 38° at Paris and Bodo, and 40° at Berlin.
 It is lower over our Islands and France, higher on the eastern shores of the North Sea than it was yesterday.

WIND

Still mainly S^w over the British Islands and North Sea, but was moderate in force as a whole, in the north of Norway and over France it was SE^w.
 S^w gales were felt on our most western and northern coasts yesterday or in the night.

WEATHER

Fine and bright at many of our northeastern and eastern stations, as well as in the west of Scotland and north of Ireland, dull generally elsewhere, with fog in Germany, rain at Bodo.
 Rain fell at the Irish stations yesterday — heavily at Belmullet.

SEA

Still rough at Sumburgh H^d and off the coast of Ireland, rather so in the Irish Channel, slight or smooth elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

There is no decided indication of any important change. The warning signals have been lowered on our north and northeast coasts.

FORECASTS

For the 24 hours ending at NOON on 18TH JAN^Y 1890.

DISTRICTS.

FORECASTS.

DISTRICTS.

FORECASTS

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

S^w breezes, light to fresh; fair as a whole.
 S^w breezes, tending to back towards E; light; less warm than of late.

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

S^w winds, force doubtful at present; cloudy, some showers.

WARNINGS

The SOUTH CONE has been lowered this morning except on ^{our} western coasts.

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

YESTERDAY'S 2 P.M. REPORTS.

	BAR:	THER:		WIND		WEA.	SEA		BAR:	THER:		WIND		WEA.	SEA
		D.	W.	D.	F.					D.	W.	D.	F.		
Skudesnaes ...	29.74	44	43	SE	6	of	5	Holyhead ...	29.88	50	49	S	6	ogm	6
Sumburgh Head ...	29.58	49	47	SSW	4	b	6	Valencia ...	29.55	55	52	SSSE	7	om	7
Stornoway ...								Scilly ...	29.94	53	51	S	7	com	6
Aberdeen ...	29.72	51	48	S	5	cq	4	Jersey ...	30.19	50	48	SSSE	4	c	3
Shields ...	29.88	53	50	SE	3	c	2	Dungeness ...	30.17	49	47	SW	4	o	3
Ardrossan ...	29.71	50	49	SSSE	6	o	5	London ...	30.13	54	51	SW	3	to	*
Malin Head ...	29.46	53	51	S	7	o	4	Yarmouth ...	30.11	49	48	SW	3	com	3
Mullaghmore ...	29.46	56	52	S	9	cm	7	Rochefort ...	30.33	48	46	S	4	o	2
Belmullet ...	29.40	51	50	SW	6	of q	*								

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

Weather fine and bright over the Mediterranean and on the Spanish coast, as well as over Sweden and at several of our own northern and eastern stations; dull elsewhere, with rain at times on our western coast and also at Riga and Niemi, snow at Uleaborg, and mist or fog locally in several parts of Europe. Rain later at all the Irish and Welsh stations, but heavy at Belmullet only; lightning at Malin Hd.

Temperature risen considerably over the northern parts of the British Islands, and in Austria-Hungary, slightly over the Mediterranean and Algeria; fallen a little over France and Germany. Still exceeding 50° at Brindisi, Malta, Algiers and many of the Irish and Irish stations, but below the freezing point over Lapland, Finland, Russia, some parts of Hungary and Switzerland, lowest record of all 15° at Moscow, 23° at Haparanda and 24° both at Kuopio and Humantadt. Rising to between 50° and 57° over the United Kingdom later.

Wind light and variable from between N. and E. on the coast of Southern Europe, NW over the Baltic, Germany and Holland (a moderate gale at Riga) but S to SW over the British Isles, the North Sea, and the north and west of France — light on our eastern coast, strong to a gale in the west. S gales or strong winds felt subsequently on all our western and northern coast, and fresh breezes in the east.

Barometer highest 30.2 ins. to nearly 30.4 ins. over Central and Southern Europe, and exceeding 30.4 ins. at Madrid; lowest 29.5 ins. and less, off our extreme northwest coast, 29.7 ins. and less, over Lapland and the White Sea, and about 29.6 ins. in a depression lying near Riga. Barometer falling west and north of our Islands all day, but no depression advancing over the Kingdom.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

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

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

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

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

DAILY WEATHER REPORT.

for *Saturday, 18th January, 1890.*
Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.

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STATIONS.	YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
	BAROM.	TEMP.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Weather.	Sea. (0 to 9.)	SHADE TEMP.		Amount of Rainfall.	
	Reading at 32° F. and Sea Level.	Dry.	Dir.	Force. (0 to 12.)		Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Dir.	Force. (0 to 12.)			Max.	Min.		
SCANDINAVIA.																		
Haparanda ...	30.36	21	SE	4	o	29.91	- .35	13	13	+ 8	SE	4	o	*	21	3	.	
Hernösand ...	30.24	32	S	6	S	29.91	- .42	34	33	+ 4	S	6	+	*	34	19	0.12	
Stockholm ...	30.24	35	ESE	2	o	30.19	+ .01	35	34	+ 3	SE	2	+	*	36	24	0.04	
Wisby ...	30.24	36	SE	4	bc	30.15	- .00	36	35	- 1	SE	4	o	*	39	34	0.04	
Bodö ...	29.88	25	ENE	6	o	29.73	- .14	36	31	- 2	E	6	o	3	45	32	.	
Christiansund	29.79	43	ESE	2	b	29.69	- .13	41	39	o	ESE	1	o	4	43	34	.	
Skudesnaes ...	29.99	44	SSE	8	o	29.78	- .20	42	39	- 3	SSE	8	o	6	45	41	.	
Christiania Fjord (Færd)	30.11	41	SSE	2	f	30.00	- .09	40	40	o	SSE	2	f	2	41	39	.	
Skagen (The Scaw)	30.14	41	SSW	1	f	29.99	- .14	40	40	- 1	S	1	o	1	43	39	0.04	
Fanö ...	30.07	39	SSE	4	o	29.91	- .27	38	38	- 3	SE	4	o	*	41	34	.	
Sumburgh Head	29.60	46	SSW	3	o	29.31	- .25	45	42	- 2	SSE	6	o	4	48	43	.	
Stornoway ...	29.45	43	SW	7	+													
Wick ...	29.57	47	S	5	o	29.13	- .45	45	42	- 2	S	9	o	4	50	42	.	
Nairn ...	29.55	45	Z	0	o	29.05	- .53	45	40	- 1	S	5	m	3	50	41	.	
Aberdeen ...	29.69	45	SSE	4	o	29.25	- .46	44	42	- 4	SSE	4	o	6	49	41	0.02	
Leith ...	29.67	47	S	2	o	29.18	- .54	45	45	- 5	S	4	bc	*	52	42	.	
Shields ...	29.78	47	S	3	+	29.38	- .48	43	40	- 4	SW	5	bc	2	48	41	0.04	
Spurn Head ...	29.89	43	SSE	6	o	29.53	- .44	44	42	- 1	SSW	6	bcq	4	45	41	0.01	
York ...	29.87	45	S	2	o	29.46	- .49	43	41	- 5	S	1	b	*	50	42	.	
Loughborough	29.91	44	SW	4	o	29.57	- .43	41	40	- 6	SW	4	bcq	*	51	41	0.10	
BRITISH ISLANDS.																		
Ardrossan ...	29.60	47	S	6	op	29.17	- .53	44	43	- 5	WSW	4	p	6	49	43	0.01	
Malin Head ...	29.46	41	SSE	5	b	29.12	- .43	42	38	o	W	4	bcq/p	5	45	39	0.15	
Mullaghmore ...	29.41	44	S	6	c	29.29	- .29	41	38	- 3	SW	6	bc	5	48	40	0.22	
Belmullet ...	29.29	43	SSE	6	o	29.26	- .26	43	41	+ 1	SW	5	bc	*	46	41	0.44	
Donaghadee ...	29.61	43	SSW	2	b	29.29	- .45	40	39	- 5	SW	6	b	4	48	38	0.02	
Liverpool (Bidston)	29.78	45	SSA	2	bc	29.49	- .39	42	38	- 5	WSW	4	bc	4	48	41	0.29	
Holyhead ...	29.72	46	SSW	4	bcq/p	29.44	- .35	43	40	- 6	WSW	6	bcq	5	50	42	0.26	
Parsonstown ...	29.49	44	SE	1	c	29.46	- .24	36	35	- 6	S	1	bc	*	49	36	0.58	
Valencia ...	29.29	50	SSE	8	o	29.48	- .17	45	43	- 2	SW	6	o	6	50	41	0.50	
Roche's Point...	29.50	49	SSW	7	c	29.55	- .20	42	40	- 6	WSW	3	c	5	50	40	0.65	
Pembroke (St. Ann's Hd.)	29.74	48	S	6	b	29.60	- .25	45	44	- 4	WSW	6	bc	6	49	42	0.42	
Scilly ...	29.78	49	SSW	6	b	29.75	- .14	47	44	- 2	W	6	bc	6	51	40	0.23	
Prawle Point ...	29.92	48	SSW	4	bc	29.77	- .22	48	46	o	W	6	bc	5	49	43	0.13	
Jersey (St. Aubin's)	30.06	44	SSE	5	o	29.87	- .27	47	44	+ 4	WSW	5	bc	4	47	39	0.24	
Hurst Castle ...	29.98	48	SSW	6	o	29.72	- .36	47	43	o	W	4	bc	6	49	43	0.09	
Dungeness ...	30.08	42	S	4	o	29.74	- .41	46	45	+ 1	SW	4	+	6	46	40	0.11	
London ...	30.03	42	SSW	3	c	29.70	- .40	42	40	- 3	WSW	4	b	*	48	41	0.13	
Oxford ...	29.94	43	SE	3	o	29.66	- .40	40	38	- 6	SW	3	bc	*	46	40	0.10	
Cambridge ...	30.10	45	SW	2	o	29.64	- .43	42	41	- 3	SSW	4	bc	*	46	40	0.04	
Yarmouth ...	30.05	41	SSW	5	cq	29.68	- .44	42	41	- 3	SSW	6	o	5	45	39	0.06	
GERMANY & HOLLAND.																		
Cuxhaven ...	30.24	39	S	1	f	29.98	- .27	38	34	- 4	S	3	o	*	42	38	.	
Berlin ...	30.30	41	Z	0	f	30.10	- .23	36	35	- 4	S	3	o	*	41	36	.	
Wiesbaden ...	*	*	*	*	*	30.11	- .16	34	33	- 7	SE	1	o	*	41	32	.	
Munich ...	30.25	33	E	1	f	30.14	- .15	28	25	- 8	E	3	f	*	36	25	.	
The Helder ...	30.12	41	S	1	c	29.82	- .39	35	34	- 7	S	4	f	3	45	?	.	
FRANCE AND BELGIUM.																		
Brussels (9 a.m.)	*	*	*	*	*	?	?	39	39	- 2	S	6	+	6	48	34	0.12	
Cape Gris Nez	?	37	S	3	o	?	?	32	32	- 6	S	3	+	6	38	31	.	
Paris ...	30.19	35	SSE	2	o	30.03	- .21	32	32	- 1	W	8	f	7	54	46	.	
Brest ...	?	51	SW	5	c	?	?	49	47	- 1	W	4	bc	5	52	45	0.16	
Lorient ...	30.05	50	S	3	o	29.95	- .16	49	46	+ 3	W	4	bc	5	52	45	0.16	
Rochefort ...	30.21	36	SSE	2	m	30.16	- .06	37	37	+ 1	S	4	f	2	46	28	.	
Belfort ...	30.15	42	N	1	bc	30.05	?	30	24	- 11	WSW	1	o	*	45	26	.	
Lyons ...	30.28	32	NW	1	o	30.24	- .07	30	30	- 1	N	1	b	*	34	30	.	
Nice ...	30.27	45	SW	2	b	30.25	- .01	40	39	- 1	E	4	b	1	52	37	.	
Perpignan ...	30.27	47	Z	0	o	30.27	?	42	41	o	W	2	o	*	52	41	.	
Biarritz ...	30.16	49	NE	3	b	30.16	+ .03	51	46	+ 12	SW	2	o	6	54	39	.	
PENINSULA.																		
Corunna ...	*	*	*	*	*	?	?	50	49	+ 5	Z	0	o	?	55	?	.	
Lisbon ...	30.26	53	W	3	b	30.33	+ .13	50	49	+ 5	Z	0	o	?	55	?	.	

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

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

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for 8 a.m. on

Saturday, 18th January,

1890.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP

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

Changes since previous morning are stated in words.

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

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

⊙ = dead calm.

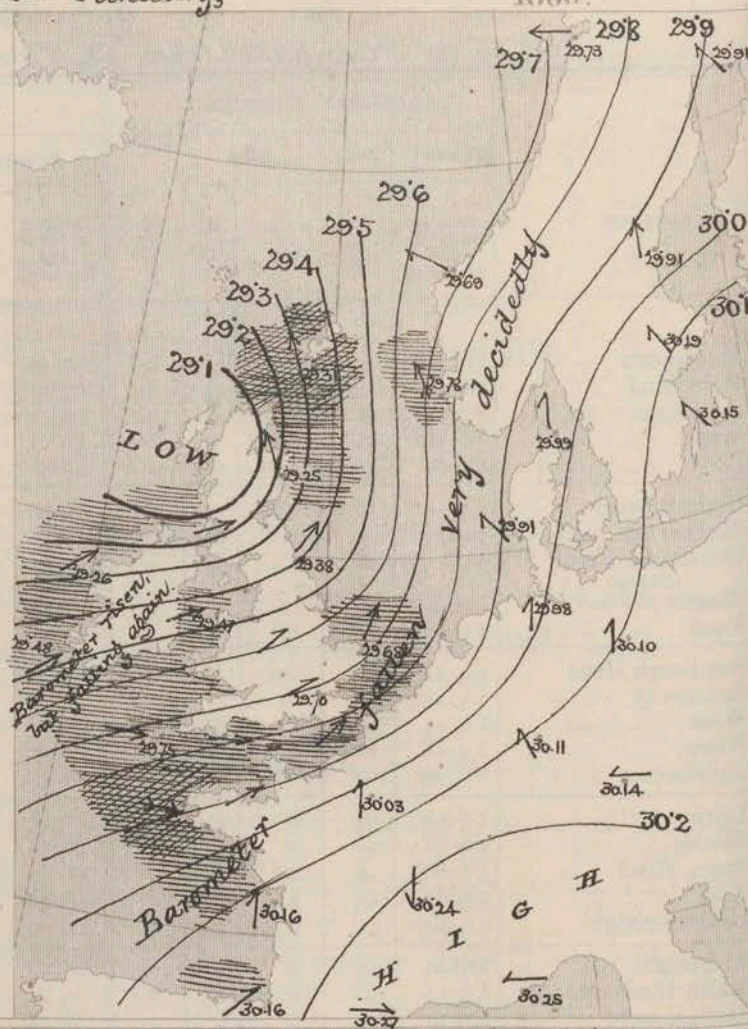
SEA DISTURBANCE—Where considerable, is shown thus:

— = Rough. — = High.

MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of January.
During the 15 Years; 1871—1885.

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



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30.10 ins. to nearly 30.3 ins. over the southern parts of France and Germany.
Lowest, 29.10 ins. and less, in a depression lying over the west of Scotland.

Gradient rather steep over the United Kingdom and North Sea, slight elsewhere.

Barometer very unsteady; rising in the south and east, but inclined to fall again at Valencia.

TEMPERATURE

Highest, 51° at Biarritz, 49° at Corrient and Brest, 48° at Havre, 45° at Madrid, Marseilles, and Sumburg H^{ts}.

Lowest, 13° at Haparanda, 25° at Munich, 30° at Lyons, 32° at Paris, 34° at Moscow, 35° at Kelder and Stockholm.

It is lower in nearly all parts of our islands than it was yesterday, but is still above the average for the time of year.

WIND

Blowing a gale from the S^W in the east of Scotland and at Skudermoo — strong and squally from the S^W over the east and southeast of England — S^W and W⁴, strong to moderate, on our western coast, with a tendency to back again at Valencia.

The gales in the west and north have been strong during the night.

WEATHER

Cloudy, squally, and showery in the southeast and east, foggy in some parts of France, but was clearing up (apparently temporarily) at most of the western and southern stations.

SEA

Very rough at the northern, western, and southern stations, rather so on all our other coasts.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The general appearance of the weather is very unsettled, and it is not at all improbable that another depression will reach our western coasts shortly. Warning signals are still up.

FORECASTS

For the 24 hours ending at NOON on 13TH JAN^Y

1890.

DISTRICTS.

FORECASTS.

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

S^W to W⁴ gales, moderating, then backing to S^W again; very unsettled.

W⁴ winds, strong, to S², moderate; changeable, Wind possibly increasing again towards night.

DISTRICTS.



FORECASTS

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

Wind backing S^W again, force uncertain at present; showery, squally.

WARNINGS

The SOUTH CONE is still flying in districts 0.1 & 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.

* NOON — Strong S^W and S^W gales with much rain probable in these districts.

YESTERDAY'S 2 P.M. REPORTS.

	BAR:	THER:		WIND		WEA.	SEA		BAR:	THER:		WIND		WEA.	SEA
		D.	W.	D.	F.					D.	W.	D.	F.		
Skudesnaes ...	20.00	44	43	SSW	6	of	5	Holyhead ...	29.76	48	47	S	4	ep	4
Sumburgh Head ...	29.61	47	45	SSW	3	0	6	Valencia ...	29.84	48	48	SSW	6	cyp	6
Stornoway ...	29.49	45	45	SW	5	6c	5	Scilly ...	29.85	51	49	SSW	5	6c	6
Aberdeen ...	29.73	46	44	SSW	3	c	4	Jersey ...	30.09	41	40	SE	5	0	4
Shields ...	29.82	47	46	S	3	r	2	Dungeness ...	30.10	42	40	S	4	c	4
Ardrossan ...	29.68	48	47	S	5	0	4	London ...	30.04	47	44	SSW	3	6c	4
Malin Head ...	29.54	45	42	S	6	6c	4	Yarmouth ...	30.04	44	42	SSW	4	c	4
Mullaghmore ...	29.53	45	42	S	6	op	5	Rochefort ...	30.21	37	36	SE	1	m	2
Belmullet ...	29.45	45	44	S	7	op	*								

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

Continental Information will be published in tomorrow's report.

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 19th JAN 1890.

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

STATIONS.	YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
	BAROM. Reading at 32° F. and Sea Level.	TEMP. Dry.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Weather.	Sea. (0 to 3.)	SHADE TEMP.			
			Force. (0 to 12.)			Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Dir.	Force. (0 to 12.)			Max.	Min.	Amount of Rainfall.	
SCANDINAVIA.																		
Haparanda ...	30.11	17	SE	6	S	30.01	- .30	15	15	+ 2	SSE	6	0	*	21	10	0.20	
Hernösand ...	29.98	22	SSE	9	S	29.76	- .55	29	28	- 5	SSE	9	3	*	37	?	0.12	
Stockholm ...	29.99	32	SSE	6	0	29.74	- .45	30	29	- 5	SE	6	5	*	36	30	0.04	
Wisby ...	29.95	33	SSE	6	0	29.76	- .39	32	31	- 4	ESE	6	0	*	37	30	0.04	
Bodö ...	29.57	37	E	2	0	29.67	- .06	38	35	+ 2	E	6	0	3	?	30	-	
Christiansund	29.25	45	SE	8	0	28.80	- .89	44	38	+ 3	SW	8	0	4	45	41	-	
Skudesnaes ...	29.39	40	SSE	8	0	28.90	- .88	44	41	+ 2	S	8	0	6	44	29	0.12	
Christiania Fjord (Færder)	29.68	39	SE	5	0	29.27	- .73	38	37	- 2	SE	8	0	5	40	36	-	
Skagen (The Seaw)	29.60	35	S	4	r	29.33	- .66	39	39	- 1	SSW	7	r	5	41	35	0.08	
Fanö ...	29.60	39	SSW	4	r	29.36	- .55	41	41	+ 3	SSW	4	0	*	41	36	0.04	
Sumburgh Head	28.90	42	SSE	7	C	28.29	- 1.02	44	42	- 1	SSW	7	0	9	45	42	0.20	
Stornoway ...	28.53	40	S	9	r	28.23	- .68	43	42	- 2	W	5	0	6	46	40	0.35	
Wick ...	28.72	43	S	7	r	28.31	- .82	40	39	- 5	SW	5	bc	5	45	39	0.15	
Nairn ...	28.66	40	S	6	r	28.39	- .66	40	40	- 5	S	5	S	4	52	38	0.45	
Aberdeen ...	28.99	39	SSE	7	0	28.53	- .72	40	37	- 4	SSW	9	bcq	6	46	38	0.26	
Leith ...	29.02	44	SSW	3	C	28.74	- .44	43	40	- 2	SSW	6	b	*	51	36	0.12	
Shields ...	29.22	42	S	6	0	28.97	- .41	42	38	- 1	SW	7	bc	2	46	42	0.03	
Spurn Head ...	29.45	44	S	6	0	29.22	- .31	42	40	- 2	SSW	6	bc	5	49	41	0.12	
York ...	29.35	44	SW	4	0	29.16	- .30	44	39	+ 1	SW	5	b	*	53	40	-	
Loughborough	29.49	46	SSW	6	0	29.31	- .26	43	41	+ 2	WSW	4	C	*	52	40	0.10	
Ardrossan ...	28.83	46	S	7	r	28.71	- .46	44	43	0	SW	8	cm	7	48	43	0.28	
Malin Head ...	28.68	44	S	10	b	28.59	- .53	40	40	- 2	SW	11	or	7	47	38	0.20	
Mullaghmore ...	28.79	48	SW	8	C	28.89	- .40	44	41	+ 3	WSW	9	cmq	7	51	41	0.09	
Belmullet ...	28.92	50	SW	5	r	28.89	- .40	44	40	+ 1	SW	8	bcq	6	50	39	0.35	
Donaghadee ...	28.92	50	SW	5	r	28.89	- .40	44	40	+ 1	SW	8	bcq	6	50	39	0.35	
Liverpool (Bidston)	29.26	48	SSE	5	0	29.19	- .30	44	38	+ 2	WSW	6	bc	5	54	41	-	
Holyhead ...	29.16	51	SSW	8	r	29.17	- .30	45	40	+ 2	WSW	8	bcq	6	51	42	0.11	
Parsonstown ...	29.06	50	SW	3	bc	29.16	- .30	42	39	+ 6	SW	3	C	*	54	35	0.24	
Valencia ...	29.18	52	SW	10	C	29.32	- .16	45	41	0	WSW	7	op	6	53	40	0.19	
Roche's Point...	29.27	49	W	6	b	29.36	- .19	45	43	+ 3	W	6	C	5	51	41	0.30	
Pembroke (St. Ann's Hd.)	29.34	47	SW	8	r	29.36	- .24	47	46	+ 2	WSW	7	bc	7	51	42	0.24	
Scilly ...	29.58	53	SW	7	r	29.56	- .19	48	47	+ 1	WSW	7	0	6	53	45	0.13	
Prawle Point ...	29.63	50	SW	7	r	29.53	- .24	49	45	+ 1	WSW	8	cm	6	51	42	0.07	
Jersey (St. Aubin's)	29.87	50	SSW	5	C	29.71	- .16	52	48	+ 5	WSW	6	cm	5	52	44	0.06	
Hurst Castle ...	29.71	49	SW	8	0	29.52	- .20	49	45	+ 2	W	8	eq	6	51	44	0.14	
Dungeness ...	29.76	48	SW	6	bc	29.50	- .24	50	48	+ 4	WSW	7	op	5	50	44	0.05	
London ...	29.68	47	SW	5	0	29.46	- .24	47	45	+ 5	WSW	5	b	*	51	42	0.19	
Oxford ...	29.50	48	SW	6	r	29.43	- .23	48	41	+ 3	WSW	4	C	*	52	40	0.13	
Cambridge ...	29.62	45	SW	3	0	29.40	- .24	47	45	+ 5	SW	4	C	*	51	40	0.02	
Yarmouth ...	29.67	43	SSW	4	C	29.37	- .31	46	45	+ 4	SW	6	eq	4	46	40	0.06	
Cuxhaven ...	29.20	42	SW	5	r	29.14	- .54	43	43	+ 5	SW	6	0	*	43	41	0.12	
Berlin ...	29.87	36	SE	2	C	29.77	- .33	37	36	+ 1	S	3	0	*	41	36	-	
Wiesbaden ...	*	*	*	*	*	29.84	- .27	46	44	+ 12	SW	4	0	*	46	34	-	
Munich ...	30.06	32	W	3	b	30.02	- .12	33	31	+ 8	SSW	4	bc	*	36	25	-	
The Helder ...	29.71	41	SSW	3	C	29.43	- .39	42	42	+ 7	SSW	4	b	3	45	34	0.04	
Brussels (9 a.m.)	?	*	*	*	*	29.65	- .27	49	48	+ 14	SW	5	0	*	50	40	0.04	
Cape Gris Nez	?	45	WSW	6	bc	?	?	48	47	+ 9	WSW	7	0	7	48	39	0.28	
Paris ...	30.09	41	SSW	3	bc	29.83	- .20	50	48	+ 18	SSW	5	0	*	?	46	-	
Brest ...	?	49	WSW	3	r	?	?	52	51	+ 3	W	8	b	8	54	45	0.08	
Lorient ...	29.95	52	SW	6	0	29.85	- .10	52	50	+ 3	WSW	5	bc	5	52	45	0.08	
Rochefort ...	30.16	50	SW	5	bc	30.08	- .08	52	52	+ 15	SW	6	r	3	54	27	0.16	
Belfort ...	30.10	41	NW	1	C	30.00	- .05	42	34	+ 12	NW	1	0	*	45	36	-	
Lyons ...	30.23	40	SSW	1	b	30.17	- .07	37	36	+ 7	S	2	0	*	50	30	-	
Nice ...	30.19	45	S	4	C	30.18	- .07	37	36	- 3	E	4	b	1	52	36	-	
Perpignan ...	30.26	43	SW	1	b	30.20	- .07	39	35	- 3	SW	1	b	*	36	36	-	
Biarritz ...	30.20	51	E	2	C	30.15	- .01	51	46	0	SW	3	b	5	59	45	-	
Corunna ...	*	*	*	*	*	30.16	+ .01	58	56	+ 6	SW	5	b	6	61	52	0.04	
Lisbon ...	30.35	55	Z	0	f	30.37	+ .04	52	52	+ 2	Z	0	f	6	55	50	0.04	

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

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

WEATHER CHARTS

for 8 a.m. on Sunday, 19th January, 1890

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP

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

Changes since previous morning are stated in words.

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

their barbs and feathers refer to force thus—

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

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

⊙ = dead calm.

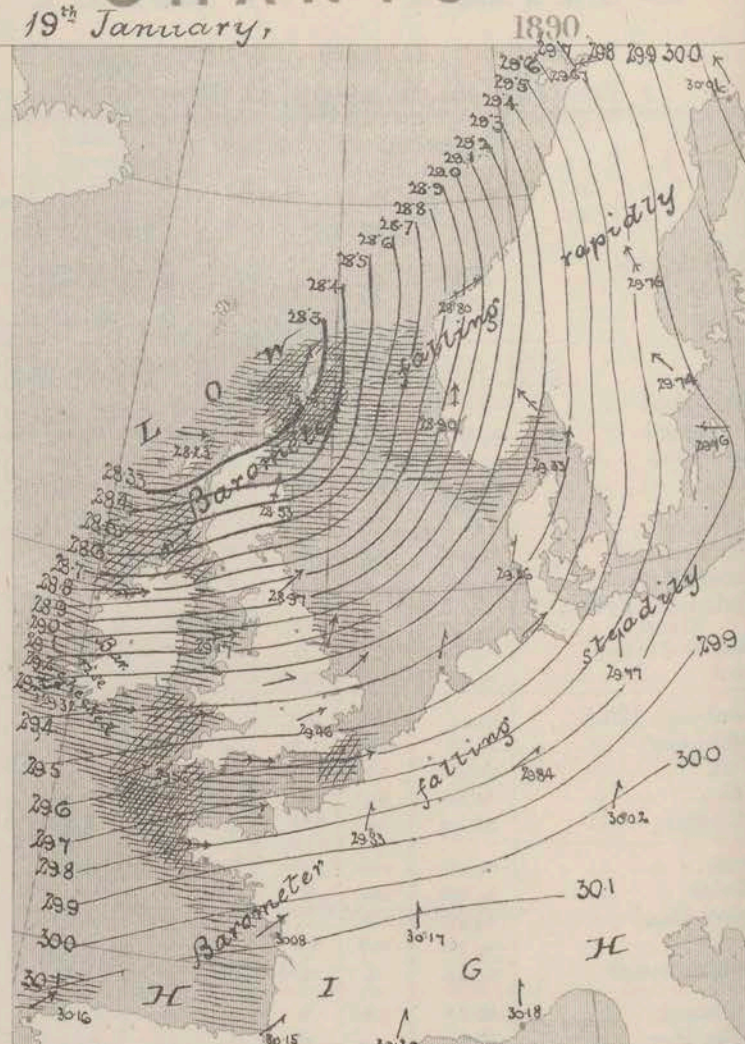
SEA DISTURBANCE—Where considerable, is shown thus:

⊖ = Rough. ⊕ = High.

MEAN HEIGHT OF THE BAROMETER

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

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



TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

TEMPERATURE—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

WEATHER is shown by Letters of the Beaufort Scale.

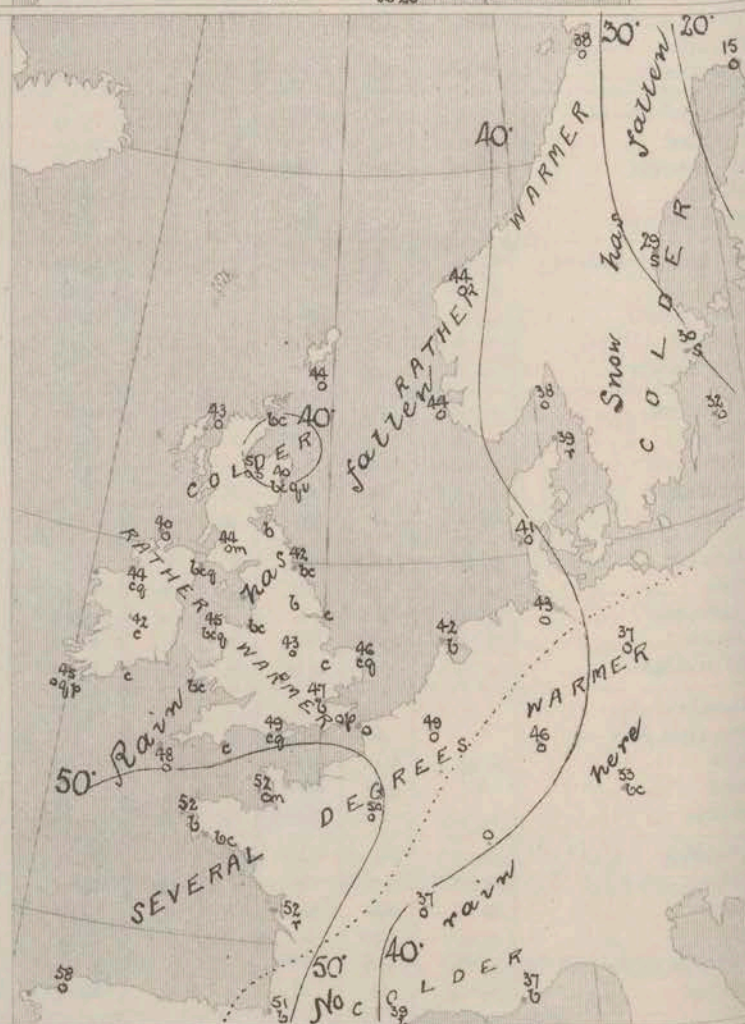
RAINFALL—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of January.)

STATIONS.	TEMPERATURE.				RAINFALL. (Inches.)
	Daily Max.	Daily Min.	at 8 a.m.		
			Dry.	Wet.	
Sumburgh Head.....	42.9	35.4	39.4	38.2	3.66
Stornoway.....	43.0	34.2	39.0	37.8	5.17
Wick.....	42.2	33.2	37.9	36.4	1.97
Nairn.....	41.9	32.7	36.6	35.0	2.02
Aberdeen.....	42.4	33.3	37.1	35.4	2.34
Leith.....	44.6	33.7	38.2	36.8	1.98
Shields.....	43.1	34.7	38.0	36.7	1.79
York.....	43.2	33.1	36.8	35.9	1.88
Loughborough.....	43.5	32.9	36.5	35.5	2.08
Ardrossan.....	44.4	36.4	39.8	38.5	4.53
Donaghadee.....	44.4	36.3	39.9	39.1	3.03
Holyhead.....	45.9	39.0	41.7	40.3	3.49
Liverpool.....	43.9	35.6	38.7	37.1	2.23
Parsonstown.....	46.0	34.6	39.0	37.9	3.09
Valencia.....	49.8	40.5	44.3	43.3	6.79
Roche's Point.....	47.9	39.7	43.2	42.0	5.63
Pembroke.....	45.8	39.9	42.8	41.2	3.92
Silly.....	49.1	43.3	46.5	45.0	3.93
Jersey.....	46.0	38.7	41.7	40.4	3.24
Hurst Castle.....	45.3	37.0	40.4	39.7	3.10
Dover.....	43.7	36.6	39.4	38.2	2.68
LONDON.....	44.8	34.4	37.9	36.8	2.20
Oxford.....	43.8	34.4	37.5	36.5	2.33
Cambridge.....	43.9	32.6	36.5	35.7	1.57
Yarmouth.....	41.9	34.3	37.7	36.9	2.06

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



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 29.9 ins. to 30.1 ins. and more, over the south of France and also over the eastern side of the Gulf of Bothnia.
 Lowest, 28.3 ins. and less, in a large deep complex depression centre of which lay off the east of Scotland.
 Gradient very steep over the United Kingdom and north of Norway, steep over the North Sea. More moderate over France, Germany and the Baltic.
 Barometer falling rapidly in the far north, inclined to rise again in southwest and south of our Islands.

TEMPERATURE

Highest, 58° at Cronna, 54° at Bilbao, 52° at Lisbon, 40° at Port of Spain, 51° at Fez, 50° at Algiers and Tunis, and 40° to 45° at our southern and northern stations.
 Lowest, 18° at Haparanda, 23° at Helsingfors, 30° at Stockholm.
 Unsteady in our Islands, but rain quickly over France and Germany.

WIND

Blowing fresh to heavy gales from between SSW. and WSW. in our Islands, S. on the eastern shores of the North Sea.
 SE. over the Baltic and greater part of Scandinavia.
 Gale very severe on our northwestern and northern coasts.

WEATHER

Fog, squally, rough and unsettled over the whole of our Islands and their neighbourhood, with snow in some parts of Scotland as well as in Russia and cold rain and hail squalls (bright intervals) in many other places.
 Thunder and lightning have been very prevalent on our western and northern coasts.

SEA

Terrible at Lumbung H., very high on our northwestern, western and southwestern coasts. Rough generally elsewhere except off the northeast and east coasts of England.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

FORECASTS

For the 24 hours ending at NOON on 20th JAN^y 1890.

DISTRICTS.

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

FORECASTS.

NONE ISSUED.

DISTRICTS.

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

FORECASTS

NONE ISSUED.

WARNINGS

The SOUTH CONE is still flying in districts 0.1.2.3.5. and part 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:	THER:		WIND		WEA.	SEA		BAR:	THER:		WIND		WEA.	SEA
		D.	W.	D.	F.					D.	W.	D.	F.		
Skudesnaes ...	29.55	42	39	SSE	8	o	6	Holyhead ...	29.42	47	43	SSE	8	comp	6
Sumburgh Head ...	28.94	44	43	SSE	7	r	7	Valencia ...	29.14	53	53	SSW	10	rm	7
Stornoway ...								Scilly ...	29.66	52	50	SSW	7	oq	7
Aberdeen ...	29.17	43	38	SSW	6	bcc	6	Jersey ...	29.91	51	46	SW	5	bc	4
Shields ...	29.41	46	40	SW	4	bc	2	Dungeness ...	29.80	49	44	W	5	bc	4
Ardrossan ...	29.21	44	42	S	6	oq	5	London ...	29.76	49	43	SW	4	bc	8
Malin Head ...	28.97	40	39	S	8	o	4	Yarmouth ...	29.67	45	42	WSW	4	bc	4
Mullaghmore ...								Rocheport ...	29.17	48	48	SSW	5	o	3.
Belmullet ...	28.79	49	49	SW	10	r	*								

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

Continental Information not available.

General Remarks on the Weather over Europe for 24 hours ended at 8 am January 18th 1890.

Weather fine generally over Southwestern and Southern Europe, temporarily fair over the northeastern and eastern parts of the British Islands, cloudy or overcast elsewhere, very unsettled with showers in the west of England and at Rode, fog in Germany and France, snow at Moscow and St Petersburg. Rain later over many parts of Ireland and England (heavy in the west) and at Constantinople, thunder and lightning at several of our western stations.

Temperature lower than on 16th, but still high for the time of year over British Islands and their neighbourhood. Exceeding 50° at 9 am at Brindisi, Malta, Algiers, and Nemours, touching 50° at Corunna and Brest, and 47° to 49° on our extreme southwestern coasts. Below freezing point over Eastern and Northern Europe and Scitzland, -3° at Archangel, +5° at Haparanda, and 15° at Moscow. (Austrian values wanting.) Daily maxima falling short of 50° at most of our own stations, but exceeding 60° at several Mediterranean stations.

Wind very light and variable over Southwestern, Central and Eastern Europe, S⁴, moderate to fresh over the British Isles and North Sea, SE in Norway, over the Baltic; NE on the northern shores of the Mediterranean and W in Algeria. Rising to gale from the S⁴ on our western coasts later, and freshening considerably from the same quarter over England.

Barometer above 30.2 in. over Southwestern and Central Europe, as well as over the Gulf of Bothnia, Northern and Central Russia, highest of all, 30.3 in. and more over Eastern Germany, Austria, and Scitzland. Lowest 29.5 in. and less off the northwest of Scotland. Gradients moderate over the United Kingdom and North Sea at first, but subsequently increasing as new depression approached.

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, 20th January, 1890.

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

STATIONS.	YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
	BAROM.	TEMP.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Weather.	Sea.	SHADE TEMP.			
	Reading at 32° F. and Sea Level.	Dry.	Dirce.	Force. (0 to 12.)		Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Dirce.	Force. (0 to 12.)			Max.	Min.	Amount of Rainfall.	
SCANDINAVIA.																		
Haparanda ...	29.80	?	SSE	8	f	29.63	- 38	6	6	- 9	SE	6	0	*	18	?	0.04	
Hernösand ...	29.25	30	SSE	9	s	29.14	- 62	28	28	- 1	SSE	9	5	*	36	27	0.28	
Stockholm ...	29.35	31	SE	8	s	29.18	- 56	35	35	+ 5	S	4	0	*	?	28	0.12	
Wisby ...	29.36	32	SE	6	s	29.28	- 48	37	36	+ 5	SW	4	0	*	?	30	0.24	
Bodö ...	29.07	32	SE	7	c	28.93	- 74	28	25	- 10	SE	8	0	*	?	27	-	
CHRISTIANIA.																		
Christiansund	28.62	44	SE	7	0	28.61	- 19	44	38	0	SE	6	0	*	45	43	-	
Skudeanaes ...	?	44	WSW	6	c	28.91	+ 01	41	40	- 3	WSW	4	0	*	45	40	0.20	
Christiania Fjord	29.02	34	SSW	5	s	28.93	- 34	40	39	+ 2	SW	5	0	*	41	34	-	
(Færd)																		
Skagen (The Seaw)	29.06	39	SW	4	0	29.03	- 30	37	36	- 2	SW	3	r	3	41	36	0.35	
Fanö ...	29.23	38	WSW	3	b	29.21	- 15	39	38	- 2	WSW	4	c	*	43	37	0.16	
SCOTLAND.																		
Sumburgh Head	28.32	42	WSW	7	r	28.75	+ 46	42	38	- 2	W	4	0	*	45	41	0.54	
Stornoway ...																		
Wick ...	28.53	39	W	4	0	28.87	+ 56	40	39	0	W	2	0	3	40	35	0.11	
Nairn ...	28.65	40	S	4	r	28.96	+ 57	35	34	- 5	WSW	1	c	2	43	35	0.35	
Aberdeen ...	28.67	39	SW	7	bc	28.99	+ 46	36	34	- 4	SW	2	0	3	43	35	-	
ENGLAND.																		
Leith ...	28.87	37	SSW	5	r	29.09	+ 35	36	35	- 7	SW	3	0	*	44	32	0.72	
Shields ...	29.01	42	SW	5	bc	29.17	+ 20	37	35	- 5	WSW	1	c	2	47	35	-	
Spurn Head ...	29.23	42	SW	7	b	29.30	+ 08	37	35	- 5	SW	5	b	4	47	35	-	
York ...	29.20	43	SSW	5	b	29.29	+ 13	36	34	- 8	W	2	b	*	47	34	0.01	
Loughborough	29.35	39	W	5	b	29.39	+ 08	35	34	- 8	WSW	3	b	*	48	34	0.02	
IRELAND.																		
Ardrossan ...	28.93	40	W	6	r	29.11	+ 40	40	39	- 4	SW	4	cqph	4	48	36	0.68	
Malin Head ...																		
Mullaghmore ...																		
Belmullet ...														*				
Donaghadee ...	29.08	41	WSW	6	b	29.20	+ 31	35	34	- 6	WSW	6	b	5	46	33	-	
BRITISH ISLANDS.																		
Liverpool (Bidston)	29.25	44	WSW	5	b	29.33	+ 14	36	34	- 8	SW	3	bc	4	47	36	-	
Holyhead ...	29.24	43	WSW	7	bcq	29.33	+ 16	40	37	- 5	WSW	4	cq	4	46	39	-	
Parsonstown ...	29.27	35	SW	1	c	29.34	+ 18	33	32	- 9	Z	0	bc	*	44	32	0.11	
Valencia ...	29.34	39	W	6	cqph	29.42	+ 10	42	39	- 3	WSW	5	oghil	5	52	35	0.21	
Roche's Point ...	29.37	46	W	5	c	29.46	+ 10	37	35	- 8	W	4	bc	4	49	35	0.20	
SCOTLAND.																		
Pembroke (St. Ann's Hd.)	29.37	44	WSW	7	bc	29.43	+ 07	41	41	- 6	WSW	6	cqph	6	47	38	0.17	
Seilly ...	29.56	46	W	8	cq	29.59	+ 03	44	42	- 4	WSW	5	cqph	6	52	39	0.33	
Prawle Point ...	29.55	47	WSW	8	bc	29.56	+ 03	40	39	- 9	WSW	7	rhqu	5	49	34	0.20	
Jersey (St. Aubin's)	29.70	50	WSW	7	rhqu	29.66	- 05	46	43	- 6	W	6	cqm	5	54	42	0.39	
Hurst Castle ...	29.56	46	WSW	7	b	29.53	+ 01	43	40	- 6	WSW	7	bc	6	50	39	0.15	
ENGLAND.																		
Dungeness ...	29.52	47	WSW	6	cq	29.48	- 02	41	39	- 9	WSW	6	bc	5	51	39	0.08	
London ...	29.49	46	W	4	ogh	29.48	+ 02	36	35	- 11	SW	2	b	*	50	36	0.16	
Oxford ...	29.46	41	SW	4	bc	29.46	+ 03	36	34	- 7	WSW	2	b	*	48	35	0.03	
Cambridge ...	29.43	41	SW	2	b	29.43	+ 03	35	34	- 12	SW	2	b	*	51	34	0.02	
Yarmouth ...	29.39	44	WSW	4	b	29.39	+ 02	36	35	- 10	W	3	bcm	3	48	35	0.03	
SCOTLAND.																		
Cuxhaven ...	29.44	41	WSW	5	0	29.41	- 13	39	38	- 4	SW	4	c	*	45	33	-	
Berlin ...	29.57	45	SSW	4	b	29.56	- 21	40	38	+ 3	SSW	3	c	*	46	?	0.08	
Wiesbaden ...	*	*	*	*	*	29.59	- 23	44	43	- 2	SW	4	r	*	48	41	0.24	
Munich ...	29.90	45	SW	5	b	29.82	- 20	43	40	+ 10	SW	5	0	*	48	33	0.08	
The Helder ...	29.39	43	SW	4	b	29.36	- 07	40	39	- 2	W	3	0	3	46	39	-	
FRANCE AND BELGIUM.																		
Brussels (8 a.m.)	*	*	*	*	*	?	?	43	41	- 5	WSW	7	bc	6	50	39	0.24	
Cape Gris Nez	?	46	W	7	b	?	?	43	41	- 9	WSW	3	c	*	50	43	0.12	
Paris ...	29.78	50	SSW	3	bc	29.69	- 14	41	41	- 4	W	8	0	8	54	46	0.16	
Brest ...	?	51	W	8	0	?	?	48	47	- 4	W	8	0	8	54	46	0.16	
Lorient ...																		
FRANCE AND BELGIUM.																		
Rochefort ...	30.02	51	WSW	5	0	29.99	- 09	49	47	- 3	W	6	0	3	55	43	0.28	
Belfort ...	29.86	49	WSW	1	0	29.79	- 21	46	35	+ 4	WSW	2	r	*	53	?	0.28	
Lyons ...	30.03	47	S	2	0	30.02	- 15	48	43	+ 11	SW	2	op	*	51	35	-	
Nice ...	30.05	44	SW	2	b	29.95	- 23	45	40	+ 8	SW	4	c	2	52	?	-	
Perpignan ...	30.12	48	Z	0	b	30.13	- 07	48	46	+ 9	SW	1	b	*	65	?	-	
Biarritz ...	30.11	55	WSW	4	0	30.15	- 00	53	50	+ 2	WSW	5	0	7	63	50	-	
PORTUGAL.																		
Corunna ...	*	*	*	*	*	?	?	?	?	?	?	?	?	?	?	?	?	
Lisbon ...	20.38	56	W	4	bc	30.38	+ 01	56	56	+ 4	WSW	4	f	?	59	?	0.04	

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

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

1890

EXPLANATION OF MAP

= Rough. = High.

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

This is a hand-drawn weather map of the North Atlantic and Europe, dated January 1902. The map features several isobars (lines of equal pressure) with values ranging from 28.6 to 30.6. A low-pressure system is marked with a 'LOW' and a '28.6' isobar. A high-pressure system is marked with a 'HIGH' and a '30.6' isobar. Wind directions are indicated by arrows, showing a general flow from the high to the low. Barometer trends are noted with handwritten text: 'Barometer rising' in the northwest, 'Barometer falling' in the northeast, and 'Barometer falling somewhat' in the south. Shaded areas represent landmasses, including North America, the British Isles, and parts of Europe. The map is titled 'January' at the top left.

(For the month of January.)

A hand-drawn map of Europe, North Africa, and the Middle East, overlaid with a grid of latitude and longitude lines. The map is annotated with handwritten notes and numbers, likely representing weather data or forecasts.

Latitude and Longitude Lines:

- Latitude: 30°, 40°, 50°
- Longitude: 20°, 30°, 40°, 50°

Handwritten Notes and Annotations:

- GENERAL**: Written vertically across the center of the map.
- fallen in most places**: Written diagonally across the upper right.
- fallen**: Written vertically on the far right.
- SNOW**: Written vertically on the far right.
- RAIN**: Written vertically on the left side.
- COLDER**: Written vertically on the left side.
- Thunderstorms**: Written vertically on the left side.
- No rain**: Written in the center-left.
- Lightning in night**: Written in the center-left.
- HERE**: Written in the lower right.
- WARMER**: Written in the lower right.

Numbers and Symbols:

- Numbers: 42, 40, 36, 37, 39, 40, 44, 43, 49, 53, 48, 35, 37, 28, 10, 16, 15, 41, 48, 49, 50.
- Symbols: "c" (clouds), "b" (breeze), "g" (gust), "r" (rain), "s" (snow).

GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 29.9 in: to nearly 30.2 in: over the southwest of France and north of Spain.
 Lowest, 28.6 in: and less, in a large low pressure system lying off the west coast of Norway.
 Gradients moderate generally in our Islands, steep over Finland and the Gulf of Bothnia.
 Barometer rising somewhat over the United Kingdom, most in the N.; falling over the Continent.

TEMPERATURE

Highest, 53° at Biarritz, 49° at Rochefort, 48° at Lyons. It is above 40° at all the French stations this morning.
 Lowest, 6° at Haparanda, 7° at Helsingfors, 33° at Paros, 35° at Aikm and Cambridge, 36° at Aberdeen, York, Oxford and in London.
 It has fallen decidedly all over Western Europe since yesterday.

WIND

SE⁴, strong to a gale over the northern parts of Scandinavia, SW², moderate on the eastern shores of the North Sea and in Germany.
 Chiefly W¹ in our Islands and France - moderate in most places, but strong and squally on the coast of the Channel.
 The gales have died down at all our own stations.

WEATHER

Cloudy over Scandinavia and the northern parts of our Islands, with snow at Helsingfors, fair over England.
 Showers of hail are reported on our southwest coast, with thunder and lightning at Valencia.

SEA

Rough over the Bay of Biscay, very rough in the Channel, rough on our western and southern coasts generally, moderate in the east and northeast.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

As there is at present no indication of the approach of any new depression the signals have all been lowered today.

[Telegraphic communication with several of our northwestern stations is still interrupted.]

FORECASTS

For the 24 hours ending at NOON on 21st JAN^y 1890.

DISTRICTS.

FORECASTS.

DISTRICTS.

FORECASTS

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

W² and SW² breezes, moderate or light;
 some slight showers

S² and SW² breezes, moderate inland,
 strong to moderate in the Channel; fair
 as a whole, but sharp passing showers.

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

W² and SW² breezes, fresh; some showers
 bright intervals.

WARNINGS

SOUTH CONE lowered everywhere today.

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

YESTERDAY'S 2 P.M. REPORTS.

	BAR:	THER:		WIND		WEA.	SEA		BAR:	THER:		WIND		WEA.	SEA
		D.	W.	D.	F.					D.	W.	D.	F.		
Skudesnaes ...	29.83	43	41	S	9	0	7		Holyhead ...	29.21	46	41	WSW	7	6
Sumburgh Head									Valencia ...						
Stornoway ...									Scilly ...						
Aberdeen ...									Jersey ...	29.70	53	48	WSW	7	5
Shields ...									Dungeness ...	29.50	49	46	WSW	6	5
Ardrossan ...									London ...						*
Malin Head ...									Yarmouth ...						
Mullaghmore ...									Rochefort ...	30.05	53	53	WSW	6	3
Belmullet ...							*								

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

Weather fine and bright over Spain, Algeria, and the Adriatic, also in extreme north of Russia; very rough, squally and showery over the whole of North Western Europe and the Baltic, with snow in many parts of the latter region. Rain and hail showers in many parts of the United Kingdom later and lightning in places.

Temperature rising decidedly over Germany and France, less quickly over Southern Europe, but beginning to give way over the British Islands, exceeding 50° in the morning over the southeast of Italy, and at Algiers as well as over the western parts of France and Spain, but below 50° over the United Kingdom generally; below the freezing point over NE., E. & SE. Europe, the lowest values of all being 5° at Kiev, 6° at Moscow, 10° at St. Petersburg, and less than 20° over nearly the whole of Russia and Finland. Daily maxima exceeding 60° in the France, and 50° in some parts of Ireland and England, but thermometer falling fast in our Islands towards night.

Wind blowing hard from between S.W. and W.S.W. over the British Isles (very hard in the north and northwest), and strong to a gale from the southward over the North Sea, and from South East over the Baltic and north of Scandinavia. Light and variable breezes prevalent over southern and southeastern Europe. Gale moderating subsequently over the British Islands generally, but not decreasing much in the Channel.

Barometer above 30.0 inches over all the southern and eastern parts of Europe; 30.4 inches and more over the south of Spain; 30.5 inches and more over the northeast of Russia, lowest 29.3 inches, and less in a large complex depression lying off our northwest coast. Gradients steep over British Isles and Norway. Depression moving northwards later, and barometer rising most in Scotland.

SUMMARY OF CHANGES IN THE WEATHER OVER THE BRITISH ISLANDS AND THEIR NEIGHBOURHOOD FROM THE 12TH TO THE 18TH JANUARY 1890.

Throughout this week pressure has continued highest over Spain and France or over France and Germany, lowest off our northern coasts and the northern parts of Scandinavia. The gradients have been steep over the northern and western parts of the British Islands, slight in the south, and several deep depressions have travelled from South West to North East, by the northwestern coasts of Scotland and Ireland on their way from the Atlantic to the north of Scandinavia. S.W. and S.W.W. gales of considerable strength have consequently been experienced in the regions referred to accompanied by much rain, but they did not spread to the southeastern parts of England with any great strength until just as the week was closing — when, owing to a very deep and complex system, which had arrived off the west of Scotland — a fresh gale from South West was experienced over the Channel and east of England, while very strong gales were in progress over Ireland and Scotland.

Temperature has been continuously high, and in addition to the rain, thunder and lightning have been experienced on more than one occasion at some of the Irish, and Scotch, and the western English 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 TUESDAY 21ST JANUARY

1890.

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

Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.																		
STATIONS.	YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
	BAROM. Reading at 32° F. and Sea Level.	TEMP. Dry.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Sea (0 to 12.)	SHADE TEMP.				
			Dirce.	Force. (0 to 12.)		Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Dirce.	Force. (0 to 12.)		Weather.	Max.	Min.	Amount of Rainfall.	
SCANDINAVIA.																		
Haparanda ...	29.46	0	S	4	S	29.45	-1.0	13	13	+7	SE	4	0	*	16	5	0.08	
Hernösand ...	29.09	33	SE	4	S	29.13	-0.1	33	32	+5	SE	6	S	*	36	25	0.55	
Stockholm ...	29.15	35	S	2	0	29.18	0.0	32	32	-3	SE	2	bc	*	39	30	0.04	
Wisby ...	29.25	36	SW	4	b	29.27	-0.1	34	?	-3	SW	4	b	*	39	30	—	
Bodö ...	29.01	25	E	8	C	29.10	+1.7	36	?	+8	E	6	0	*	?	21	—	
SCANDINAVIA.																		
Christiansund ...	28.91	42	WSPW	1	T	28.99	+2.8	39	37	-5	SW	1	0	4	?	37	0.12	
Skudesnaes ...	29.01	39	S	0	0	29.14	+2.3	39	36	-2	W	2	0	5	43	36	0.04	
Christiania Fjord (Færder) ...	29.02	38	WSPW	4	T	29.07	+1.4	35	35	-5	WSPW	4	T	4	?	34	—	
Skagen (The Scaw) ...	28.75	36	WSPW	5	0	29.15	+1.2	35	34	-2	WSPW	3	bc	3	35	34	—	
Faenø ...	29.29	38	WSPW	4	b	29.33	+1.2	36	35	-3	W	5	b	*	41	36	0.08	
SCANDINAVIA.																		
Sumburgh Head ...	28.88	38	W	3	C	28.97	+2.2	38	36	-4	W	3	C	5	42	34	0.12	
Stornoway ...	28.97	35	NW	3	C	29.00	+1.3	35	34	-5	W	4	C	3	40	32	—	
Wick ...	28.92	34	WSPW	3	0	29.07	+1.1	36	35	+1	WSPW	4	C	2	38	33	0.02	
Nairn ...	29.07	34	SW	2	bc	29.17	+1.8	33	31	-3	SPW	3	bc	3	35	32	—	
Aberdeen ...	29.17	36	SW	3	bc	29.23	+1.4	36	34	0	SW	2	C	*	39	31	0.16	
Leith ...	29.24	36	SW	4	b	29.34	+1.7	38	35	+1	SW	3	C	2	42	33	—	
Shields ...	29.34	38	SW	5	b	29.47	+1.7	36	34	-1	SW	4	C	4	41	33	—	
Spurn Head ...	29.34	37	W	1	b	29.44	+1.5	34	34	-2	SPW	1	C	*	44	32	0.09	
York ...	29.41	37	WSPW	4	bc	29.52	+1.3	36	34	+1	WSPW	4	bc	*	44	34	—	
Loughborough ...	29.18	38	SW	4	of	29.21	+1.0	40	40	0	SW	5	T	5	40	36	0.02	
Ardrossan ...	29.15	36	SPW	5	CLP	29.12	—	34	34	—	S	6	OST	4	38	32	0.30	
Malin Head ...	29.25	36	SW	8	C	29.17	—	37	35	—	SPW	6	og	5	40	33	0.50	
Mullaghmore ...	29.24	40	W	6	of	29.11	—	42	40	—	WSPW	6	0	*	43	34	0.60	
Belmullet ...	29.27	36	SW	4	b	29.31	+1.1	35	35	0	SW	5	0	3	39	32	—	
Donaghadee ...	29.37	39	SW	3	C	29.46	+1.3	38	35	+2	SW	4	bc	4	42	36	0.01	
Liverpool (Bidston) ...	29.37	41	WSPW	4	C	29.43	+1.0	41	38	+1	WSPW	5	og	5	42	38	0.01	
Holyhead ...	29.38	34	S	0	S	29.33	-0.1	36	35	+3	SW	1	0	*	37	32	0.39	
Parsonstown ...	29.42	42	WSPW	3	C	29.33	-0.9	45	43	+3	SPW	6	0	6	46	36	0.33	
Valencia ...	29.46	38	W	4	b	29.42	-0.4	43	42	+6	WSPW	5	rh	5	43	35	0.30	
Roche's Point ...	29.44	43	W	5	bc	29.50	+0.7	45	45	+4	SW	7	og	6	46	39	0.06	
Pembroke (St. Ann's Hd.) ...	29.52	43	W	7	og	29.56	+0.7	47	45	+3	SW	7	0	7	47	41	0.08	
Scilly ...	29.53	41	SW	5	T	29.71	+1.5	45	40	+5	W	6	b	4	46	36	0.15	
Prawle Point ...	29.62	46	WSPW	5	ogme	29.80	+1.4	46	41	0	WNW	6	bc	5	48	40	0.30	
Jersey (St. Aubin's) ...	29.53	44	W	6	C	29.70	+1.7	43	40	0	WNW	6	b	6	46	39	0.01	
Hurst Castle ...	29.52	42	W	4	C	29.64	+1.6	40	38	-1	WNW	4	C	2	47	36	0.01	
Dungeness ...	29.51	38	W	2	bm	29.61	+1.3	35	34	-1	WSPW	2	b	*	45	33	—	
London ...	29.50	36	SW	2	C	29.62	+1.6	35	34	-1	WSPW	3	bc	*	43	33	0.03	
Oxford ...	29.48	34	SW	1	b	29.61	+1.8	35	33	0	SW	2	b	*	45	28	—	
Cambridge ...	29.43	37	WSPW	3	b	29.53	+1.4	34	33	-2	WSPW	3	bc	3	42	31	—	
Yarmouth ...	29.43	37	WSPW	3	b	29.53	+1.4	34	33	-2	WSPW	3	bc	3	42	31	—	
GERMANY & HOLLAND.																		
Cuxhaven ...	29.43	36	WSPW	3	0	29.47	+0.6	33	33	-6	SW	3	b	*	41	33	—	
Berlin ...	29.52	40	WNW	4	0	29.56	0.0	36	35	-4	SW	2	0	*	43	36	0.35	
Wiesbaden ...	29.81	37	W	6	0	29.64	+0.5	39	37	-5	W	2	0	*	46	36	0.16	
Munich ...	29.43	40	SW	3	b	29.66	-1.6	37	35	-6	SW	8	C	*	48	34	0.08	
The Helder ...	29.43	40	SW	3	b	29.52	+1.6	40	38	0	WSPW	2	b	3	43	39	0.04	
FRANCE AND BELGIUM.																		
Brussels (9 a.m.) ...	?	?	?	?	?	?	?	35	31	—	WSPW	3	0	*	43	35	0.16	
Cape Gris Nez ...	?	43	WNW	5	bc	?	?	41	38	-2	WNW	4	0	4	46	39	—	
Paris ...	29.72	43	SPW	3	0	29.79	+1.0	36	35	-5	SPW	2	0	*	?	33	0.49	
Brest ...	?	46	W	5	0	?	?	48	45	0	NW	6	bc	7	50	43	0.04	
Lorient ...	29.67	46	NW	6	C	29.92	?	48	42	?	W	5	bc	7	50	39	0.24	
Rochefort ...	29.91	48	W	6	C	30.06	+0.7	47	44	-2	WNW	6	C	4	54	?	0.35	
Belfort ...	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	
Lyons ...	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	
Nice ...	29.92	52	SW	5	?	29.89	-0.6	46	39	+1	WNW	6	b	3	61	45	—	
Perpignan ...	30.08	54	SE	2	C	30.15	+0.2	49	45	+1	W	2	0	*	64	?	—	
Biarritz ...	30.04	53	W	3	0	30.17	+0.2	51	49	-2	WSPW	7	0	7	63	46	0.16	
Corunna ...	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	
Lisbon ...	30.38	55	WSPW	3	0	30.27	-1.1	53	53	-3	S	2	f	?	59	?	0.04	

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

Errata. The amount of Rainfall at Ardrossan in yesterday's report should be 0.09

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

WEATHER CHARTS

for 8 a.m. on Tuesday, 21st January

1890.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP

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

Changes since previous morning are stated in words.

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

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

→ = forces 5 to 7; → = forces 1 to 4.

☉ = dead calm.

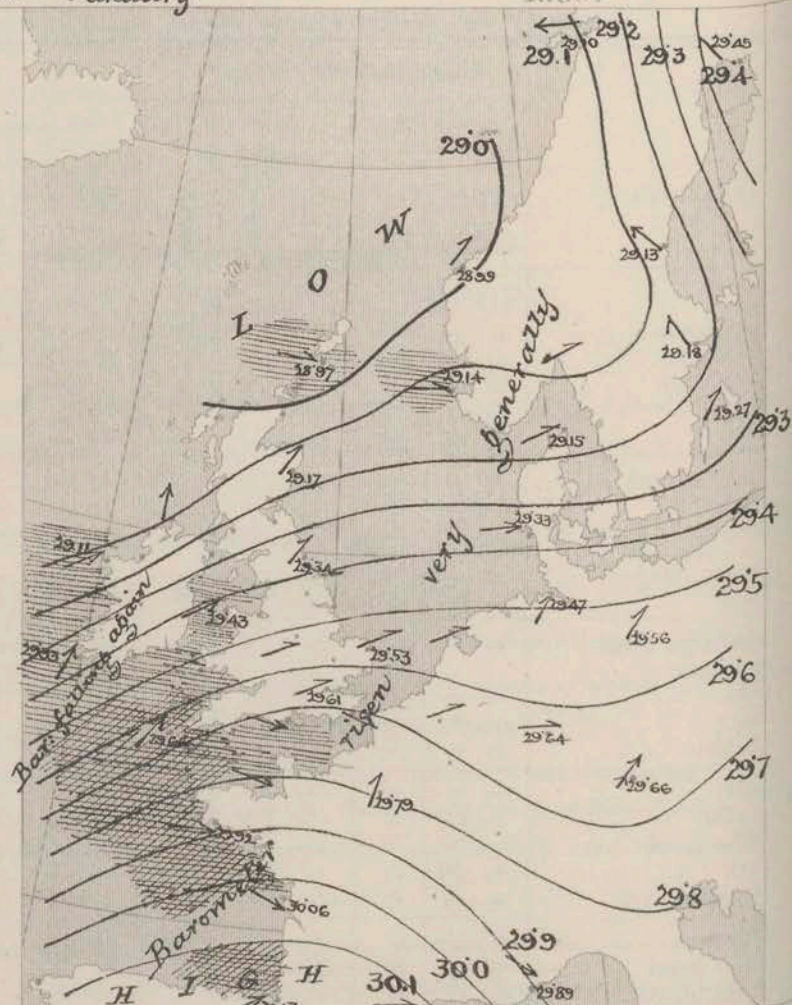
SEA DISTURBANCE—Where considerable, is shown thus:

— = Rough. — = High.

MEAN HEIGHT OF THE BAROMETER

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

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



TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

TEMPERATURE—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

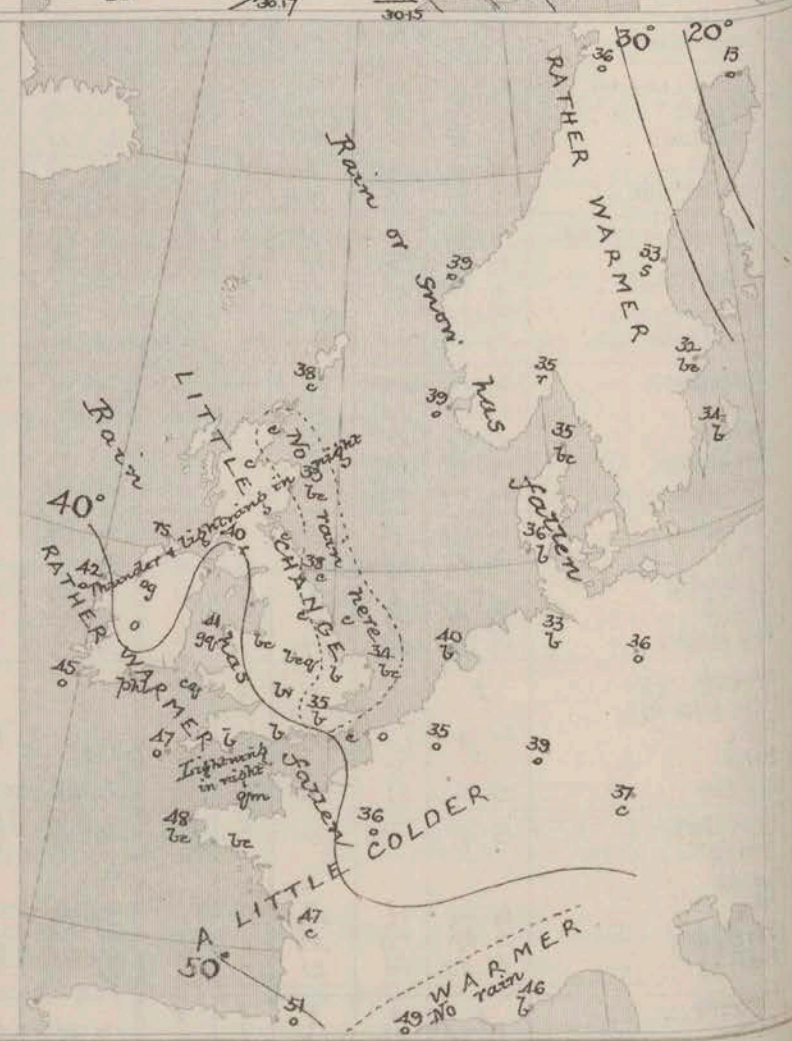
WEATHER is shown by Letters of the Beaufort Scale.

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

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL. (For the month of January.)

STATIONS.	TEMPERATURE.				RAINFALL (Inches.)
	Daily Max.	Daily Min.	at 8 a.m.		
			Dry.	Wet.	
Sumburgh Head.....	42.9	35.4	39.4	38.2	3.66
Stornoway.....	43.0	34.2	39.0	37.8	5.17
Wick.....	42.2	33.2	37.9	36.4	1.97
Nairn.....	41.9	32.7	36.6	35.0	2.02
Aberdeen.....	42.4	33.3	37.1	35.4	2.34
Leith.....	44.6	33.7	38.2	36.8	1.98
Shields.....	43.1	34.7	38.0	36.7	1.79
York.....	43.2	33.1	36.8	35.9	1.88
Loughborough.....	43.5	32.9	36.5	35.5	2.08
Ardrossan.....	44.4	36.4	39.8	38.5	4.53
Donaghadee.....	44.4	36.3	39.9	39.1	3.03
Holyhead.....	45.9	39.0	41.7	40.2	3.49
Liverpool.....	43.9	35.6	38.7	37.1	2.23
Parsonstown.....	46.0	34.0	39.0	37.9	3.09
Valencia.....	49.8	40.5	44.3	43.3	6.79
Roche's Point.....	47.9	39.7	43.2	42.0	5.63
Pembroke.....	45.8	39.9	42.8	41.2	3.92
Scilly.....	49.1	43.3	46.5	45.0	3.93
Jersey.....	46.0	38.7	41.7	40.4	3.24
Hurst Castle.....	45.3	37.0	40.4	39.7	3.10
Dover.....	43.7	36.5	39.4	38.2	2.68
LONDON.....	44.8	34.4	37.9	36.8	2.20
Oxford.....	43.8	34.4	37.5	36.5	2.33
Cambridge.....	43.9	32.6	36.5	35.7	1.57
Yarmouth.....	41.0	34.5	37.7	36.9	2.06

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



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30.1 ins. to 30.2 ins. and apparently more, over the southeast of France and the Spanish Peninsula; 29.4 ins. and more over Lapland and the north of Russia.
 Lowest, 29.0 ins. and less, off the north of Scotland.
 Gradients are somewhat steep over the United Kingdom.
 Barometer falling fast again in the west of Ireland, rising at the eastern and southern stations.

TEMPERATURE

Highest, 51° at Biarritz, 48° at Brest, 47° at Scilly, 45° at Valencia, and 40° at Tangiers.
 Lowest, 13° at Haparanda, 32° at Stockholm, 35° in London, 36° at Lancaster and Paris.
 Frost was experienced on the grass at our inland stations early this morning.

WIND

Moderate from W. and SW. over the North Sea ~~over the North Sea~~ and the eastern half of Great Britain, rather strong from W. and NW. in the Channel. At our western stations it has backed towards S. and is increasing — already blowing a slight gale at some southwestern stations.

WEATHER

Fair over the eastern portions of our area, dull and unsettled in the west and north, with heavy showers of sleet, hail or cold rain at several of our most western stations.
 Thunder and lightning again occurred in the extreme northwest last night.

SEA

High over the Bay of Biscay, rough on our western coasts and over the western part of the English Channel, moderate to slight on our eastern coasts.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

It is evident that a new and somewhat deep depression is approaching our western coasts from the Atlantic and threatens to cause squally, wet unsettled weather generally, and gales on our southwestern, western, and northwestern coasts — which have been warned.

FORECASTS

For the 24 hours ending at NOON on 21st JAN^y 1890.

DISTRICTS.

FORECASTS.

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

S^w winds, increasing in force and veering SW^{by}W; fair to rainy, milder.
 Wind backing to S^w and increasing considerably; becoming unsettled, rainy, and milder.

DISTRICTS.

FORECASTS

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

S^w and SW^{by}W gales and strong winds; squally, rainy, and unsettled.

SW^{by}W gales, with rain; very unsettled.

WARNINGS

The SOUTH CONE has again been hoisted 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.

	THER:							THER:						
	BAR:	D.	W.	D.	F.	WEA.	SEA	BAR:	D.	W.	D.	F.	WEA.	SEA
Skudesnaes ...	29.97	42	41	WSPW	2	o	6	Holyhead ...	29.36	41	38	WSPW	4	c
Sumburgh Head ...	29.86	41	37	W	3	c	5	Valencia ...	29.43	40	38	W	4	o q h p
Stornoway ...								Scilly ...	29.54	47	43	WSPW	7	o q
Aberdeen ...	29.03	37	34	SPW	3	bc	3	Jersey ...	29.65	46	42	WSPW	6	c q
Shields ...	29.19	40	36	WSPW	3	c	2	Dungeness ...	29.51	45	42	WSPW	6	c
Ardrossan ...	29.14	39	38	SPW	4	o q	3	London ...	29.51	45	41	W	3	bc
Malin Head ...	29.12	37	36	WSPW	5	c q h p	4	Yarmouth ...	29.41	42	39	WSPW	4	c
Mullaghmore ...	29.22	39	38	SPW	6	c q h p	5	Rochefort ...	30.04	52	49	W	5	c
Belmullet ...							*							

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

Weather fine over Spain and Algeria, changeable and unsettled in almost all other districts, rain in several parts of France, hail, thunder and lightning on our SW coast. Rain or hail later except over the E. parts of Great Britain, heaviest in the NW. of Ireland; thunder and lightning at several Irish stations & at Rochefort.

Temperature fallen considerably over the British Islands and N. of France, even over southern and central Europe. Exceeding 50° over the Spanish coasts, and at several of the Mediterranean stations, but much lower over NW. Europe, the highest in our Islands being 44° at Scilly; below the freezing point over Austria, Poland, Russia and Finland. Lowest values -5° at Archangel -2° at Kiev (zero) at Kharkov and below 10° at Odessa, Nicolaieff, Moscow, St. Petersburg, Kuopio, Uleaborg and Haparanda. Exceeding 60° in S. of France during day but falling short of over the United Kingdom and below 40° at many of our N. stations.

Wind W. and SW. over the whole of W. and central Europe, strong over the S. of England and France moderate generally elsewhere. S. over the Baltic and SE. over Finland and the N. of Scandinavia - strong to a gale in force. Light and variable breezes over S. SE. and E. Europe. Little change later, except in N. where wind backed and became strong.

Barometer highest, 30.2 ins. to 30.4 ins. and more both over Spain and Russia, lowest, 28.6 ins. and less, in a depression off the W. of Norway; local disturbances over the Gulf of Genoa and the Caucasus. No important change later.

General remarks on the Weather over the British Islands for the 24 hours ending 8 am on Jan 13th

Weather fine bright and quiet over the Iberian Peninsula, the Mediterranean, Adriatic and southern Europe generally, unsettled over Russia, extremely changeable over northern and northwestern Europe, and stormy in the north of the British Islands. Becoming very wild over the United Kingdom and Scandinavian later, rough and squally over the North Sea. Thunder and lightning very general over Scotland, Ireland, Wales and the north of England at night.

Temperature falling considerably over Russia, changing fitfully over northwestern Europe. Exceeding 50° in morning over the southeastern and southern parts of the Mediterranean, and on the western and northern coasts of the Spanish Peninsula below that value, but above 40° over the British Islands. Below the freezing point at inland stations in eastern, southeastern and central Europe, -19° F. at Archangel, +5° at Kharkov, 10° at Moscow, and 11° at Kuopio and Uleaborg. Rising to 50° and more at several of our stations later, and to 60° and more on the S. shores of the Mediterranean.

Wind light E. over southern Europe, moderate to light W. over France, S. over Germany and Denmark, SE. over Scandinavia. S. gales in Scotland, strong and squally SW. and W. winds in England and Ireland. Very strong S. and SE. gales at our W. and N. stations later, spreading with less force to the Channel and North Sea.

Barometer highest, 30.1 ins. and more, over SW. S. and E. Europe, and exceeding 30.3 ins. over S. of Spain. Lowest 28.9 ins. and less in deep depression off the W. of Scotland and below 29.7 ins. off the NW. of Norway. New deep depressions appearing in NW. later, uniting with older one and moving northwards.

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, 22nd January, 1890.

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

Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.																		
STATIONS.	YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
	BAROM. Reading at 32° F. and Sea Level.	TEMP. Dry.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Sea. (0 to 5.)	SHADE TEMP.				
			Dirac.	Force. (0 to 12.)		Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Dirac.	Force. (0 to 12.)		Weather.	Max.	Min.	Amount of Rainfall.	
SCANDINAVIA.																		
Haparanda ...	29.23	30	N	4	S	29.28	+ .15	28	27	- .5	N	2	0	*	39	28	0.35	
Hernösand ...	29.25	35	S	2	0	29.38	+ .20	33	32	+ .1	WSW	4	0	*	37	30	.	
Stockholm ...	29.36	35	SW	6	6	29.48	+ .21	36	35	+ .2	W	6	6	*	37	32	.	
Wisby ...	29.23	26	E	4	6	29.24	+ .14	25	22	- .11	ESE	4	0	2	?	21	.	
Bodo ...																		
Christiansund ...	29.16	37	ESE	1	6	29.07	+ .08	38	32	- .1	E	3	0	4	39	36	.	
Skudesnaes ...	29.25	41	SE	6	0	29.02	- .12	42	39	+ .3	SE	6	0	5	?	37	.	
Christiania Fjord (Fæder)	29.31	37	W	3	6	29.31	+ .24	39	38	+ .4	SSW	4	0	3	?	?	.	
Skagen (The Scaw)	29.37	36	W	3	6	29.30	+ .15	35	35	0	SW	3	0	3	41	?	0.04	
Fanö ...	29.47	38	SW	6	7	29.31	- .02	37	36	+ .1	S	5	0	*	41	36	0.04	
Sumburgh Head	28.92	40	SSE	3	0	28.81	- .16	37	36	- .1	Z	0	0	4	41	35	0.04	
Stornoway ...																		
Wick ...	28.86	40	SW	5	0 u	28.75	- .25	33	31	- .2	WSW	1	0	1	40	30	0.01	
Nairn ...	28.85	40	SSW	4	6	28.77	- .30	34	33	- .2	S	2	0	2	42	32	0.04	
Aberdeen ...	28.99	38	S	5	bcg	28.71	- .46	33	32	0	WSW	2	0 TS	4	40	33	0.37	
Leith ...	29.03	43	SW	2	0	28.71	- .52	35	35	- .1	W	2	0	*	43	32	0.36	
Shields ...	29.15	39	SW	4	m	28.72	- .62	42	40	+ .4	S	5	0	2	43	36	.	
Spurn Head ...	29.33	39	S	5	7	28.84	- .63	40	39	+ .4	SSE	8	0	6	43	35	0.15	
York ...	29.29	38	S	3	7	28.81	- .63	40	39	+ .6	S	1	0	*	41	34	0.45	
Loughborough	29.35	43	SSW	5	0	28.90	- .62	39	38	+ .3	W	3	0	*	45	35	0.30	
BRITISH ISLANDS.																		
Ardrossan ...	29.02	43	SSW	4	C	28.80	- .41	36	35	- .4	NNW	2	0 sp	1	43	33	0.43	
Malin Head ...	28.95	38	S	7	0	28.83	- .29	37	36	+ .3	SW	5	0 qh p	4	42	33	0.30	
Mullaghmore ...	29.01	40	SSW	5	cg	28.94	- .23	38	36	+ .1	SW	6	0 qh p	5	42	33	0.22	
Belmullet ...	29.00	42	WNW	4	0	28.95	- .16	39	37	- .3	W	3	0 bc	*	43	35	0.24	
Donaghadee ...	29.06	41	SW	4	C	28.89	- .42	35	35	0	SW	5	0	3	42	35	0.41	
Liverpool (Bidston)	29.22	37	S	3	7	28.85	- .61	38	36	0	W	8	0 h	5	44	35	0.63	
Holyhead ...	29.15	43	SW	6	rgm	28.95	- .48	38	37	- .3	WNW	7	0 qh	6	45	38	1.02	
Parsonstown ...	29.07	38	Z	0	0	29.04	- .29	34	33	- .2	Z	0	0	*	40	32	0.36	
Valencia ...	29.04	48	WNW	1	om	29.14	- .19	40	37	- .5	WSW	5	0 qh	5	47	35	0.38	
Roche's Point...	29.12	45	WSW	5	C	29.14	- .28	39	36	- .4	WNW	4	0	4	46	35	1.05	
Pembroke (St. Ann's Hd.)	29.21	47	SSW	9	7	29.09	- .41	42	41	- .3	W	7	0 qh	7	48	35	0.87	
Scilly ...	29.36	48	SSW	8	0	29.29	- .37	44	42	- .3	W	8	0 bc	7	51	38	0.39	
Prawle Point ...	29.47	47	W	8	C	29.23	- .48	40	38	- .5	W	5	0 bc u	4	48	38	0.14	
Jersey (St. Aubin's)	29.66	48	SSW	6	0 u	29.29	- .51	47	42	+ .1	W	8	0 qh r	6	50	40	0.12	
Hurst Castle ...	29.56	48	WSW	8	0 p	29.13	- .57	43	40	0	WNW	8	0 bc	6	48	39	0.20	
Dungeness ...	29.61	47	WSW	6	C	28.98	- .66	41	40	+ .1	SW	6	0	5	47	33	0.03	
London ...	29.54	44	SSW	5	rg	29.03	- .58	38	37	+ .3	SW	4	0	*	47	35	0.23	
Oxford ...	29.39	43	W	3	bc	29.03	- .59	39	37	+ .4	WSW	5	0 bc qh p	*	45	35	0.12	
Cambridge ...	29.47	41	SW	3	7	28.96	- .65	40	39	+ .5	SW	3	0	*	44	33	0.08	
Yarmouth ...	29.51	42	SSW	5	C	28.98	- .55	38	37	+ .4	SSW	5	0 qh	4	42	32	0.04	
GERMANY & HOLLAND.																		
Cuxhaven ...	29.61	34	SW	4	0	29.43	- .04	33	32	0	S	5	0	*	38	32	.	
Berlin ...	29.78	37	SW	2	0	29.70	+ .14	32	31	- .1	SE	3	0	*	41	30	.	
Wiesbaden ...	*	*	*	*	*	29.47	- .17	36	35	- .3	E	2	0	*	43	32	.	
Munich ...	29.99	35	SW	3	0	29.71	+ .05	30	28	- .7	SSE	5	0	*	39	28	0.04	
The Helder ...	29.59	41	SSW	5	0	29.09	- .43	37	35	- .3	SE	4	0	3	41	36	.	
FRANCE AND BELGIUM.																		
Brussels (9 a.m.)	*	*	*	*	*	29.06	?	38	37	+ .3	SSW	4	0	*	43	?	.	
Cape Gris Nez	?	42	W	6	6	?	?	39	38	- .2	WSW	6	0	6	46	34	0.08	
Paris ...	29.83	40	SSE	2	6	29.25	- .54	42	41	+ .6	SW	5	0	*	47	?	0.12	
Brest ...	?	50	SW	6	0	?	?	49	47	+ .1	WSW	9	0	9	54	45	0.08	
Lorient ...	29.60	49	SSW	6	0	29.45	- .47	47	43	- .1	WNW	6	0 bc	7	50	43	0.43	
Rochefort ...																		
Belfort ...	29.83	47	S	6	0	29.64	- .42	51	48	+ .4	W	7	0	4	?	43	.	
Lyons ...																		
Nice ...	30.13	39	ESE	2	6	29.72		44	41		S	5	0	*	48	36	.	
Perpignan ...	30.01	47	NW	6	6	30.00	+ .11	39	37	- .7	NW	4	0	3	54	37	0.04	
Biarritz ...	30.13	51	NE	3	0	29.88	- .27	42	40	- .7	Z	0	0	*	57	39	.	
Corunna ...	29.84	55	SSE	3	0	29.80	- .37	?	50	?	WSW	5	0	6	55	39	.	
Lisbon ...	*	*	*	*	*													
	30.17	57	SW	6	0	30.20	- .07	57	57	+ .4	SW	5	0	?	59	?	0.16	

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

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

GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 29.8 ins. to 30.2 ins. over the Iberian Peninsula—29.7 ins. and more over Central Europe.
 Lowest, 28.8 ins. and less, in a complex depression lying over Scotland and the north of England.
 Gradients rather steep for W^{ly} winds over the southern half of our area, steep for S^{ly} winds over eastern parts of North Sea and North Germany.
 Barometer rising except in the northern district.

TEMPERATURE

Highest, 57° at Lisbon, 51° at Rochefort, 49° at Jersey, 44° at Scilly, and 42° at Rudestades.
 Lowest, 28° at Hermand, 30° at Munich, 33° at Stockholm, 34° at Parsonstown, and 38° in London, and at Liverpool, Holyhead and Mullaghmore.
 Changing fitfully but not greatly.

WIND

Very light and variable in Scotland—fresh SW^{ly} and W^{ly} in Ireland.
 W^{ly} strong to a gale over the greater part of England and Wales, the Irish and English Channels and the Bay of Biscay.
 S^{ly}, fresh, over the North Sea—a gale at Spurn Hd.

WEATHER

Very changeable and unsettled. Alternately clear and cloudy in most places, with passing showers of cold rain, hail or sleet. Thunder and lightning have again occurred at some western stations.
 Rainfall has been heavy in Ireland.

SEA

High over the Bay of Biscay and at Scilly, very rough in the Irish and English Channel, rather rough or moderate elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

Very unsettled weather is still probable in all districts.

FORECASTS

For the 24 hours ending at NOON on 23rd JAN^y 1890.

DISTRICTS.

FORECASTS.

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

Varying winds, very unsettled and changeable, cold showers, perhaps snow.

SW^{ly} to W^{ly} winds, very unsettled, showery, perhaps sleet.

DISTRICTS.

FORECASTS

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

Wind very doubtful at present; weather unsettled and showery.

W^{ly} and SW^{ly} winds, strong, squally, showery, unsettled.

Same as Nos 6 and 7.

WARNINGS

The SOUTH CONE is still flying in districts 3. and 5 to 10.

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

YESTERDAY'S 2 P.M. REPORTS.

	BAR:	THER:		WIND		WEA	SEA		BAR:	THER:		WIND		WEA	SEA
		D.	W.	D.	F.					D.	W.	D.	F.		
Skudesnaes ...	29.24	42	39	SW	4	c	5	Holyhead ...	29.27	44	43	SW	6	op qm	6
Sumburgh Head ...	28.97	40	37	WSW	4	o	5	Valencia ...	29.19	46	45	SW	5	op	5
Stornoway ...								Scilly ...	29.49	50	46	SSW	8	o	7
Aberdeen ...	29.12	37	35	SSW	3	og u	3	Jersey ...	29.75	48	44	SW	5	bc	5
Shields ...	29.26	42	39	SW	4	c	2	Dungeness ...	29.68	47	43	WSW	5	c	3
Ardrossan ...	29.10	42	41	SSW	5	o	5	London ...	29.62	47	43	SW	2	o	3
Malin Head ...	28.96	37	37	S	6	o	4	Yarmouth ...	29.58	40	37	SW	4	c	3
Mullaghmore ...	29.02	41	39	S	5	og	4	Rochefort ...	30.12	51	46	WSW	4	o	2
Belmullet ...	29.04	42	42	WSW	5	op	*								

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

Weather though fine in several localities, unsettled over Europe generally, but especially over the British Islands and the neighbourhood, showers of rain and hail at some of our western stations, snow at Herneösand and St Petersburg, rain at Alvaro. Rain, hail or sleet showers very general over Western Europe - heavy in Ireland, where also thunder and lightning occurred.

Temperature risen rapidly over Southern Russia, moderately over Austria and the Mediterranean, as well as in the Baltic Provinces and Finland, changed irregularly elsewhere. Above 50° in the extreme south only, below 40° in many parts of our Islands and over Central Europe, but below 32° over Russia, Finland, and Lapland only; lowest values - 17° at Archangel, - 6° at Moscow, + 5° at Kharkov, + 7° at St Petersburg. Daily maxima below 50° Ireland and England, but 57° at Perpignan.

Wind fresh to strong from W. and NW. in France, moderate SW over Germany and the greater part of England, SE over Ireland and Sweden, strong from between SW and S on our western coasts, and from W. in the Channel. Fresh gales from the SW over the Irish and English Channels and in the southeast of England later.

Barometer highest, 30.1 ins. to nearly 30.4 ins. over Spain, 30.0 ins. to 30.2 ins. and more, over Central Russia; lowest, 29.6 ins. and less, off the west of Norway and north of Scotland, and rather low in large hollow spreading thence across Sweden, Denmark, and the Baltic to Central Europe. New complete depressions approaching Scotland and our western coasts later 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).

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

DAILY WEATHER REPORT.

for Thursday, 23rd January, 1890.

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

Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.																		
STATIONS.	YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
	BAROM :	TEMP.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Weather.	Sea. (0 to 1.)	SHADE TEMP.		Amount of Rainfall.	
			Reading at 32° F. and Sea Level.	Dry.		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.
SCANDINAVIA.																		
Haparanda ...	29.62	9	Z	0	0	29.53	-0.01	17	17	+17	SE	2	0	*	?	?	.	
Hernösand ...	29.44	28	Z	0	0	29.43	+1.5	26	26	-2	Z	0	0	*	34	25	.	
Stockholm ...	29.43	31	ESE	2	0	29.33	-0.05	34	32	+1	SE	2	0	*	36	28	.	
Wisby ...	29.42	33	SW	4	6	29.24	-0.24	35	32	-1	SE	4	0	*	37	32	0.04	
Bodö ...	29.27	27	ESE	6	6	29.20	-0.04	23	21	-2	ESE	6	6	3	27	21	.	
SCANDINAVIA.																		
Christiansund ...	29.02	41	ESE	4	0	28.99	-0.08	41	34	+3	ESE	7	0	3	?	?	.	
Skudesnaes ...	28.96	39	SE	6	0	28.87	-1.5	40	37	-2	SE	4	0	5	43	36	0.08	
Christiania Fjord (Færd)	29.19	36	ESE	5	6	29.06	-0.23	36	35	-3	ESE	6	7	4	39	34	.	
Skagen (The Scaw)	29.06	37	SSE	6	0	28.99	-0.31	38	37	+3	S	4	0	3	?	34	0.12	
Fanö ...	28.93	40	WSW	4	0	29.06	-0.23	36	35	-1	W	2	6	*	39	34	0.08	
SCANDINAVIA.																		
Sumburgh Head	28.78	35	WNW	3	7	28.80	-0.01	33	32	-4	Z	0	6	3	38	31	0.24	
Stornoway ...	28.88	35	Z	0	6	28.80	+0.05	25	24	-8	WNW	1	6	0	35	25	.	
Wick ...	28.85	35	S	1	6	28.82	+0.03	25	24	-9	S	1	6	1	36	25	.	
Nairn ...	28.91	31	WSW	2	6	28.87	+0.16	21	20	-12	WNW	1	6	4	35	21	0.11	
Aberdeen ...	28.97	36	Z	0	6	28.84	+0.13	28	28	-7	Z	0	6	*	38	27	0.03	
Leith ...	29.03	37	SW	3	6	28.78	+0.06	37	36	-5	E	3	7	3	42	32	0.05	
Shields ...	29.12	39	WSW	5	6	28.69	-0.15	39	38	-1	ESE	6	7	6	41	33	0.34	
Spurn Head ...	29.12	37	WSW	1	6	28.68	-0.13	34	33	-6	E	1	5	*	44	32	0.32	
York ...	29.22	38	SW	2	6	28.64	-0.26	38	38	-1	S	2	6	*	44	34	0.15	
Loughborough	28.98	40	WSW	4	6	28.81	+0.01	31	31	-5	NE	2	6	1	42	31	.	
BRITISH ISLANDS.																		
Ardrossan ...	28.91	36	SSW	5	6	28.82	-0.01	38	36	+1	NNE	2	6	3	39	33	0.10	
Malin Head ...	28.92	37	SSW	5	6	28.84	-0.10	38	36	0	NNE	4	6	3	40	35	0.02	
Mullaghmore ...	28.94	41	SSW	4	0	28.93	-0.02	33	33	-6	NW	1	6	*	43	33	0.12	
Belmullet ...	29.06	34	W	3	6	28.76	-0.13	38	37	+3	NE	4	6	3	40	32	0.03	
Donaghadee ...	29.14	37	WSW	3	6	28.55	-0.30	36	35	-2	ESE	4	0	5	42	33	0.30	
Liverpool (Bidston)	29.13	40	SW	3	6	28.49	-0.46	40	39	+2	W	1	6	3	43	34	0.28	
Holyhead ...	29.05	35	Z	0	6	28.80	-0.24	35	34	+1	NE	2	0	*	38	33	0.47	
Parsonstown ...	28.95	42	ESE	3	7	28.98	-0.16	43	40	+3	WNW	5	6	4	49	35	0.39	
Valencia ...	29.03	44	SSW	3	6	28.81	-0.33	40	37	+1	WNW	8	6	6	45	38	0.90	
Roche's Point...	29.18	45	SSW	4	6	28.56	-0.53	45	45	+3	W	6	7	7	49	40	0.60	
Pembroke (St. Ann's Hd.)	29.22	46	SSW	6	7	28.78	-0.51	48	47	+4	WNW	10	7	9	52	42	0.76	
Scilly ...	29.30	45	SW	4	0	28.72	-0.51	49	47	+4	SW	9	6	7	50	40	0.82	
Prawle Point ...	29.43	47	SW	5	6	28.97	-0.32	52	48	+5	WSW	8	6	7	54	44	0.88	
Jersey (St. Aubin's)	29.33	44	W	4	6	28.75	-0.38	50	43	+7	WSW	8	7	6	50	40	0.54	
Hurst Castle ...	29.33	44	W	4	6	28.75	-0.38	50	43	+7	WSW	8	7	6	50	40	0.54	
BRITISH ISLANDS.																		
Dungeness ...	29.33	42	W	5	6	28.80	-0.18	48	47	+7	WSW	7	7	6	49	40	0.37	
London ...	29.32	38	SW	1	6	28.74	-0.29	47	45	+9	SW	5	0	*	47	37	0.14	
Oxford ...	29.25	37	SW	3	0	28.68	-0.35	45	44	+6	SSW	3	6	*	46	36	0.10	
Cambridge ...	29.26	38	SW	4	6	28.69	-0.27	42	41	+2	S	2	6	*	44	33	0.13	
Yarmouth ...	29.21	39	W	5	6	28.73	-0.25	42	41	+4	SSE	6	6	5	42	34	0.19	
GERMANY & HOLLAND.																		
Cuxhaven ...	29.05	33	SSE	6	7	29.18	-0.25	33	33	0	SSE	3	6	*	39	32	0.18	
Berlin ...	29.35	39	SW	4	0	29.33	-0.37	35	33	+3	SSE	3	0	*	39	?	0.08	
Wiesbaden ...	*	*	*	*	*	29.17	-0.30	36	35	0	Z	0	7	*	43	34	0.75	
Munich ...	29.69	38	W	5	6	29.39	-0.32	45	42	+15	SW	7	0	*	45	30	0.39	
The Helder ...	29.22	41	WSW	5	0	28.94	-0.15	37	36	0	SE	2	0	2	41	34	0.12	
FRANCE AND BELGIUM.																		
Brussels (9 a.m.)	*	*	*	*	*	28.94	-0.12	48	47	+10	SW	5	7	*	?	37	0.43	
Cape Gris Nez	?	44	WNW	6	6	?	?	48	46	+4	W	7	7	7	48	37	0.43	
Paris ...	29.58	44	SSW	2	0	29.21	-0.04	54	52	+12	SW	5	0	*	?	39	0.39	
Brest ...	?	45	W	4	7	?	?	50	49	+1	W	9	0	0	52	45	0.28	
Lorient ...	29.43	46	S	5	7	29.15	-0.30	55	52	+8	WSW	9	7	9	?	43	0.55	
FRANCE AND BELGIUM.																		
Rochefort ...	29.71	46	S	6	7	29.62	-0.02	54	54	+3	WSW	7	7	4	?	48	0.89	
Belfort ...	29.82	48	S	2	7	29.69	-0.03	50	46	+6	S	5	0	*	50	?	0.08	
Lyons ...	29.89	45	WNW	4	6	29.78	-0.22	56	45	+17	WNW	7	6	3	?	?	.	
Nice ...	29.91	46	Z	0	6	29.83	-0.05	39	38	-3	SW	1	6	*	59	37	.	
Perpignan ...	29.80	59	WSW	4	0	29.75	-0.05	?	54	?	WSW	7	6	7	63	54	.	
Biarritz ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	.
GERMANY & HOLLAND.																		
Corunna ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	.
Lisbon ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	.

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

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

WEATHER CHARTS

for 8 a.m. on Thursday, 23rd January, 1890.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP

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

Changes since previous morning are stated in words.

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

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

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

⊙ = dead calm.

SEA DISTURBANCE—Where considerable, is shown thus:

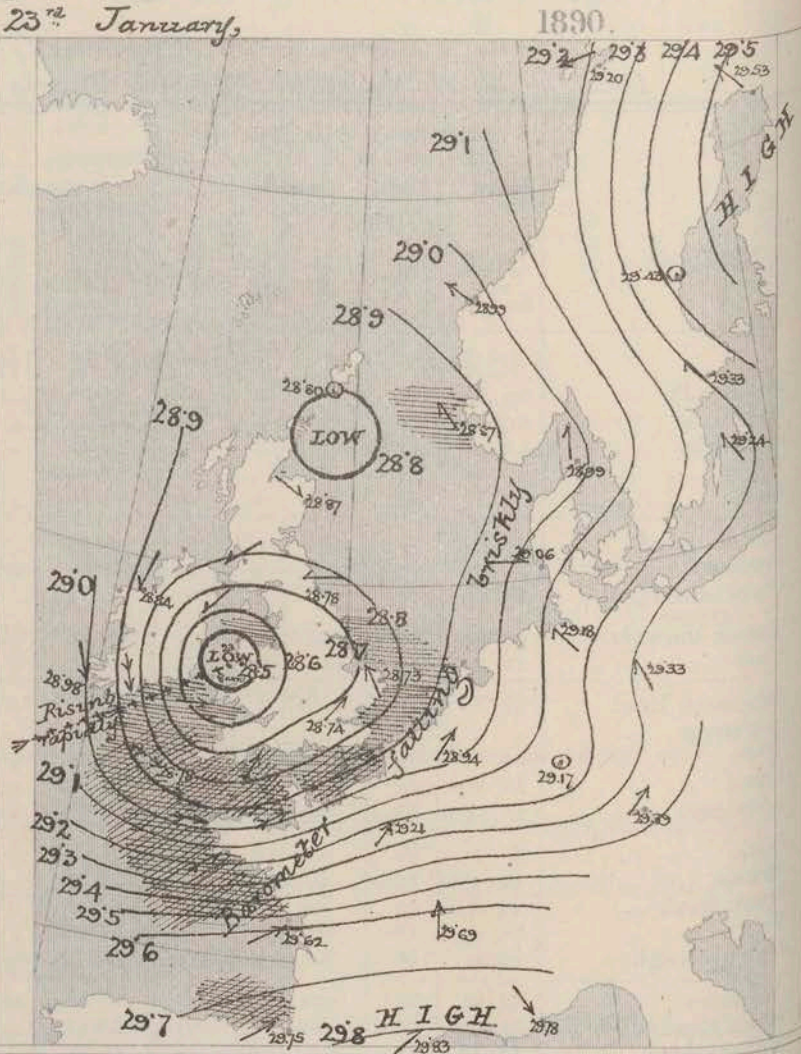
— Rough. — High.

MEAN HEIGHT OF THE BAROMETER

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

During the 15 Years: 1871—1885.

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



TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

TEMPERATURE—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

WEATHER is shown by Letters of the Beaufort Scale.

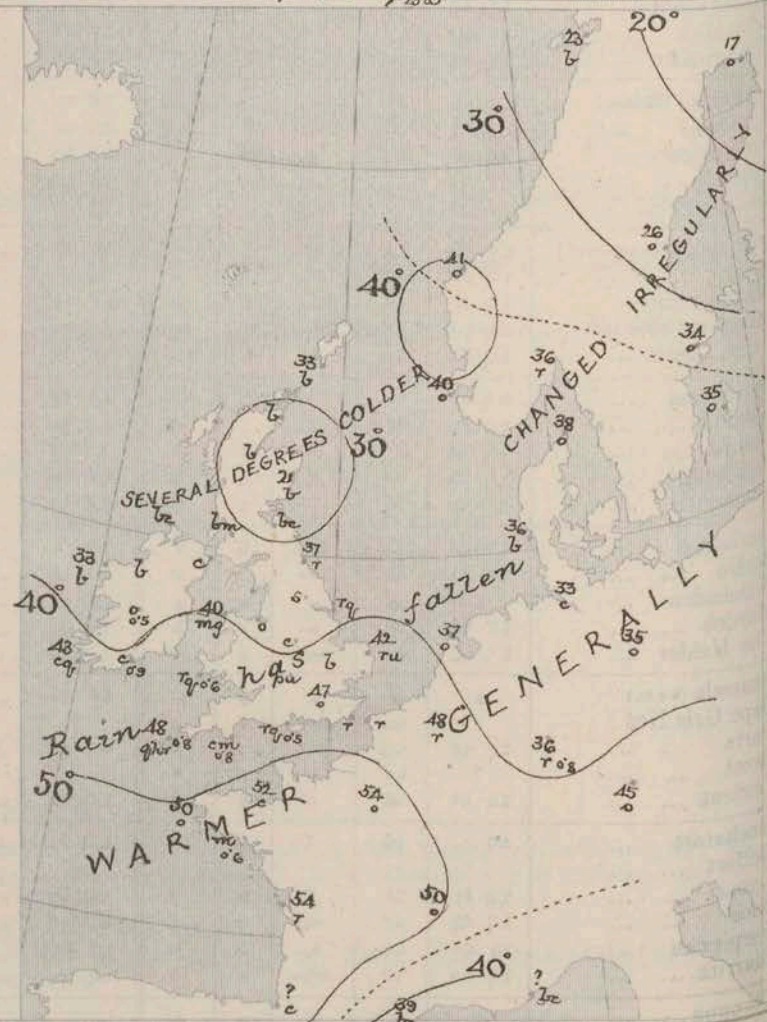
RAINFALL—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of January.)

STATIONS.	TEMPERATURE.				RAINFALL (Inches.)
	Daily Max.	Daily Min.	at 8 a.m.		
			Dry.	Wet.	
Sumburgh Head.....	42.9	35.4	39.4	38.2	3.66
Stornoway.....	43.0	34.2	39.0	37.8	5.17
Wick.....	42.2	33.2	37.9	36.4	1.97
Nairn.....	41.9	32.7	36.6	35.0	2.02
Aberdeen.....	42.1	33.3	37.1	35.4	2.34
Leith.....	44.6	33.7	38.2	36.8	1.98
Shields.....	43.1	34.7	38.0	36.7	1.79
York.....	43.2	33.1	36.8	35.9	1.83
Loughborough.....	43.5	32.9	36.5	35.5	2.08
Ardrossan.....	44.4	36.4	39.8	38.5	4.53
Donaghadee.....	44.4	36.3	39.9	39.1	3.03
Holyhead.....	45.9	39.0	41.7	40.3	3.49
Liverpool.....	43.9	35.6	38.7	37.1	2.23
Parsonstown.....	46.0	34.6	39.0	37.9	3.09
Valencia.....	42.8	40.5	44.3	43.8	6.79
Roche's Point.....	47.9	39.7	43.2	42.0	5.63
Pembroke.....	46.8	39.9	42.8	41.2	3.92
Seilly.....	49.1	43.3	46.5	45.0	3.93
Jersey.....	46.0	38.7	41.7	40.4	3.24
Hurst Castle.....	45.3	37.0	40.4	39.7	3.10
Dover.....	43.7	36.0	39.4	38.2	2.68
LONDON.....	44.8	34.4	37.9	36.8	2.20
Oxford.....	43.8	34.4	37.5	36.5	2.33
Cambridge.....	43.9	32.6	36.5	35.7	1.57
Yarmouth.....	41.9	34.5	37.7	36.9	2.06

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



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 29.6 in. to 29.8 in. and more over the south of France and the Spanish Peninsula, 29.4 in. to 29.5 in. and more over the north of Scotland and Ireland.
 Lowest, 28.5 in. and less, in a depression lying over Carnarvon, 28.8 in. and less, in another disturbance off the northeast of Scotland.
 Gradients very steep over the Bay of Biscay, France and the Channel, steep over Ireland, moderate to the eastward of the North Sea, slight over Scotland.
 Barometer rising with great rapidity (0.14 in. per hour) at Valencia, falling at our eastern stations.
 Readings are below 29 inches all over the British Isles.

TEMPERATURE

Highest, 55° at Lorient, 54° at Rochefort & Paris, 52° at Jersey, 50° at Brest and Hunt Castle, 48° at Biscaya.
 Lowest, (a) 17° at Haparanda, 23° at Bodö, 26° at Helsingfors; (b) 21° at Aberdeen, 25° at Wick and Kinn, 28° at Leith.
 It has fallen decidedly in the north, risen decidedly in the south since yesterday.

WIND

Extremely light and variable in Scotland — light NE³ on our north-west coasts.
 NW⁴ strong to gale in the south of Ireland — SE⁴ strong breeze on our east coasts.
 A strong SW⁴ to W⁴ gale has again set in over the Channel and Bay of Biscay.

WEATHER

Bell over Scandinavia (with rain at Lander) — fine and bright at present in Scotland and the north of Ireland — gloomy, rainy and very squally on the west, south and east coasts of England, and on the French coasts.

SEA

Extremely high at Lorient, Brest, and Scilly, and high on our south-western coasts generally and over the Bay of Biscay, rough in St. George's Channel and on our east coasts, moderate or slight in the north, except at Llandanoe.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

As the depression moves north-eastwards the gale is likely to veer to the NW⁴ and blow hard over all but the northern parts of the Kingdom, with colder weather, sleet or snow in several places.

FORECASTS

For the 24 hours ending at NOON on 24th JAN^y 1890.

DISTRICTS.

FORECASTS.

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

Wind variable and light; unsettled, cold, perhaps snow.

SE⁴ to SW⁴ winds, strong; squally, cold showers.

Wind veering to W. and NW. and blowing hard; colder, squally, cold showers.

DISTRICTS.

FORECASTS

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

Same as Nos 0 and 1.

NW⁴ gales and strong winds; colder, squally, cold showers.

NW⁴ winds, strong and squally to moderate; much colder, cold showers.

WARNINGS

The SOUTH CONE is still flying in districts 2.3.5.8. and part of 7.

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. REPORT

[illegible]

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

Weather in a very changeable and unsettled condition over the whole of NW^{rn} and Nth Europe; clear in some localities, cloudy or overcast as a whole, with showers of snow in Scotland, sleet hail or rain in various parts of Ireland, England and the N. of France, rain in the Riviera, but fair weather over Austria and S. Germany, remaining very unsettled over the United Kingdom during day; much rain over Ireland and smaller quantities over England at night.

Temperature risen fast over Russia, changing fitfully elsewhere; ranging from 50° $^{\circ}\text{F}.$ over Spain and the Mediterranean, 51° at Rochefort, 49° at Brest; below 40° over western Germany and many parts of the British Isles, and below the freezing point over Russia, Finland, Lapland and S. Greenland. Lowest readings of all - 13° at Archangel (0° zero F.) at Haparanda $+8^{\circ}$ at Moscow, 10° at Kuopio and 12° at Uleaborg and St Petersburg. Continuing to change very irregularly over NW^m. Europe during day; and rising to 63° at Biarritz.

Wind light and variable over SEth Europe, moderate and variable over the Mediterranean. Strong to a gale from the W^{ind} over the Bay of Biscay and southern half of our Island, Sth fresh to a gale over the North Sea, SEth over Russia and Nth Europe. The Wth gales subsiding during morning and wind backing to Sth SE subsequently on our SWth coasts.

Barometer highest 29.8 ins. to 30.2 ins. and more over Spain and the Mediterranean, 29.8 ins. to 30.1 and more over Russia; lowest 28.8 ins. and less in a complex depression over the N. of our Islands, gradients steep over W.th Europe. Mercury after rising quickly during day, beginning to fall fast again in the S.W. at night owing to advance of new deep depression towards Valencia.

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, 24th January, 1890.*
Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.

Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.																		
STATIONS.	YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
	BAROM :	TEMP.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Weather.	Sea. (0 to 9.)	SHADE TEMP.		Amount of Rainfall.	
			Reading at 32° F. and Sea Level.	Dry.		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.
SCANDINAVIA.																		
Haparanda ...	29.49	10	SE	2	0	29.49	-0.4	10	9	-7	SE	4	0	*	18	9	0.16	
Hernösand ...	29.39	32	E.N.E.	2	0	29.44	+0.1	32	30	+6	N.E.	2	0	*	34	25	-	
Stockholm ...	29.27	32	E	4	0	29.39	+0.6	31	28	-3	E.N.E.	2	0	*	37	30	-	
Wisby ...	29.17	34	SE	4	0	29.28	+0.4	33	31	-2	E.N.E.	4	0	*	36	32	-	
Bodö ...	29.18	24	E.N.E.	4	6	29.24	+0.4	23	21	0	E.N.E.	2	6	1	25	21	-	
SCANDINAVIA.																		
Christiansund ...	28.98	38	SE	4	6	29.19	+2.0	41	35	0	SW	3	0	3	41	37	-	
Skudesnaes ...	29.07	39	SE	4	5	29.40	+5.3	39	38	-1	SSE	4	0	5	?	37	0.28	
Christiania Fjord (Færder) ...																		
Skagen (The Scaw) ...	29.11	37	SSE	2	0	29.38	+3.9	37	36	-1	Z	0	0	1	39	34	-	
Fanö ...	28.96	35	NE	4	0	29.44	+3.8	32	32	-4	W	2	6	*	36	32	-	
SCANDINAVIA.																		
Sumburgh Head ...	28.91	37	WSW	1	0	29.23	+4.3	38	36	+5	Z	0	6c	3	42	33	0.06	
Stornoway ...																		
Wick ...	29.00	34	Z	0	6	29.27	+4.7	36	35	+11	Z	0	6	0	42	25	-	
Nairn ...	29.02	33	W	1	6	29.27	+4.5	37	36	+12	Z	0	6	1	37	24	-	
Aberdeen ...	29.08	23	W	1	6	29.35	+4.8	33	32	+12	SW	2	6c	3	34	21	-	
SCANDINAVIA.																		
Leith ...	29.11	33	SSW	1	6c	29.41	+5.7	39	37	+11	SSW	1	6	*	39	27	-	
Shields ...	29.13	37	Z	0	6cm	29.48	+7.0	37	35	0	SW	2	m	3	39	33	0.18	
Spurn Head ...	29.12	40	N	6	r	29.59	+9.0	38	36	-1	SW	4	6	4	41	36	0.24	
York ...	29.13	37	N	2	m	29.57	+8.9	37	35	+3	SW	1	6	*	37	33	0.10	
Loughborough ...	29.18	39	NW	3	r	29.64	+10.0	38	36	0	WSW	3	c	*	45	35	0.08	
SCANDINAVIA.																		
Ardrossan ...	29.12	42	W	1	c	29.43	+6.2	42	41	+11	W	3	c	2	42	31	-	
Malin Head ...	29.08	40	S	5	6c	29.33	+5.1	39	38	+1	SSW	5	cp	3	42	37	0.22	
Mullaghmore ...	29.16	42	SW	5	og p	29.43	+5.9	40	39	+2	SSW	4	og p	3	44	36	0.13	
Belmullet ...	29.19	39	W	5	0	29.42	+4.9	44	44	+11	WSW	2	0	*	46	33	0.20	
Donaghadee ...	29.18	36	WSW	5	6	29.47	+7.1	35	35	-3	WSW	3	6c	1	43	33	0.02	
SCANDINAVIA.																		
Liverpool (Bidston) ...	29.23	40	WSW	3	6	29.59	+10.4	40	37	+4	SW	2	6c	3	42	34	0.04	
Holyhead ...	29.25	41	WSW	3	6	29.56	+10.7	43	40	+3	SW	3	c	3	44	39	0.01	
Parsonstown ...	29.27	38	SSW	1	c	29.53	+7.3	38	36	+3	SSW	1	0	*	42	34	0.15	
Valencia ...	29.37	43	W	3	og p	29.54	+5.6	47	45	+4	S	2	om	3	47	40	0.18	
Roche's Point ...	29.37	43	W	3	6	29.59	+7.8	45	43	+5	WSW	2	0	4	48	38	-	
SCANDINAVIA.																		
Pembroke (St. Ann's Hd.) ...	29.36	44	W	5	6c	29.66	+11.0	47	46	+2	WSW	4	op	5	47	42	0.08	
Scilly ...	29.47	47	WSW	6	og p	29.70	+9.2	49	49	+1	SSW	5	0	7	50	43	0.06	
Prawle Point ...	29.41	43	WSW	6	6	29.77	+10.5	48	46	-1	WSW	4	6c	4	49	39	0.16	
Jersey (St. Aubin's) ...	29.45	48	WSW	7	og p	29.84	+8.9	47	46	-5	SW	4	cm	4	53	44	0.04	
Hurst Castle ...	29.34	44	WSW	8	6c	29.77	+10.2	47	45	-3	WSW	4	0	4	52	41	0.07	
SCANDINAVIA.																		
Dungeness ...	29.08	43	WSW	9	c	29.73	+9.3	41	39	-1	W	4	c	3	50	37	0.02	
London ...	29.19	43	WSW	7	og	29.74	+10.0	35	35	-12	SSW	2	c	*	50	33	0.02	
Oxford ...	29.41	38	WSW	2	6	29.72	+10.4	37	36	-8	WSW	2	cm	*	48	35	0.01	
Cambridge ...	29.16	41	SW	2	c	29.71	+10.2	35	34	-7	SW	1	c	*	50	32	-	
Yarmouth ...	28.89	42	NW	6	og	29.64	+9.1	35	34	-7	W	3	6	4	48	33	0.09	
SCANDINAVIA.																		
Cuxhaven ...	28.87	36	ESE	6	8	29.52	+3.4	37	36	+4	NW	5	6c	*	38	?	0.20	
Berlin ...	28.84	37	SW	3	6	29.08	-2.5	35	34	0	W	7	r	*	41	34	0.28	
Wiesbaden ...	*	*	*	*	*	29.73	+5.6	40	38	+4	W	4	r	*	52	?	0.79	
Munich ...	29.32	45	W	7	0	29.70	+3.1	37	34	-8	NW	7	c	*	54	36	0.20	
The Helder ...																		
SCANDINAVIA.																		
Brussels (9 a.m.) ...	*	*	*	*	*	29.78	+8.4	37	36	-11	SSW	2	6	*	51	37	0.24	
Cape Gris Nez ...	?	44	WSW	8	0	?	?	45	44	-3	W	4	c	24	50	41	0.16	
Paris ...	29.39	49	W	6	6c	29.83	+6.2	36	35	-18	SSW	1	6	*	58	36	-	
Brest ...																		
Lorient ...	29.59	50	W	7	0	29.89	+7.4	50	50	-3	SW	2	0	7	55	48	-	
SCANDINAVIA.																		
Rocheport ...	29.78	51	NW	7	0	30.03	+4.1	48	?	-6	W	4	0	?	57	43	1.02	
Belfort ...	29.44	44	SW	4	r	29.88	+3.1	43	34	-6	NW	3	c	*	48	25	0.55	
Lyons ...	29.70	53	SW	4	0	30.00	+3.1	44	42	-6	E	1	0	*	61	42	0.04	
Nice ...	29.69	57	W	4	0	29.72	-0.6	52	41	-4	NW	6	6c	4	63	?	-	
Perpignan ...	29.83	60	NW	2	6	30.04	+2.1	51	47	+12	SW	2	0	*	59	?	-	
Barritz ...	29.90	55	WSW	4	r	30.04	+2.9	54	54	?	SW	3	r	7	68	48	0.98	
SCANDINAVIA.																		
Corunna ...	*	*	*	*	*													
Lisbon ...	30.32	59	SW	4	0	30.35	+0.9	57	54	0	SW	3	0	6	61	55	0.08	

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

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

WEATHER CHARTS

for 8 a.m. on

Fridays 24th January,

1890.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP

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

Changes since previous morning are stated in words.

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

their barbs and feathers refer to force thus—

— force above 10; — force 8 to 10;

— force 5 to 7; — force 1 to 4.

⊙ dead calm.

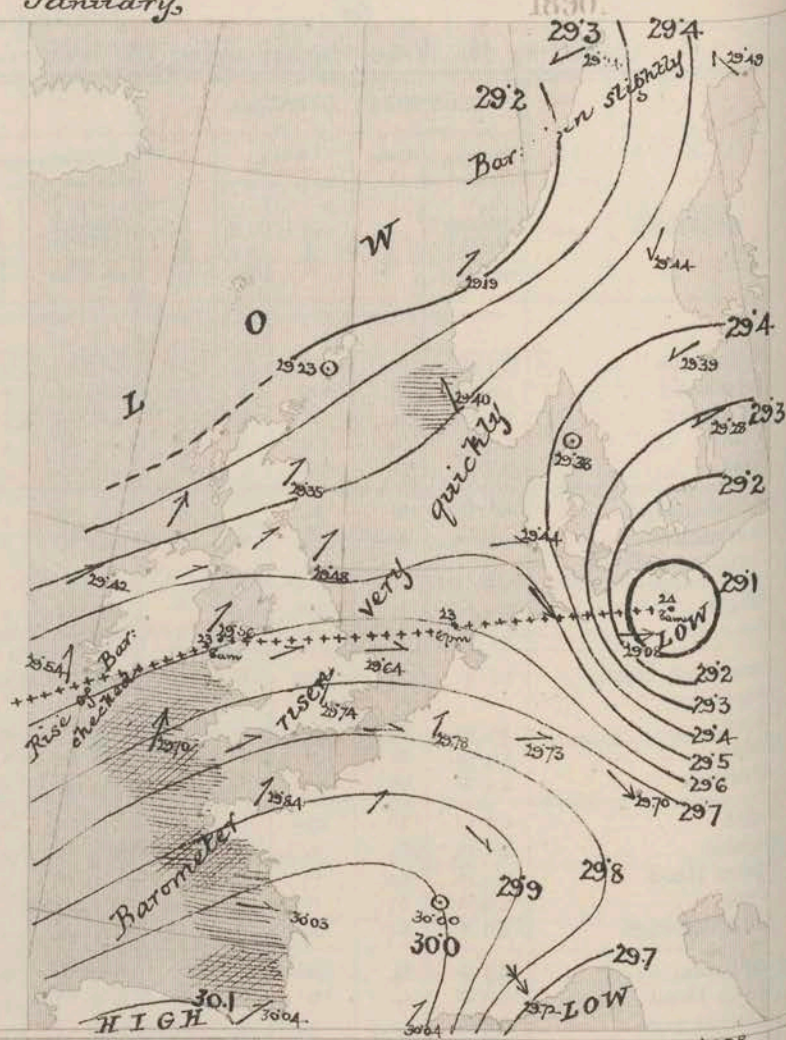
SEA DISTURBANCE—Where considerable, is shown thus:

— Rough, — High.

MEAN HEIGHT OF THE BAROMETER

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

STATIONS.	MEAN READINGS.
Sumburgh Head	29.685
Stornoway	29.687
Wick	29.725
Nairn	29.753
Aberdeen	29.790
Leith	29.829
Shields	29.856
York	29.935
Loughborough	29.967
Ardrossan	29.840
Donaghadee	29.851
Holyhead	29.896
Liverpool	29.922
Parsonstown	29.886
Valencia	29.869
Roche's Point	29.894
Pembroke	29.928
Sally	29.960
Jersey	30.010
Hurst Castle	29.997
Dover	30.017
LONDON	30.007
Oxford	29.997
Cambridge	29.992
Yarmouth	29.981



TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

TEMPERATURE—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

WEATHER—is shown by Letters of the Beaufort Scale.

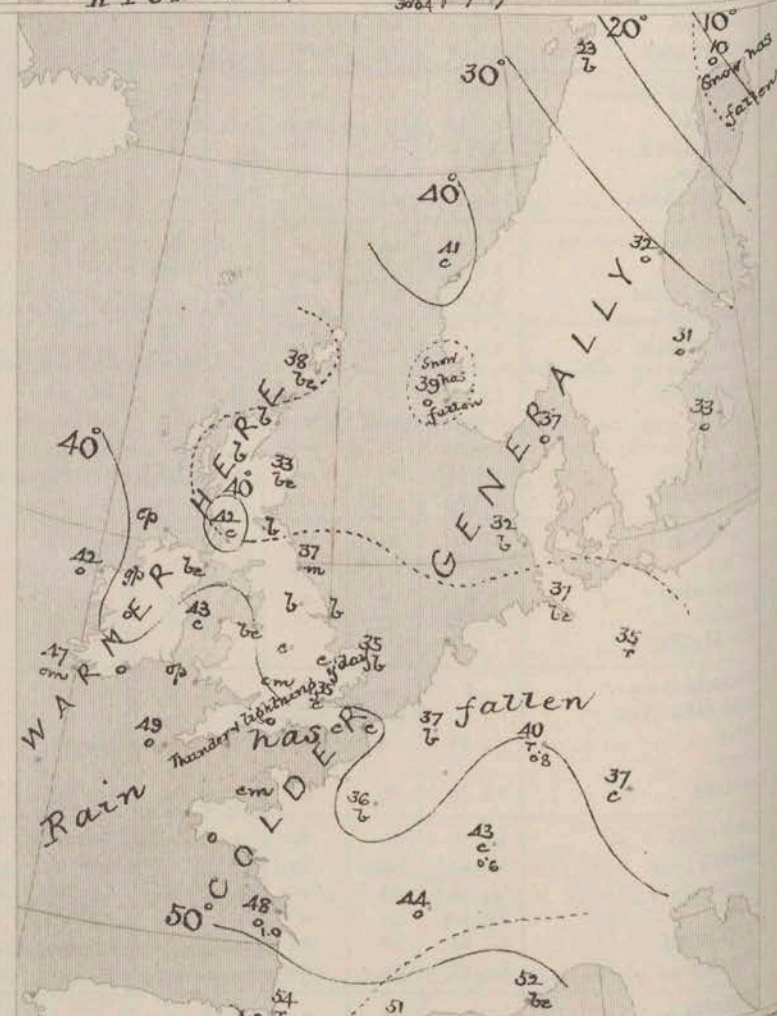
RAINFALL—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of January.)

STATIONS.	TEMPERATURE.				RAINFALL (Inches.)
	Daily Max.	Daily Min.	at 8 a.m.	at 4 p.m.	
Sumburgh Head	42.9	35.4	39.4	38.2	3.66
Stornoway	43.0	34.2	39.0	37.8	5.17
Wick	42.2	33.2	37.9	36.4	1.97
Nairn	41.9	32.7	36.6	35.0	2.02
Aberdeen	42.4	33.3	37.1	35.4	2.31
Leith	41.6	33.7	38.2	36.8	1.98
Shields	43.1	34.7	38.0	36.7	1.79
York	43.2	33.1	36.8	35.9	1.83
Loughborough	43.5	32.9	36.5	35.5	2.08
Ardrossan	44.4	36.4	39.8	38.5	4.53
Donaghadee	41.4	36.3	39.9	39.1	3.03
Holyhead	45.9	39.0	41.7	40.3	3.49
Liverpool	43.9	35.6	38.7	37.1	2.23
Parsonstown	46.0	34.6	39.0	37.9	3.09
Valencia	49.8	40.5	44.3	43.3	6.79
Roche's Point	47.9	39.7	43.2	42.0	5.63
Pembroke	45.8	39.9	42.8	41.2	3.92
Sally	49.1	43.3	46.5	45.0	3.93
Jersey	46.0	38.7	41.7	40.4	3.24
Hurst Castle	45.3	37.0	40.4	39.7	3.10
Dover	43.7	36.5	39.4	38.2	2.68
LONDON	41.8	34.4	37.9	36.8	2.20
Oxford	43.8	34.4	37.5	36.5	2.33
Cambridge	43.9	32.6	36.5	35.7	1.57
Yarmouth	41.9	34.5	37.7	36.9	2.06

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



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 29.8 in. to 30.1 in. over France, the Bay of Biscay and English Channel.
 Lowest, 29.1 in. and less, in a depression over North Germany, 29.2 in. and less, off the extreme northwest of Scotland.
 Gradients moderate for SW winds over our Islands.
 Barometer apparently still rising except perhaps in the extreme southwest of Ireland.

TEMPERATURE

Highest, 57° at Lisbon, 54° at Harritz, 51° at Perpignan, 49° at Kelly, and 41° at Jersey and Valencia.
 Lowest, 10° F. at Haparanda, 23° at Borö, 31° at Stockholm, 35° at Yarmouth, Cambridge, and in London, 36° at Paris, 38° at Portsmouth. In the south of London temperature fell to 23° on the grass.
 Thermometer is now rising again decidedly in Ireland.

WIND

Strong to gale from NW. and W. over Germany, but has backed to SW (moderate) over Great Britain, and to S. at Malin Head, Valencia, and Seilly.
 The gales experienced yesterday have all died down.

WEATHER

Fair as a whole off the North Sea, France, England, and Scotland, dull and unsettled again in the west, with showers in several places.
 The appearance of the sky both in London and at Babbacombe (Torquay) was indicative of further disturbed weather.

SEA

Still high at the mouth of the Channel and over the Bay of Biscay, but had gone down elsewhere. At Holyhead and Dungeness it is slight.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The improvement in the weather is too sudden to be relied on, and although no decided fall of the barometer is reported at present further depressions are likely to arrive shortly.

FORECASTS

For the 24 hours ending at NOON on 25th JAN^y 1890.

DISTRICTS.

FORECASTS.

DISTRICTS.

FORECASTS

0	SCOTLAND NORTH	SW ^{ly} and S ^{ly} breezes, light to fresh; milder, becoming showery again.
1	SCOTLAND EAST	
2	ENGLAND N.E.	SW ^{ly} breezes, light; fine—perhaps freshening later, and becoming less fair.
3	ENGLAND EAST	
4	MIDLAND COUNTIES	
5	ENGLAND SOUTH	SW ^{ly} breezes, moderate or light; fair today perhaps showery and windy tomorrow.

6	SCOTLAND WEST	S ^{ly} and SW ^{ly} winds, increasing in strength; some showers.
7	ENGLAND N.W.	
8	ENGLAND S.W.	
9	IRELAND NORTH	
0	IRELAND SOUTH	

WARNINGS

The SOUTH CONE is still flying in districts 5.8 and part of 7.
 Ireland and Irish Sea warned at Noon.

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

YESTERDAY'S 2 P.M. REPORTS.

	BAR:	THER:		WIND		WEA.	SEA		BAR:	THER:		WIND		WEA.	SEA
		D.	W.	D.	F.					D.	W.	D.	F.		
Skudesnaes ...	28.93	38	37	2	0	r	5		Holyhead ...	29.00	42	39	MTW	6	6
Sumburgh Head ...	28.83	40	37	w	1	c	3		Valencia ...	29.25	46	41	w	3	6
Stornoway ...									Scilly ...	29.30	48	44	WNW	9	7
Aberdeen ...	28.95	28	26	w	1	6	3		Jersey ...	29.18	51	46	w	9	7
Shields ...	28.89	39	37	NE	3	r	3		Dungeness ...	28.69	50	48	w	9	6
Ardrossan ...	28.99	41	39	w	1	6	1		London ...	28.74	49	46	w	6	6
Malin Head ...	28.99	41	39	NW	3	0	3		Yarmouth ...	28.60	48	46	WSW	6	6
Mullaghmore ...	29.04	44	41	SW	5	6	4		Rocheport ...	29.60	52	52	w	7	4
Belmullet ...	29.05	46	44	w	5	0	*								

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

Weather cloudy and unsettled in all but the southeastern parts of Europe, extremely rough squally and showery over France, the Bay of Biscay, Ireland and England, dull over the Baltic and Germany. Very fine in Scotland and the north of Ireland. Squally and showery over Ireland and England later, heavy rain in west of France, thunder and lightning in south of England. Continuing fine at the Scotch stations.

Temperature rising quickly France, fallen fast in Scotland, Hungary, and south of Russia. Above 50° over Mediterranean Sea and France, and as high as 58° at Palermo and Malta, 59° at Algiers, 60° at Corunna, and 63° at Barcelona. Below the freezing point over Russia and Northern Europe as well as in Scotland; lowest readings being -12° at Archangel, +1° at Moscow, +1° at Haparanda and Hangö, and 21° at Abisko. Very unsettled during day, falling fast over England at night.

Wind very light and variable over Southeastern Europe, SE in the north. Complex cyclonic circulation over Western Europe causing strong gales from SW. to WNW. over France, Bay of Biscay, English Channel, and south of Ireland, W¹ gale spreading to the Netherlands and Germany later, dying down over France and British Isles.

Barometer, highest, 29.8 ins. to 30.3 ins. and more, over Southwestern Europe and the Mediterranean, and 29.8 ins. to 30.1 ins. over southeastern and Eastern Europe, lowest, 28.5 ins. and less in deep depression over North Wales, 28.8 ins. and less, in another (filling up) off the northeast of Scotland. The deeper depression travelling quickly to eastward later, and barometer rising very rapidly in its rear.

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, 25th January, 1890.*
Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.

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STATIONS.	YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
	BAROM. Reading at 32° F. and Sea Level.	TEMP. Dry.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Weather.	Sun. (0 to 12.)	SHADE TEMP.		Amount of Rainfall.	
			Dirce.	Force. (0 to 12.)		Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Dirce.	Force. (0 to 12.)			Max.	Min.		
SCANDINAVIA.																		
Haparanda ...	29.49	16	SE	2	S	29.50	+0.1	20	20	+10	S	4	0	0	7	7	0.51	
Hernösand ...	29.53	28	S	2	C	29.58	+0.14	14	14	-18	W	0	0	0	36	28		
Stockholm ...	29.69	30	W	0	O	29.74	+0.35	30	28	-1	W	4	0	0	36	28		
Wisby ...	29.68	33	E	4	O	29.83	+0.55	32	31	-1	SSW	4	0	0	36	30		
Bodö ...	29.43	22	ESE	2	B	29.05	-1.19	21	18	-2	ESE	2	0	1	23	18		
Christiansund	29.42	40	SW	4	C	29.33	+0.14	39	35	-2	SE	5	0	3	41	34		
Skudenes	29.60	41	SSE	6	O	29.28	-1.12	40	39	+1	SSE	8	0	0	41	39	0.08	
Christiania Fjord (Færder)																		
Skagen (The Scaw)	29.71	35	NW	1	B	29.67	+0.29	36	36	-1	SSW	4	0	3	39	32	0.08	
Fanö ...	29.81	36	SSW	4	B	29.65	+0.21	36	36	+4	SSE	6	0	0	39	32		
Sumburgh Head	29.37	40	SW	1	O	28.74	-0.49	45	45	+7	SSE	5	0	5	45	38	0.34	
Stornoway ...																		
Wick ...	29.36	37	S	1	O	28.70	-0.57	43	42	+7	S	4	0	3	43	35	0.30	
Nairn ...	29.36	37	W	0	O	28.75	-0.52	47	46	+10	WSW	4	0	1	47	35	0.04	
Aberdeen ...	29.46	37	SSW	3	C	28.83	-0.50	46	45	+13	S	5	0	4	47	33	0.16	
Leith ...	29.49	40	S	2	B	28.93	-0.48	52	48	+13	WSW	4	0	0	52	39	0.08	
Shields ...	29.56	42	NW	2	M	29.10	-0.38	52	50	+15	SSW	5	0	2	52	35	0.11	
Spurn Head ...	29.66	41	S	3	O	29.32	-0.27	51	49	+13	SSW	6	0	5	51	36	0.04	
York ...	29.64	40	SE	1	O	29.23	-0.34	55	52	+18	SW	4	0	0	55	35	0.16	
Loughborough	29.69	42	SSE	2	T	29.38	-0.26	54	52	+16	SSW	7	0	0	54	38	0.10	
BRITISH ISLANDS.																		
Ardrossan ...	29.43	43	S	3	T	28.92	-0.51	48	47	+6	S	4	0	4	49	39	0.26	
Malin Head ...	29.26	36	SSE	6	ogp	28.69	-0.64	47	44	+8	SSW	9	0	5	50	34	0.24	
Mullaghmore ...	29.18	43	SE	6	O	28.83	-0.60	49	45	+9	SSW	7	0	6	54	38	0.22	
Belmullet ...	29.11	44	SSW	6	O	28.92	-0.60	50	48	+6	WSW	10	0	0	52	31	0.52	
Donaghadee ...	29.43	41	WSW	3	T	28.98	-0.49	47	47	+12	WSW	6	0	4	51	35	0.15	
Liverpool (Bidston)	29.58	41	SE	3	T	29.19	-0.40	54	51	+14	SW	7	0	4	55	39	0.10	
Holyhead ...	29.49	42	SSE	4	mtg	29.18	-0.38	49	47	+6	SW	6	0	5	51	42	0.21	
Parsonstown ...	29.32	45	SSE	3	T	29.07	-0.46	50	47	+12	SW	2	0	0	55	37	0.06	
Valencia ...	29.30	53	S	3	om	29.15	-0.39	52	48	+5	SSW	8	0	6	55	45	0.15	
Roche's Point...	29.42	50	SW	5	T	29.23	-0.36	51	49	+6	SW	6	0	0	51	45	0.40	
Pembroke (St. Ann's Hd.)	29.53	46	S	5	T	29.35	-0.31	49	48	+2	SW	5	0	6	51	45	0.18	
Scilly ...	29.64	53	SSW	6	ogdm	29.48	-0.22	53	53	+4	SSW	8	0	9	54	48	0.08	
Prawle Point ...	29.69	51	SSW	5	O	29.58	-0.19	51	51	+3	SSW	8	0	6	51	47	0.18	
Jersey (St. Aubin's)	29.79	51	SSE	3	of	29.81	-0.03	53	51	+6	SSW	6	0	5	53	46	0.25	
Hurst Castle ...	29.73	48	SSW	5	om	29.64	-0.13	52	50	+5	WSW	7	0	6	52	45	0.13	
Dungeness ...	29.72	47	WSW	4	O	29.63	-0.10	51	50	+10	SW	7	0	5	51	43	0.09	
London ...	29.78	44	SSW	2	od	29.59	-0.15	54	51	+19	SW	6	0	0	54	35	0.08	
Oxford ...	29.68	43	S	3	O	29.51	-0.21	53	51	+16	S	7	0	0	53	37	0.08	
Cambridge ...	29.72	42	SW	3	T	29.49	-0.22	54	51	+19	S	5	0	0	54	33	0.09	
Yarmouth ...	29.74	41	WSW	2	bcf	29.53	-0.11	50	49	+15	SW	5	0	4	50	33	0.05	
GERMANY & HOLLAND.																		
Buxhaven ...	29.80	38	WSW	2	B	29.77	+0.25	38	37	+1	S	4	0	0	40	37		
Berlin ...	29.86	35	W	0	bc	29.99	+0.41	33	32	-2	S	3	0	0	43	32	0.20	
Wiesbaden ...	*	*	*	*	*	29.97	+0.24	41	41	+1	W	0	0	0	46	34	0.16	
Munich ...	30.04	35	W	5	S	30.13	+0.43	35	34	-2	S	4	0	0	39	34	0.04	
The Helder ...	29.82	38	SSE	1	C	29.62	-0.11	45	45		SW	4	0	3	45	37	0.08	
FRANCE AND BELGIUM.																		
Brussels (9 a.m.)	*	*	*	*	*	29.82	+0.04	51	50	+14	SSW	3	0	0	51	37	0.16	
Cape Gris Nez																		
Paris ...	29.98	46	SSE	2	O	29.98	+0.15	50	49	+14	SW	3	0	0	50	37	0.16	
Brest ...	29.91	52	W	5	O	29.91	+0.02	52	51		SW	9	0	0	54	48	0.08	
Lorient ...	29.91	53	W	5	T	29.91	+0.02	53	51	+3	SW	6	0	0	54	46	0.16	
Rochefort ...	30.10	54	W	5	O	30.16	+0.13	52	51	+4	SW	5	0	0	55	45	0.08	
Belfort ...	30.00	41	NW	2	O	30.08	+0.20	41	34	-2	NW	1	0	0	46	36	0.14	
Lyons ...	30.15	46	S	1	O	30.24	+0.24	44	43	0	SSE	1	0	0	52	43	0.04	
Nice ...	29.91	51	E	4	B	30.08	+0.36	54	40	+2	SSE	2	0	1	61	45		
Perpignan ...	30.15	53	W	0	O	30.21	+0.17	48	47	-3	SW	1	0	0	62	46	0.04	
Biarritz ...	30.21	58	W	3	O	30.13	+0.09	52	50	0	W	3	0	0	61	48	0.20	
SPAIN.																		
Coruna ...	*	*	*	*	*	30.31	-0.04	54	50	-3	S	2	0	0	59	54		
Lisbon ...																		

For Explanation of Columns, see 1st of p. 2.

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

WEATHER CHARTS

for 8 a.m. on *Saturday, 25th January, 1890.*

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP

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

Changes since previous morning are stated in words.

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

their barbs and feathers refer to force thus—

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

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

⊙ = dead calm.

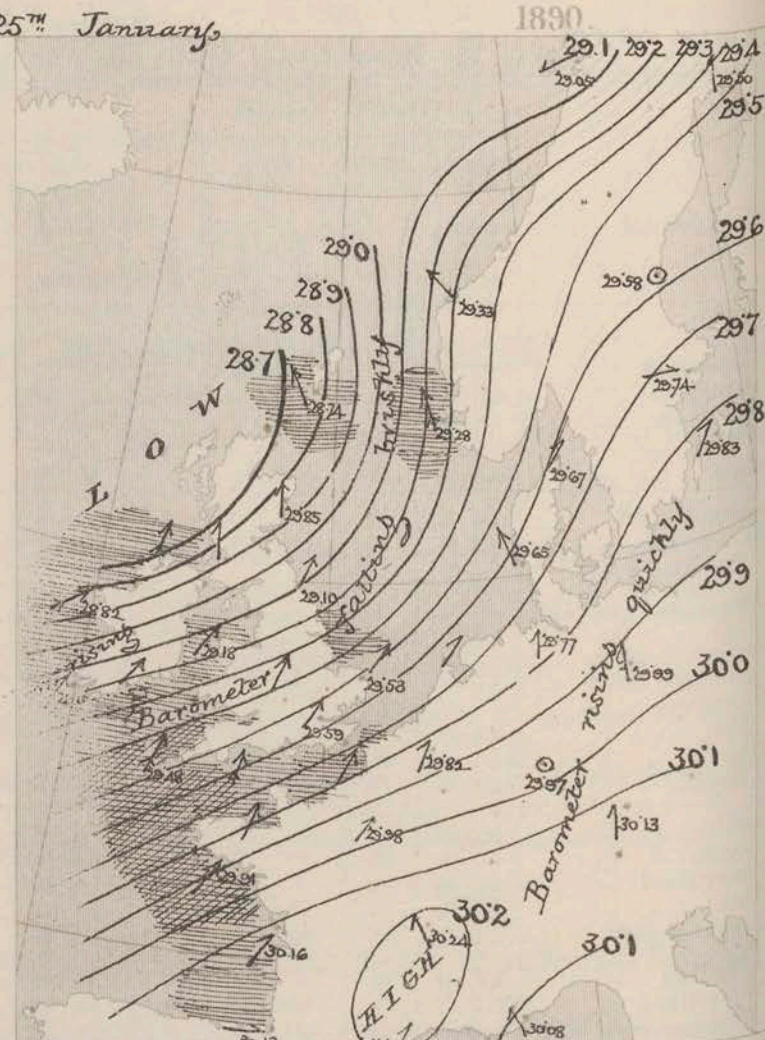
SEA DISTURBANCE—Where considerable, is shown thus:

— Rough. — High.

MEAN HEIGHT OF THE BAROMETER

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

STATIONS.	MEAN READINGS.
Sumburgh Head	29.685
Stornoway	29.687
Wick	29.725
Nairn	29.753
Aberdeen	29.790
Leith	29.829
Shields	29.886
York	29.935
Loughborough	29.967
Ardrossan	29.940
Donaghadee	29.851
Holyhead	29.806
Liverpool	29.922
Parsonstown	29.886
Valencia	29.869
Roche's Point	29.891
Pembroke	29.926
Sally	29.960
Jersey	30.010
Hurst Castle	29.997
Dover	30.017
LONDON	30.007
Oxford	29.997
Cambridge	29.992
Yarmouth	29.981



TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

TEMPERATURE—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

WEATHER is shown by Letters of the Beaufort Scale.

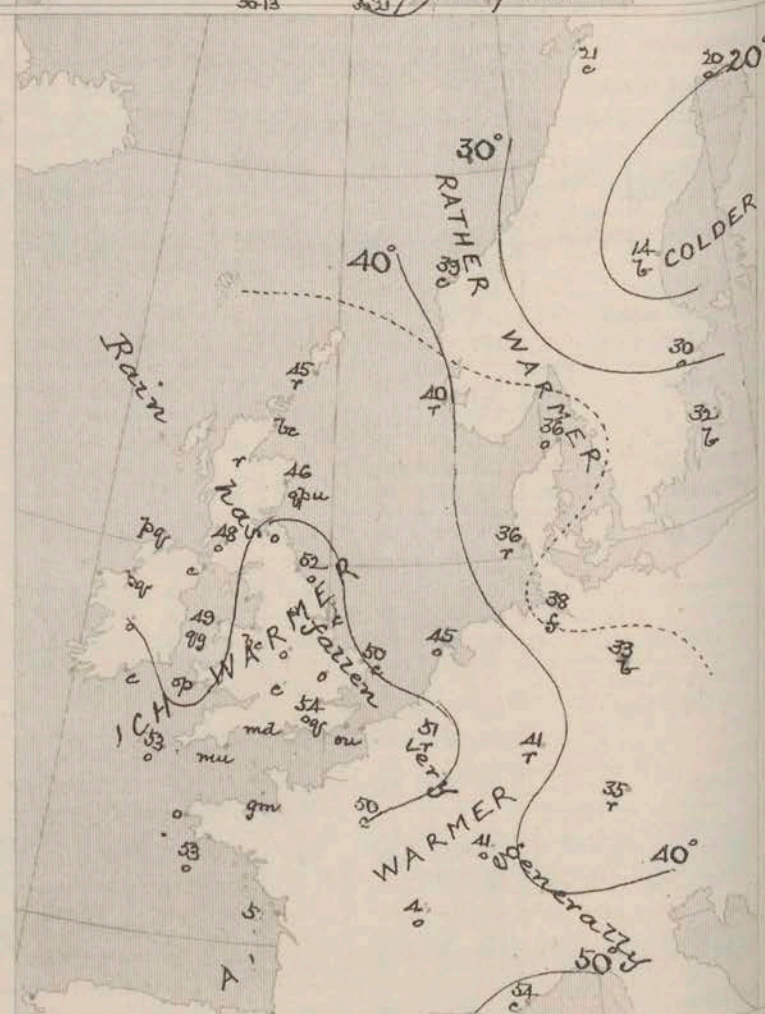
RAINFALL—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of January.)

STATIONS.	TEMPERATURE.				RAINFALL. (Inches.)
	Daily Max.	Daily Min.	at 8 a.m.		
			Dry.	Wet.	
Sumburgh Head.....	42.9	35.4	39.4	38.2	3.06
Stornoway.....	43.0	34.2	39.0	37.8	5.17
Wick.....	42.2	33.2	37.9	36.4	1.97
Nairn.....	41.9	32.7	36.6	35.0	2.02
Aberdeen.....	42.4	33.3	37.1	35.4	2.34
Leith.....	41.0	33.7	38.2	36.8	1.98
Shields.....	42.1	34.7	38.0	36.7	1.79
York.....	43.2	33.1	36.8	35.9	1.88
Loughborough.....	43.5	32.9	36.5	35.6	2.08
Ardrossan.....	44.4	36.4	39.8	38.5	4.53
Donaghadee.....	44.4	36.3	39.9	39.1	3.03
Holyhead.....	45.9	39.0	41.7	40.3	3.49
Liverpool.....	43.9	35.0	38.7	37.1	2.23
Parsonstown.....	46.0	34.6	39.0	37.9	3.09
Valencia.....	49.8	40.5	44.3	43.3	0.79
Roche's Point.....	47.9	39.7	43.2	42.0	5.63
Pembroke.....	45.8	39.0	42.8	41.2	3.92
Sally.....	49.1	43.3	46.5	45.0	8.93
Jersey.....	46.0	38.7	41.7	40.4	3.24
Hurst Castle.....	45.3	37.0	40.1	39.7	3.10
Dover.....	43.7	36.6	39.4	38.2	2.68
LONDON.....	44.8	34.4	37.9	36.8	2.20
Oxford.....	43.8	34.4	37.5	36.5	2.33
Cambridge.....	43.9	32.6	36.5	35.7	1.57
Yarmouth.....	41.9	34.5	37.7	36.9	2.06

NOTE.—The Temperature means are for the 15 years 1871-85, the Rainfall means are mainly those for the 20 years 1869-85.



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30.0 in. to 30.2 in. and more, over the southern parts of France and Germany, 29.8 in. to 29.9 in. over the southern parts of the Baltic.
 Lowest, about 28.6 in. off the northwest coast of Scotland — but exact value cannot be quoted as Stromøys report is wanting.
 Gradients somewhat steep over our Islands and the North Sea, moderate in the north of France, slight in the south.
 Barometer beginning to rise again in the southeast and south, falling in north.

TEMPERATURE

Highest, 55° at York, 54° at Biarritz, London, Cambridge, Loughborough and Liverpool, and above 50° over Ireland and England generally.
 Lowest, 42° at Herisand, 20° to 21° in Lapland, 33° at Berlin, and 35° at Munich.
 It has risen from 10° to 15° over England since yesterday, and this morning readings are from 15° to 20° high: than the average of this time of year.

WIND

S^W to S^W^{by} — varying in force from a strong breeze to a moderate gale on our western and southern coasts, and to a fresh breeze over the greater part of the North Sea. In the East of Scotland the wind is increasing and already blows a moderate gale at times. The gale has been very strong in the west of Ireland during the night.

WEATHER

Dull, equally, showery, and unsettled over the United Kingdom, rainy in Belgium and Western Germany, Fair in Sweden and the south of France.

SEA

Exceedingly high at the mouth of the Channel, rough on our western and southern coasts generally, and in the far north, moderate or slight elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

At present there is no indication of any serious complication in the disturbance referred to above, so that the wind will probably moderate slowly in the west and south. Conditions, however, are not settled.

FORECASTS

For the 24 hours ending at NOON on 26th JAN^y 1890.

DISTRICTS.	FORECASTS.	DISTRICTS.	FORECASTS
† 0 SCOTLAND NORTH	S ^W gales, veering and moderating; showery, squally, becoming cooler.	† 6 SCOTLAND WEST	S ^W gales and strong winds; squally, showery.
† 1 SCOTLAND EAST		† 7 ENGLAND N.W.	
2 ENGLAND N.E.	S ^W to W ^W winds, strong and squally; showery mild — moderating later and becoming cooler.	† 8 ENGLAND S.W.	Same as No 5
3 ENGLAND EAST		† 9 IRELAND NORTH	Same as Nos 6 and 7.
4 MIDLAND COUNTIES		† 0 IRELAND SOUTH	
† 5 ENGLAND SOUTH		WARNINGS	The SOUTH CONE is still flying in districts 1, 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:	THER:		WIND			SEA		BAR:	THER:		WIND			WEA.	SEA
		D.	W.	D.	F.	NEA				D.	W.	D.	F.	NEA		
Skudesnaes ...	29.54	41	39	SSE	6	C	5		Holyhead ...	29.58	47	SW	5	ogm	4	
Sumburgh Head ...	29.34	42	40	SW	1	C	3		Valencia ...	29.36	50	SSE	7	rm	6	
Stornoway ...									Scilly ...	29.62	53	SW	5	f d	7	
Aberdeen ...	29.47	37	35	SW	1	bc	3		Jersey ...	29.83	48	SSE	3	f	4	
Shields ...	29.56	44	40	SW	3	cm	2		Dungeness ...	29.78	48	SW	5	o	4	
Ardrossan ...	29.47	43	42	SSW	3	o	3		London ...	29.76	50	SW	3	o	3	
Malin Head ...	29.80	40	39	S	4	o	2		Yarmouth ...	29.70	43	WSW	2	o	3	
Mullaghmore ...	29.41	42	41	S	5	org	4		Rochefort ...	30.06	53	SSW	4	f	?	
Belmullet ...	29.31	40	40	SW	4	om	*									

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

Weather showing some temporary improvement over the United Kingdom generally, but not settled; very rough and stormy over Central Europe, with rain in many places, snow in several parts of Russia, fog at St. Petersburg. Fair weather prevalent over Southwestern Europe and Algeria only. Rain falling subsequently over the United Kingdom but not in large quantity, and becoming equally again on our western and southern coasts.

Temperature risen considerably in Scotland and Ireland, as well as in Austria-Hungary and the south of Russia, fallen fast over France and the southeast of England; morning readings above 50° over the Mediterranean and Spain, 60° at Palermo; between 40° and 50° on our own southern coasts, and in Austria, lower elsewhere; lowest actual readings -1° at Kuopio, +1° at Archangel, 7° at Moscow, at Haparanda. Rising quickly over England and France later.

Wind very variable; large cyclonic circulation prevailing over Central Europe, causing W³ gales over Germany and Austria, SE winds over Russia, and E⁴ over the Baltic. Gales over British Islands and France all subsided, and wind over United Kingdom back to S. again. S³ gales again setting in over Ireland later.

Barometer highest 30.4 ins. to 30.0 ins. over Spain and the southwest of France, and exceeding 29.8 ins. over the northeast of Russia. Lowest about 28.9 ins. in a depression over North Germany and Poland; 29.2 ins. and less, off the northwest of Scotland and west of Norway. Rising in east later, but fresh decided fall commencing on our western coasts.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

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

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

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

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

DAILY WEATHER REPORT.

for Sunday 26th JAN.

1890.

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

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STATIONS.	YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
	Barom.: Reading at 32° F. and Sea Level.	Temp. Dry.	Wind.		Weather.	Barometer.		Shade Temp.			Wind.		Sea. (0 to 5.)	Shade Temp.				
			Force. (0 to 12.)	Dir.		Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Dir.	Force. (0 to 12.)		Weather.	Max.	Min.	Amount of Rainfall.	
SCANDINAVIA.																		
Haparanda ...	29.51	25	S	2	o	29.33	— .17	26	25	+ 6	SSE	6	o	*	28	14	0.08	
Hernösand ...	29.38	22	S	6	s	28.95	— .63	33	33	+ 19	SSE	2	o	*	24	12	0.32	
Stockholm ...	29.45	34	SE	6	T	29.08	— .66	38	37	+ 8	SSW	2	o	*	36	28	0.16	
Wisby ...	29.56	36	WSW	6	o	29.19	— .63	42	41	+ 10	WSW	6	o	*	42	30	0.08	
Bodö ...	29.19	23	ENE	4	b	28.75	— .30	32	30	+ 11	ENE	2	o	1	?	18	—	
SCANDINAVIA.																		
Christiansund	28.69	41	SE	4	c	28.54	— .79	43	38	+ 4	SE	6	c	3	43	39	0.04	
Skudesnaes ...	28.93	45	S	7	o	28.86	— .42	45	41	+ 5	WSW	8	o	6	45	40	0.59	
Christiania Fjord (Færder)	29.01	42	SSW	6	f	28.86	—	42	41	—	WSW	7	o	6	43	41	0.47	
Skagen (The Scaw)	29.10	45	SW	6	m	29.05	— .62	42	41	+ 6	W	6	o	5	46	34	0.59	
Fanö ...	29.31	43	SW	6	o	29.34	— .31	41	40	+ 5	WSW	6	c	*	45	36	0.16	
SCANDINAVIA.																		
Sumburgh Head	28.42	46	SSW	7	o	28.51	— .23	45	43	0	W	5	o	6	48	43	0.18	
Stornoway ...	28.48	45	S	7	c	28.71	+ .01	43	42	0	WNW	8	bcp	6	47	40	0.07	
Wick ...	28.69	45	SSW	7	o	28.86	+ .11	44	43	— 3	WSW	6	o	5	50	42	0.05	
Nairn ...	28.72	45	SSW	7	bcp	28.90	+ .05	43	39	— 3	WSW	5	bcp	4	50	41	—	
Aberdeen ...	28.89	48	WSW	6	b	29.13	+ .20	41	39	— 11	W	7	b	*	52	38	0.22	
Leith ...	29.11	50	SSW	6	b	29.28	+ .18	41	36	— 11	WSW	8	c	3	53	39	—	
Shields ...	29.30	48	SW	6	bc	29.50	+ .18	41	38	— 10	WSW	7	bcp	6	53	39	0.07	
Spurn Head ...	29.27	48	W	4	b	29.54	+ .31	42	39	— 13	W	5	bc	*	57	39	0.02	
York ...	29.41	49	W	6	bc	29.70	+ .32	40	36	— 14	W	6	b	*	56	39	0.09	
Loughborough	28.87	44	SW	8	pc	29.32	+ .40	44	41	— 4	W	6	opq	5	48	41	0.21	
Ardrossan ...	28.71	44	SW	11	or	29.32	+ .63	41	37	— 6	W	10	bcp	7	49	38	0.05	
Malin Head ...	29.04	47	WSW	8	opq	29.55	+ .72	43	39	— 6	W	8	cq	7	50	38	0.10	
Mullaghmore ...	29.08	47	W	10	o	29.53	+ .74	42	41	— 8	W	5	o	*	49	37	0.27	
Belmullet ...	29.03	47	SW	8	bc	29.53	+ .55	36	35	— 11	SW	6	b	5	52	35	0.04	
Donaghadee ...	29.30	48	SW	7	b	29.63	+ .44	41	37	— 13	WSW	8	c	6	54	40	—	
Liverpool (Bidston)	29.19	48	SW	6	bm	29.68	+ .50	42	38	— 7	W	7	cng	6	54	41	—	
Holyhead ...	29.27	46	SW	3	bc	29.70	+ .63	41	40	— 9	SW	2	r	*	52	35	0.12	
Parsonstown ...	29.48	46	WSW	6	cq	29.73	+ .58	49	47	— 3	SSW	7	rng	6	52	39	0.14	
Valencia ...	29.48	47	W	6	b	29.81	+ .58	46	44	— 5	W	5	c	5	53	40	0.01	
Roche's Point...	29.48	49	SW	7	c	29.85	+ .50	45	44	— 4	WSW	7	cq	7	50	42	0.06	
Pembroke (St. Ann's Hd.)	29.64	50	WSW	7	bc	30.04	+ .56	49	47	— 4	WSW	7	bc	4	54	44	0.05	
Scilly ...	29.65	49	WSW	6	bc	30.01	+ .43	46	43	— 5	WSW	6	bcp	4	52	39	0.15	
Prawle Point ...	29.80	51	WSW	5	b	30.13	+ .32	49	44	+ 4	WSW	6	bm	5	55	45	0.05	
Jersey (St. Aubin's)	29.64	52	WSW	7	bc	29.95	+ .31	46	42	— 6	W	7	bcp	5	52	42	0.08	
Hurst Castle ...	29.60	51	WSW	8	c	29.84	+ .21	42	40	— 9	WSW	6	bc	5	52	42	—	
Dungeness ...	29.58	52	SW	6	bc	29.87	+ .28	40	36	— 14	WSW	3	b	*	56	40	0.03	
London ...	29.67	47	SW	6	bc	29.85	+ .34	39	37	— 14	WSW	4	bp	*	56	39	0.16	
Oxford ...	29.51	50	S	3	c	29.79	+ .30	39	36	— 15	S	3	b	*	56	37	0.09	
Cambridge ...	29.46	51	W	8	rq	29.67	+ .44	40	37	— 10	W	6	b	4	54	38	0.17	
Yarmouth ...	29.58	42	WSW	7	r	29.53	— .24	43	42	+ 5	WSW	5	c	*	48	41	0.14	
Cuxhaven ...	29.78	44	SSW	4	o	29.68	— .31	47	45	+ 14	WSW	3	c	*	48	33	0.08	
Berlin ...	*	*	*	*	*	29.88	— .09	48	46	+ 7	SW	2	o	*	52	41	0.04	
Wiesbaden ...	29.94	47	S	5	o	30.01	— .12	41	39	+ 6	SSW	4	o	*	50	35	0.20	
Munich ...	29.53	47	SW	6	c	29.62	— .00	44	41	— 1	WSW	5	c	4	48	?	—	
The Helder ...	*	*	*	*	*	29.86	+ .04	45	43	— 6	WSW	2	o	*	55	44	0.16	
FRANCE AND BELGIUM.																		
Brussels (9 a.m.)	29.98	53	WSW	7	o	30.06	+ .08	47	43	— 3	WSW	2	o	*	57	46	0.04	
Cape Gris Nez	29.92	51	WSW	6	b	30.24	+ .33	48	44	— 5	WNW	5	b	7	54	46	0.07	
Paris ...	30.10	53	W	4	o	30.33	+ .17	48	47	— 4	WNW	3	bc	?	58	43	0.12	
Brest ...	30.07	41	W	1	bc	30.10	+ .02	41	34	0	W	3	r	*	45	36	0.47	
Lorient ...	30.14	52	WSW	1	b	30.21	— .03	44	44	0	SW	1	r	*	61	41	—	
Rochefort ...	30.21	49	SSW	4	b	30.16	+ .08	46	42	— 8	E	4	c	1	59	43	—	
Belfort ...	30.15	52	L	0	b	30.25	+ .04	51	49	+ 3	NW	3	o	*	63	43	—	
Lyons ...	30.15	55	NNE	3	b	30.34	+ .21	52	50	— 2	WSW	5	r	6	63	50	0.12	
Perpignan ...	*	*	*	*	*	30.41	+ .33	48	46	+ 7	WSW	1	b	3	59	45	0.67	
Biarritz ...	30.34	56	SW	3	o	30.44	+ .13	50	48	— 4	WNW	2	b	6	57	50	0.12	
Corunna ...																		
Lisbon ...																		

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

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

WEATHER CHARTS

for 8 a.m. on

Sunday,

26th January,

1890.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP

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

Changes since previous morning are stated in words.

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

their barbs and feathers refer to force thus—

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

→ = forces 5 to 7; → = forces 1 to 4.

⊙ = dead calm.

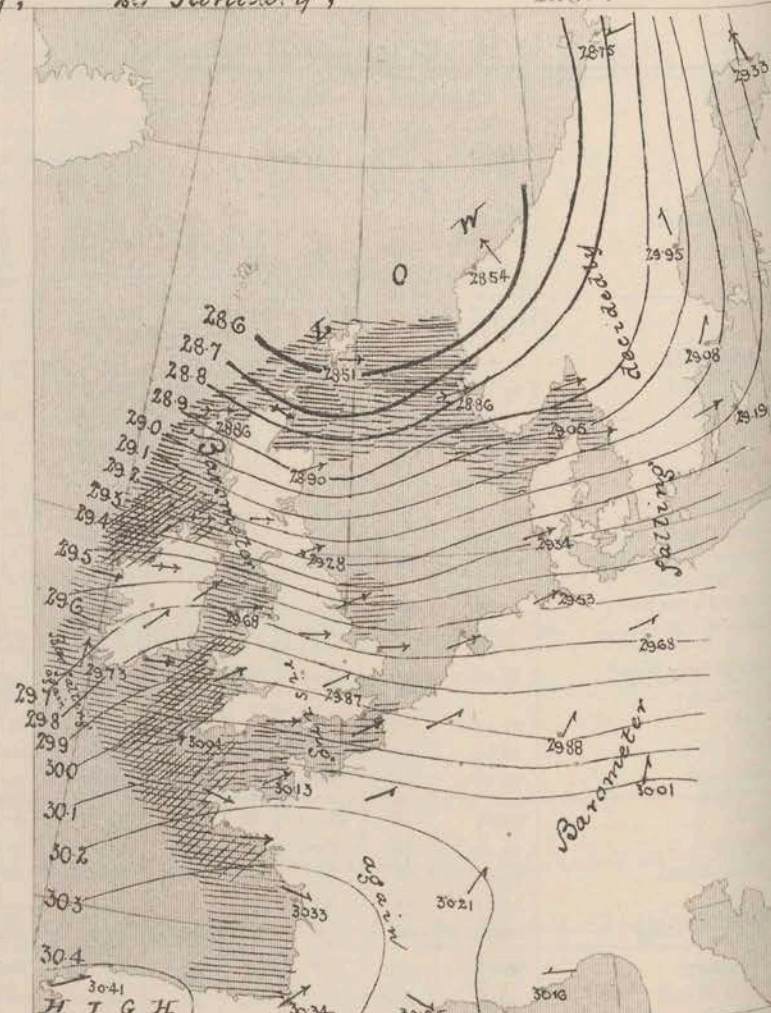
SEA DISTURBANCE—Where considerable, is shown thus:

→ = Rough. → = High.

MEAN HEIGHT OF THE BAROMETER

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

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



TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

TEMPERATURE—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

WEATHER is shown by Letters of the Beaufort Scale.

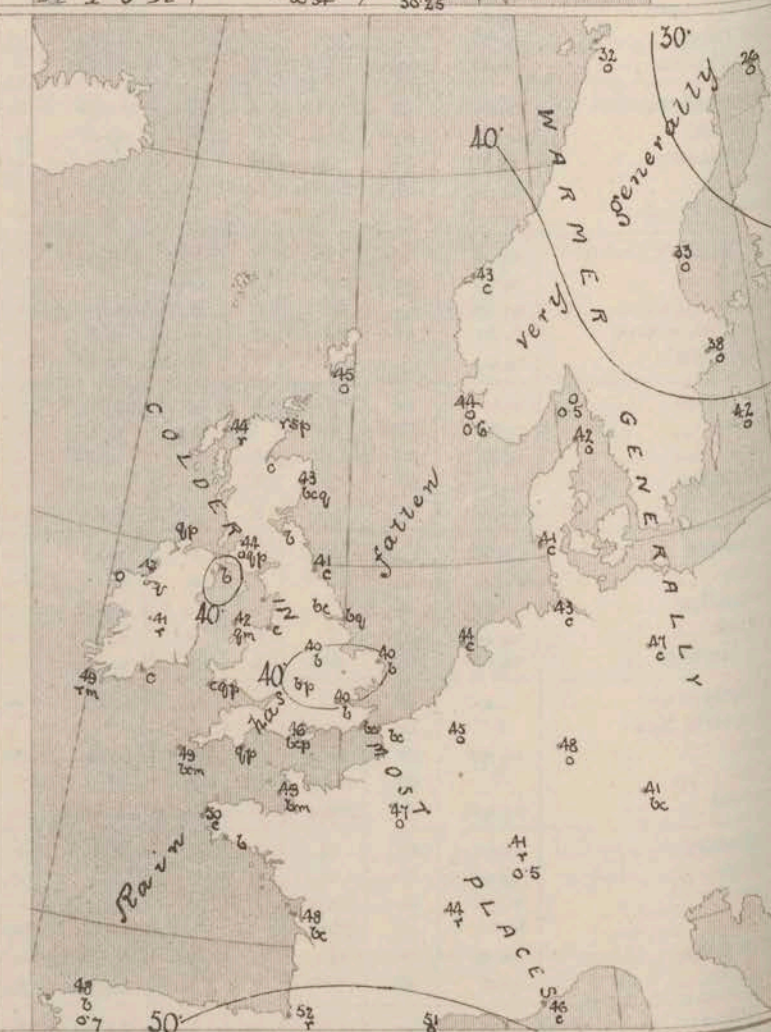
RAINFALL—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of January.)

STATIONS.	TEMPERATURE.				RAINFALL (Inches.)
	Daily Max.	Daily Min.	at 8 a.m.		
			Dry.	Wet.	
Sumburgh Head.....	42.9	35.4	39.4	38.2	3.08
Stornoway.....	43.0	34.2	39.0	37.8	5.17
Wick.....	42.2	33.2	37.9	36.4	1.97
Nairn.....	41.9	32.7	36.6	35.0	2.02
Aberdeen.....	42.4	33.3	37.1	35.4	2.34
Leith.....	44.6	33.7	38.2	36.8	1.98
Shields.....	43.1	34.7	38.0	36.7	1.79
York.....	43.2	33.1	36.8	35.9	1.88
Loughborough.....	43.5	32.9	36.5	35.5	2.08
Ardrossan.....	44.4	36.4	39.8	38.5	4.53
Donaghadee.....	44.4	36.3	39.9	39.1	3.03
Holyhead.....	45.9	39.0	41.7	40.3	3.49
Liverpool.....	43.9	35.6	38.7	37.1	2.23
Parsonstown.....	46.0	34.6	39.0	37.9	3.09
Valencia.....	49.8	40.5	44.3	43.3	6.79
Roehe's Point.....	47.9	39.7	43.2	42.0	5.63
Pembroke.....	45.8	39.9	42.8	41.2	3.92
Sally.....	49.1	43.3	46.5	45.0	3.93
Jersey.....	46.0	38.7	41.7	40.4	3.24
Hurst Castle.....	45.3	37.0	40.4	39.7	3.10
Dover.....	43.7	36.6	39.4	38.2	2.68
LONDON.....	44.8	34.4	37.9	36.8	2.20
Oxford.....	43.8	34.4	37.5	36.5	2.33
Cambridge.....	43.9	32.6	36.5	35.7	1.57
Yarmouth.....	41.9	34.5	37.7	36.9	2.06

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



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30.0 in. and more, over all the southern parts of England, as well as over Eastern and Northern Russia, 30.2 in. to 30.4 in. over Spain and the southeast of France.

Lowest, 28.5 in. and less, in a large depression near the Shetland Isles and west of Norway.

Gradients steep over most of the northern countries, but very steep over Scotland the north of England and North Sea.

Barometer falling over the Baltic and North Germany, rising over our islands, but beginning to fall again at Valencia.

TEMPERATURE

Highest, 52° at Biarritz, 50° at Lisbon and Bristol, 49° at Jersey, Sicily and Valencia, 48° at Marseilles, 47° at Berlin and Paris.

Lowest, 26° at Khabaranda, 32° at Koda, 33° at Krasnodar, 39° at Oxford.

It has fallen decidedly over our islands and north of France, risen quietly over Germany.

WIND

S⁴, strong over Finland and the Baltic Provinces — W⁴, moderate over North Germany.

WSW⁴ strong to gale over the North Sea, while W⁴ gales prevail over the United Kingdom.

At Valencia it is back to SSW, again and increasing in force.

WEATHER

Very unsettled over the whole of Northern and Western Europe especially over the British Isles.

Clear temporarily in several places, overcast in others, squally and rainy at several stations, thunder and lightning at Mullaghmore.

SEA

High in the northwest, west, and southwest, rough in the south and north and at some northeastern stations, moderate off our east coast.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

FORECASTS

For the 24 hours ending at NOON on 27TH JAN^Y 1890.

DISTRICTS.

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

FORECASTS.

NONE ISSUED

DISTRICTS.

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

FORECASTS

NONE ISSUED

WARNINGS

The SOUTH CONE has been hoisted this morning in districts 0. and 1. and is still flying elsewhere.

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

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

YESTERDAY'S 2 P.M. REPORTS.

	BAR:	THER:		WIND		WEA.	SEA		BAR:	THER:		WIND		WEA.	SEA
		D.	W.	D.	F.					D.	W.	D.	F.		
Skudesnaes ...	28.97	44	43	SE	8	r	7	Holyhead ...	29.23	51	48	SW	7	bcmg	7
Sumburgh Head ...	28.54	47	45	S	4	o	5	Valencia ...	29.32	50	44	WSW	8	cmg	7
Stornoway ...	28.35	47	46	SW	9	r	7	Scilly ...	29.56	53	51	WSW	7	cmg	5
Aberdeen ...	28.76	49	44	SSW	8	bq	6	Jersey ...	29.78	53	51	SW	6	c	7
Shields ...	29.09	51	46	SSW	5	c	2	Dungeness ...	29.60	52	50	WSW	9	o	7
Ardrossan ...	28.90	48	47	SW	6	b	7	London ...	29.54	56	53	SSW	7	cmg	5
Malin Head ...	28.72	47	43	SW	9	bc	6	Yarmouth ...	29.45	54	52	WSW	6	cmg	5
Mullaghmore ...	28.91	48	44	SW	9	bc	7	Rochefort ...	30.15	58	55	S	3	bc	2
Belmullet ...	28.90	48	47	WSW	10	ow	*								

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

Continental Information will appear subsequently.

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.

SCANDINAVIA.
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Skud
Christi
Skag
Fand
Sum
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Wick
Nair
Aber
Leit
Shie
Spr
Yor
Lond
Ard
Mal
Mun
Bel
Den
Brit
Livi
Hol
Pars
Vale
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DAILY WEATHER REPORT.

for *Monday, 27th January,* 1890.

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

Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.																		
STATIONS.	YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
	BAROM. Reading at 32° F. and Sea Level.	TEMP. Dry.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Weather.	Sea. (0 to 4.)	SHADE TEMP.		Amount of Rainfall.	
			Dir.	Force. (0 to 12.)		Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Dir.	Force. (0 to 12.)			Max.	Min.		
SCANDINAVIA.																		
Haparanda ...	29.27	17	SE	8	C	29.14	-1.9	12	11	-1.4	E	4	0	3	30	?	0.20	
Hernösand ...	28.86	35	Z	0	C	28.93	-0.2	28	27	-1.5	SE	4	0	3	37	?	0.12	
Stockholm ...	29.05	36	W	4	C	28.91	-1.7	34	33	-1.4	SW	2	1	3	43	32	0.04	
Wisby ...	29.37	37	SW	6	C	29.00	-1.9	37	36	-1.5	WSW	6	0	3	43	32	0.04	
Bodö ...	28.52	35	ESE	6	C	28.78	+0.3	29	26	-3	E	5	0	3	39	27	-	
SCANDINAVIA.																		
Christiansund ...	28.62	42	SE	2	C	28.58	+0.4	43	41	0	ESE	1	0	3	45	39	-	
Skudesnaes ...	28.94	44	WSW	5	T	28.94	+0.0	43	41	-2	WSW	6	T	6	45	41	0.28	
Christiania Fjord (Færd)	28.94	40	WSW	5	0	28.82	-0.4	41	39	-1	WSW	9	0	6	?	?	-	
Skagen (The Seaw)	29.01	40	W	5	C	28.97	-0.8	40	38	-2	W	5	0	5	43	37	0.12	
Fanö ...	29.32	41	SW	6	T	29.25	-0.9	39	37	-2	W	5	0	3	41	39	0.20	
SCANDINAVIA.																		
Sumburgh Head	28.69	43	WSW	8	P	29.11	+0.60	40	36	-5	NW	4	0	6	46	38	0.14	
Stornoway ...	29.08	38	W	6	C	29.11	+0.60	40	36	-5	NW	4	0	6	46	38	0.14	
Wick ...	29.09	40	WSW	7	C	29.30	+0.59	39	38	-1	NW	4	0	3	45	35	0.04	
Nairn ...	29.12	39	W	5	C	29.35	+0.49	38	37	-1	WSW	4	0	4	44	35	0.26	
Aberdeen ...	29.17	39	WSW	4	C	29.35	+0.45	39	37	-2	W	4	0	3	47	36	0.11	
SCANDINAVIA.																		
Leith ...	29.29	38	W	4	C	29.47	+0.34	41	37	0	W	4	0	3	44	37	0.01	
Shields ...	29.30	39	SW	2	T	29.50	+0.22	40	37	-1	SSW	7	0	3	45	36	0.01	
Spurn Head ...	29.43	45	SW	9	T	29.60	+0.10	41	39	0	WSW	7	0	6	46	39	0.19	
York ...	29.42	46	W	4	T	29.62	+0.10	40	37	-2	W	3	0	3	48	40	0.32	
Loughborough	29.59	46	SW	7	T	29.77	+0.07	38	37	-2	W	4	0	3	50	38	0.68	
BRITISH ISLANDS.																		
Ardrossan ...	29.33	41	WSW	3	C	29.56	+0.24	43	41	-1	W	7	0	5	45	39	0.01	
Malin Head ...	29.36	41	W	5	C	29.64	+0.32	42	38	+1	NW	7	0	6	42	37	0.02	
Malinbeg ...	29.46	38	WSW	2	0	29.82	+0.27	40	38	-3	NW	7	0	6	43	35	0.25	
Belmullet ...	29.49	39	WSW	3	0	29.90	+0.34	41	39	-1	NW	5	0	3	42	37	0.30	
Donaghadee ...	29.41	38	WSW	3	0	29.72	+0.19	37	36	+1	NW	5	0	3	41	36	0.06	
BRITISH ISLANDS.																		
Liverpool (Bidston)	29.43	49	WSW	7	T	29.77	+0.14	41	38	0	W	6	0	5	50	38	0.48	
Holyhead ...	29.47	49	WSW	8	T	29.82	+0.14	40	39	-2	WSW	6	0	5	49	40	0.18	
Parsonstown ...	29.48	46	W	1	T	29.92	+0.22	34	33	-1	Z	0	0	3	50	33	0.79	
Valencia ...	29.59	52	WSW	6	T	30.00	+0.27	43	41	-6	WSW	3	0	3	53	42	0.42	
Roche's Point...	29.61	50	WSW	8	T	29.96	+0.15	42	40	-4	WSW	3	0	4	51	40	0.60	
BRITISH ISLANDS.																		
Pembroke (St. Ann's Hd.)	29.61	48	SW	9	T	29.92	+0.07	43	41	-2	NW	4	0	5	51	40	0.25	
Scilly ...	29.91	51	SW	8	0	29.95	-0.09	50	50	+1	W	4	0	6	52	48	0.10	
Prawle Point ...	29.93	49	WSW	8	0	29.91	-1.0	49	49	+3	W	6	0	5	50	46	0.28	
Jersey (St. Aubin's)	30.14	50	SW	6	C	30.03	-1.0	53	51	+4	W	7	0	5	54	47	0.01	
Hurst Castle ...	29.92	51	WSW	8	0	29.86	-0.09	50	49	+4	W	7	0	5	51	44	0.03	
BRITISH ISLANDS.																		
Dungeness ...	29.87	49	WSW	7	0	29.76	-0.08	49	49	+7	W	8	0	6	51	42	0.06	
London ...	29.82	49	SW	8	0	29.83	-0.04	40	39	0	WSW	2	0	3	52	40	0.05	
Oxford ...	29.71	48	SW	7	T	29.84	-0.01	41	40	+2	WSW	3	0	3	52	39	0.23	
Cambridge ...	29.66	50	S	3	T	29.78	-0.01	40	38	+1	W	1	0	3	54	37	0.10	
Yarmouth ...	29.67	45	WSW	8	T	29.68	+0.01	40	38	0	WSW	5	0	4	46	38	0.39	
GERMANY & HOLLAND.																		
Cuxhaven ...	29.63	42	W	8	T	29.41	-1.2	42	41	-1	W	5	0	3	43	41	0.26	
Berlin ...	29.81	40	NW	4	C	29.54	-1.4	42	40	-5	WSW	5	0	3	48	37	0.24	
Wiesbaden ...	*	*	*	*	*	29.91	+0.03	45	43	-3	W	6	0	3	52	36	-	
Munich ...	30.25	38	W	6	C	30.06	+0.05	41	36	0	W	6	0	3	50	36	0.16	
The Helder ...	29.63	44	SW	7	T	29.87	-0.05	43	41	-1	W	2	0	3	46	43	0.32	
FRANCE AND BELGIUM.																		
Brussels (a.m.)	*	*	*	*	*	29.74	-1.2	47	47	+2	WSW	4	0	3	48	42	0.28	
Cape Gris Nez	?	43	WSW	7	0	?	?	50	49	+6	WSW	7	0	7	47	?	0.08	
Paris ...	30.25	46	WSW	3	C	30.09	+0.03	47	45	0	SSW	3	0	3	53	44	-	
Brest ...	?	50	WSW	9	0	?	?	51	50	+1	SW	8	0	7	54	48	0.08	
Lorient ...	30.26	50	WSW	6	C	30.15	-0.09	52	50	+4	WSW	6	0	7	52	46	-	
FRANCE AND BELGIUM.																		
Rochefort ...	30.45	50	WSW	3	C	30.39	+0.06	52	50	+4	WSW	5	0	3	57	43	-	
Belfort ...	30.17	41	NW	1	C	30.21	+0.11	36	32	-5	WSW	2	0	3	49	34	-	
Lyons ...	30.44	43	NW	2	C	30.43	+0.22	33	33	-11	ESE	1	0	3	51	33	-	
Nice ...	30.13	?	W	2	C	30.21	+0.05	46	39	0	ESE	3	0	1	48	41	-	
Perpignan ...	30.39	52	NW	3	C	30.42	+0.17	40	36	-11	W	2	0	3	69	38	-	
Biarritz ...	30.48	52	NW	3	C	30.42	+0.08	42	38	-10	ESE	2	0	2	55	39	-	
SPAIN.																		
Corunna ...	*	*	*	*	*	30.44	-0.0	46	44	-4	N	4	0	6	59	45	-	
Lisbon ...	30.44	53	N	5	C	30.44	-0.0	46	44	-4	N	4	0	6	59	45	-	

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

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

WEATHER CHARTS

for 8 a.m. on Monday, 27th January, 1890.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP

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

Changes since previous morning are stated in words.

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

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

→ = forces 5 to 7; → = forces 1 to 4.

⊙ = dead calm.

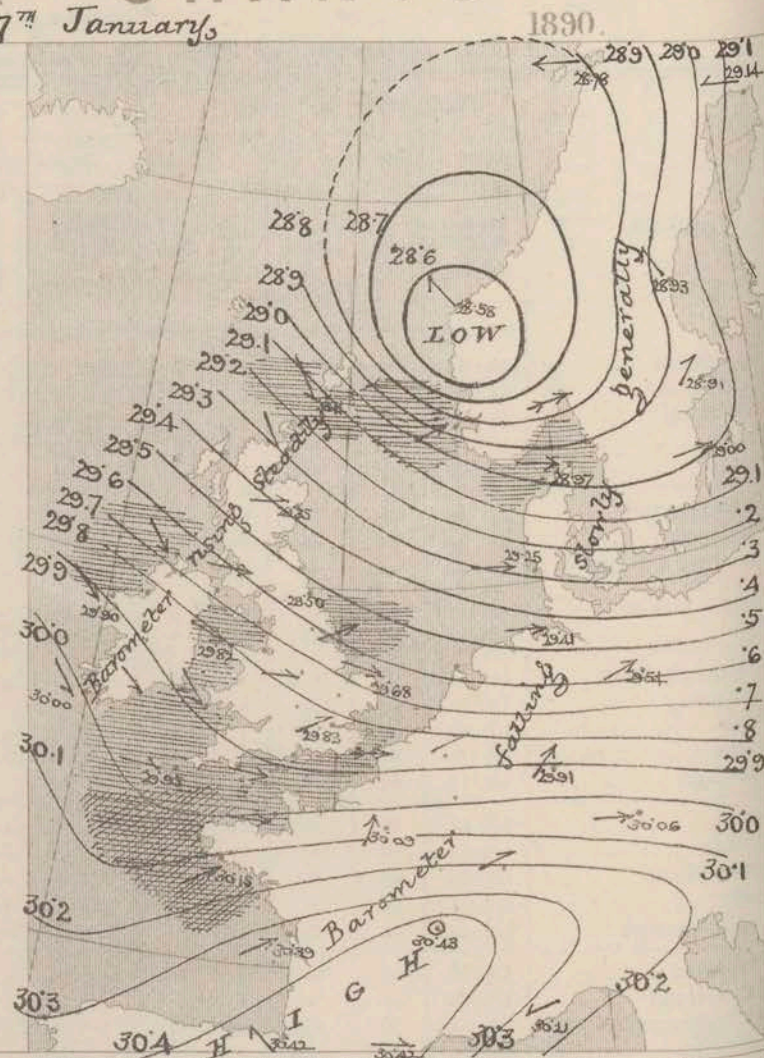
SEA DISTURBANCE—Where considerable, is shown thus:

— Rough. — High.

MEAN HEIGHT OF THE BAROMETER

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

STATIONS.	MEAN READINGS.
Sumburgh Head	29.685
Stornoway	29.687
Wick	29.725
Nairn	29.753
Aberdeen	29.790
Leith	29.829
Shields	29.886
York	29.935
Loughborough	29.967
Ardrossan	29.840
Donaghadee	29.551
Holyhead	29.896
Liverpool	29.922
Parsonstown	29.886
Valencia	29.869
Roche's Point	29.894
Pembroke	29.926
Scilly	29.960
Jersey	30.010
Hurst Castle	29.997
Dover	30.017
LONDON	30.007
Oxford	29.997
Cambridge	29.992
Yarmouth	29.981



TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

TEMPERATURE—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

WEATHER is shown by Letters of the Beaufort Scale.

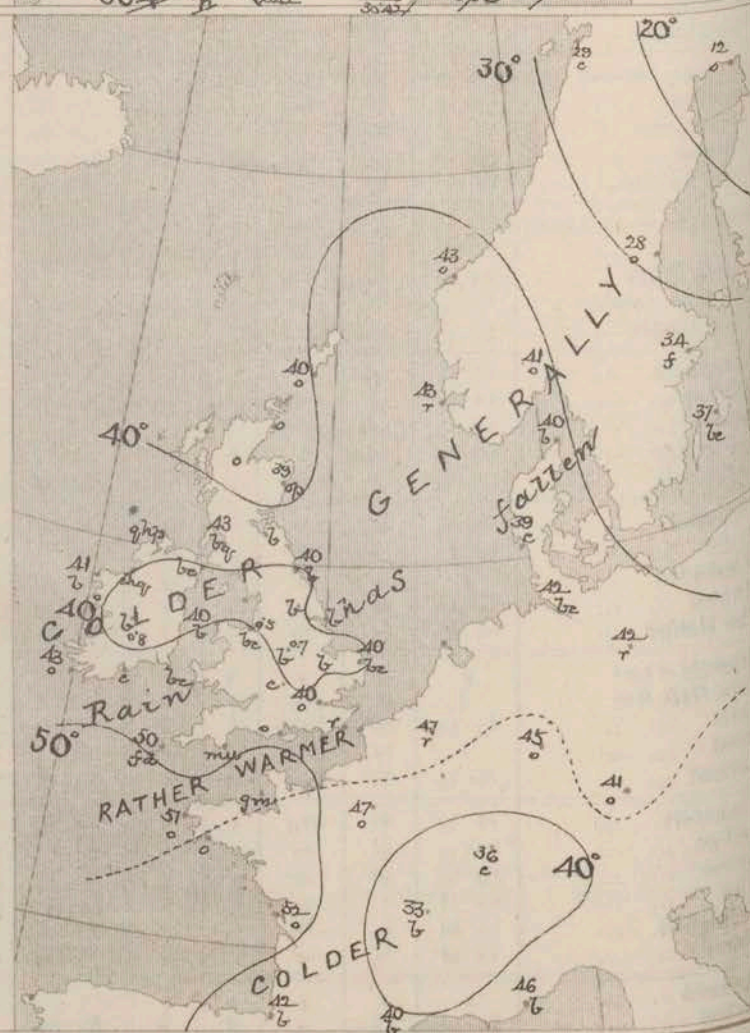
RAINFALL—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of January.)

STATIONS.	TEMPERATURE.				RAINFALL (Inches.)
	Daily Max.	Daily Min.	at 8 a.m.		
			Dry.	Wet.	
Sumburgh Head.....	42.9	35.4	39.4	38.2	3.66
Stornoway.....	43.0	34.2	39.0	37.8	5.17
Wick.....	42.2	33.2	37.9	36.4	1.97
Nairn.....	41.9	32.7	36.6	35.0	2.02
Aberdeen.....	42.4	33.3	37.1	35.4	2.34
Leith.....	43.6	33.7	38.2	36.8	1.98
Shields.....	43.1	34.7	38.0	36.7	1.79
York.....	43.2	33.1	36.8	35.9	1.88
Loughborough.....	43.5	32.9	36.5	35.5	2.08
Ardrossan.....	44.4	36.4	39.8	38.5	4.53
Donaghadee.....	44.4	36.3	39.9	39.1	3.03
Holyhead.....	45.0	39.0	41.7	40.3	3.49
Liverpool.....	43.9	35.6	38.7	37.1	2.23
Parsonstown.....	46.0	34.6	39.0	37.9	3.09
Valencia.....	49.8	40.5	44.3	43.3	6.79
Roche's Point.....	47.9	39.7	43.2	42.0	5.63
Pembroke.....	45.8	39.9	42.8	41.2	3.92
Scilly.....	49.1	43.3	40.5	45.0	3.93
Jersey.....	46.0	38.7	41.7	40.4	3.24
Hurst Castle.....	45.3	37.0	40.4	39.7	3.10
Dover.....	43.7	36.6	39.4	38.2	2.68
LONDON.....	44.8	34.4	37.9	36.8	2.20
Oxford.....	43.8	34.4	37.5	36.5	2.33
Cambridge.....	43.9	32.6	36.5	35.7	1.57
Yarmouth.....	41.9	34.5	37.7	36.9	2.06

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



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30.4 ins: to 30.2 ins: over Spain and the southwest of France—30.0 ins: and more to the southward of Valencia, as well as over South Germany.
 Lowest, 28.6 ins: and less, in a depression lying over Norway.
 Gradient steep over North Germany and the North Sea, rather so in France, moderate but decreasing in our Islands.
 Barometer rising in our Islands—most in the north and west, falling over Baltic and Germany.

TEMPERATURE

Highest, 53° at Jersey, 52° at Rochefort and Orient, 50° at Brest, and Harwich, 47° at Paris, 45° at Wiesbaden, 43° at Valencia, Skutumpah, and Chamaund.
 Lowest, 12° at Haparanda, 18° at Helsingfors, 23° at Stockholm. It is not below 38° at present at any of our own stations.
 It is falling decidedly at our stations, most in the west and north.

WIND

W to SW³ over the Netherlands and North Sea, and also on our southeast coast and in the Channel, strong to gale in many places.
 W to NW⁴ in Ireland and Scotland, moderating as a whole, though still strong in some places.
 Over Scandinavia ^(there is) a cyclonic circulation round the depression noticed above.

WEATHER

Still overcast in many places, and showery in some, but clear and bright in others.
 The general appearance is finer than of late.
 Rainfall yesterday was general over the British Isles, but heavy at very few stations.

SEA

Still high over the Bay of Biscay, rough on our western, southern, and northeastern coasts and on the eastern shore of the North Sea; going down slowly at our western and southern stations.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The depression in the north appears to be filling up slowly, and, although some small secondary disturbances may pass over our Islands from NW, the gradients appear likely to decrease steadily as a whole.

There appears to be a new high pressure off our southeastern coast spreading northwards.

FORECASTS

For the 24 hours ending at NOON on 28th JAN^y 1890.

DISTRICTS.

FORECASTS.

0	SCOTLAND NORTH	NW ⁴ winds, fresh to moderate; weather improving and becoming colder.
1	SCOTLAND EAST	
2	ENGLAND N.E.	Same as No 5.
3	ENGLAND EAST	
4	MIDLAND COUNTIES	
5	ENGLAND SOUTH	Wind veering towards NW and moderating; weather becoming finer and colder.

DISTRICTS.

FORECASTS

6	SCOTLAND WEST	NW ⁴ breezes, falling light and possibly backing again; fair generally, colder.
7	ENGLAND N.W.	
8	ENGLAND S.W.	
9	IRELAND NORTH	
0	IRELAND SOUTH	

WARNINGS

The SOUTH CONE has been lowered this morning except in district 2.

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

YESTERDAY'S 2 P.M. REPORTS.

	BAR:	THER:		WIND		WEA.	SEA		BAR:	THER:		WIND		WEA.	SEA
		D.	W.	D.	F.					D.	W.	D.	F.		
Skudesnaes ...	28.86	42	41	S	8	r	6		Holyhead ...	29.51	47	46	SW	9	rqgm
Sumburgh Head ...									Valencia ...						
Stornoway ...	29.05	42	42	W	1	c	6		Scilly ...						
Aberdeen ...									Jersey ...	30.18	52	47	WSW	5	6
Shields ...									Dungeness ...	29.93	50	46	W	7	60
Ardrossan ...									London ...						
Malin Head ...	29.37	38	37	WSW	4	c	4		Yarmouth ...						
Mullaghmore ...									Rochefort ...	30.44	55	50	WNW	3	6
Belmullet ...	29.44	38	38	E	4	r	*								

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

Continental information not yet received

SUMMARY OF CHANGES IN THE WEATHER OVER THE BRITISH ISLANDS AND THEIR NEIGHBOURHOOD FROM THE 19TH TO 25TH JANUARY 1890

During this week there has been a constant succession of large and deep depressions, advancing over our area from the SWnd and Wnd causing severe SW^{ly} to W^{ly} gales on all our coasts, and accompanied by unusually high seas at our southwestern and southern stations. Temperature has been high, but unsteady, the air very damp, the sky changeable from cloudy to clear, rainfall of almost daily occurrence, and thunder and lightning very frequent. Between the morning of the 21st and 22nd the rainfall was heavy on our western coasts and on the following day in the southwest, but in other regions the amounts measured have as a whole been small.

The first depression reached our northwest coasts early on Sunday, it was very large and deep - minimum readings 28.3 ins. and less at our northern stations.

The second advanced over Scotland on Tuesday; it was a complex disturbance and was somewhat deep - minimum readings about 29.7 ins.

The third came in from the WSWnd and travelled directly across England on Thursday, the 21st. Its central area was small, but the system was deep (minimum readings 28.5 ins. and less) and its gales were confined to the southern half of our area.

The fourth reached our NW coasts on Saturday, and was a very large and deep system. minimum readings 28.7 ins. and less on our NW^{rn} coasts but it was evident that much lower values prevailed over the Atlantic in that region.

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 28TH JANUARY. 1890.

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

Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.																		
STATIONS.	YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
	BAROM.	TEMP.	WIND.			BAROMETER.		SHADE TEMP.			WIND.				SHADE TEMP.			
			Reading at 32° F. and Sea Level.	Dry.		Dirce.	Force. (0 to 12.)	Weather.	Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.			Difference from 8 a.m. yesterday.	Dirce.	Force. (0 to 12.)	Weather.
SCANDINAVIA.																		
Haparanda ...	29.14	16	NNE	2	s	29.32	+18	15	14	+3	ENE	2	0	*	19	9	0.16	
Hernösand ...	29.08	26	ENE	4	o	29.32	+39	24	23	-4	x	0	0	*	37	30	0.04	
Stockholm ...	29.92	35	2	0	f	29.23	+32	34	33	0	N	4	0	*	37	30	0.08	
Wisby ...	29.93	37	WPN	4	p	29.17	+17	35	35	-2	N	6	0	*	35	28	0.16	
Bodö ...	29.98	27	ENE	4	o	29.15	+37	25	23	-4	ENE	2	0	2	23	23	—	
SCANDINAVIA.																		
Christiansund ...	29.17	35	NW	7	c	29.52	+94	35	32	-8	NW	4	c	5	43	32	0.55	
Skudesnaes ...	29.42	40	WNW	8	c	29.75	+81	36	33	-7	WNW	4	0	4	43	34	—	
Christiania Fjord (Færder) ...	29.01	43	WNW	5	o	29.52	+70	38	32	-3	WNW	4	c	4	43	37	—	
Skagen (The Scaw) ...	29.17	40	NW	8	c	29.55	+58	39	35	-1	N	4	0	5	43	36	—	
Fanö ...	29.55	38	WNW	6	c	29.78	+53	36	35	-3	WNW	4	c	5	41	36	—	
SCANDINAVIA.																		
Sumburgh Head ...	29.61	36	N	1	bc	29.78	+67	34	34	-6	NE	1	0	4	41	32	0.07	
Stornoway ...	29.79	37	N	3	c	29.80	+50	34	32	-5	W	2	bc	2	40	30	0.10	
Wick ...	29.75	38	WNW	2	c	29.80	+50	34	32	-5	W	2	bc	2	40	30	0.10	
Nairn ...	29.79	37	WPN	3	c	29.89	+54	35	34	-3	WPN	1	bc	1	44	34	—	
Aberdeen ...	29.79	37	W	3	bc	29.89	+54	34	32	-5	W	2	c	3	42	33	—	
SCANDINAVIA.																		
Leith ...	29.83	40	W	2	bc	29.89	+42	34	34	-7	2	0	f	*	45	30	—	
Shields ...	29.83	40	W	2	c	29.84	+34	37	37	-3	NNE	1	0	2	45	35	0.01	
Spurn Head ...	29.79	40	W	5	c	29.85	+25	34	34	-7	SW	1	0	3	43	34	0.04	
York ...	29.89	40	W	3	c	29.87	+23	34	34	-6	SE	1	0	*	45	34	0.03	
Loughborough ...	30.01	39	NW	2	c	29.84	+07	33	33	-5	ENE	1	0	*	46	33	0.20	
SCANDINAVIA.																		
Ardrossan ...	29.88	42	NW	3	bc	29.90	+34	37	36	-6	2	0	cm	0	45	34	—	
Malin Head ...	29.91	43	WNW	5	bc	29.88	+24	40	38	-2	NNE	5	0	3	44	39	0.01	
Mullaghmore ...	29.98	40	NW	4	bc	29.90	+08	40	38	0	NE	5	0	4	44	36	0.02	
Belmullet ...	30.00	39	WNW	3	bc	29.91	+01	39	38	-2	NNE	4	0	*	43	37	0.09	
Donaghadee ...	29.96	38	WNW	3	c	29.87	+15	38	38	+1	NNE	2	0	1	43	35	0.01	
SCANDINAVIA.																		
Liverpool (Bidston) ...	29.98	41	W	4	c	29.83	+06	33	33	-8	E	1	0	2	43	32	0.19	
Holyhead ...	30.01	41	NW	3	o	29.79	-03	36	36	-4	E	4	0	3	45	34	0.14	
Parsonstown ...	30.02	39	2	0	o	29.82	-10	34	33	0	NE	1	0	*	44	33	0.15	
Valencia ...	30.01	37	E	3	p	29.69	-31	37	36	-6	NE	6	0	6	45	36	0.33	
Roche's Point ...	30.01	42	ENE	3	p	29.69	-27	38	36	-4	ENE	5	0	5	46	35	0.45	
SCANDINAVIA.																		
Pembroke (St. Ann's Id.) ...	30.06	42	WNW	1	o	29.67	-25	47	47	+4	NW	3	0	4	49	30	0.32	
Scilly ...	30.00	44	ESE	5	p	29.67	-28	50	50	0	E	4	cm	6	51	43	0.31	
Prawle Point ...	30.09	43	N	1	c	29.75	-16	49	49	0	WPN	6	0	5	49	42	0.48	
Jersey (St. Aubin's) ...	30.11	49	W	4	bc	29.98	-05	50	48	-3	S	4	0	4	53	44	0.28	
Hurst Castle ...	30.08	48	W	4	c	29.76	-10	50	48	0	SW	6	0	5	51	41	0.26	
SCANDINAVIA.																		
Dungeness ...	30.03	43	NW	3	c	29.79	+03	48	48	-1	SW	5	0	4	49	40	0.15	
London ...	30.07	43	NW	2	cm	29.75	-08	40	39	0	ESE	1	0	*	48	37	0.18	
Oxford ...	30.09	40	W	2	cm	29.75	-09	36	36	-5	NNE	1	0	*	46	34	0.33	
Cambridge ...	30.00	38	W	1	c	29.79	+01	33	32	-7	NE	1	0	*	48	32	—	
Yarmouth ...	29.92	41	WNW	4	c	29.88	+20	34	34	-6	SW	2	0	3	44	32	0.08	
SCANDINAVIA.																		
Cuxhaven ...	29.45	45	W	5	o	29.88	+47	40	39	-2	WNW	3	c	*	9	38	0.08	
Berlin ...	29.56	42	WNW	5	o	29.84	+30	38	36	-4	WNW	5	c	*	43	37	0.24	
Wiesbaden ...	*	*	*	*	*	30.09	+18	35	32	-10	SW	1	0	*	50	34	0.32	
Munich ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
The Helder ...	29.88	43	WNW	4	c	29.74	+37	39	38	-4	S	1	f	1	43	39	—	
SCANDINAVIA.																		
Brussels (9 a.m.) ...	*	*	*	*	*	29.97	+23	38	38	-9	SE	1	0	*	51	38	0.47	
Cape Gris Nez ...	*	45	NW	4	bc	*	*	46	46	-4	SW	6	0	6	50	39	0.63	
Paris ...	30.13	52	WPN	5	bc	30.05	-04	49	46	0	WPN	2	0	*	54	43	0.24	
Brest ...	?	52	SW	6	o	?	?	51	50	0	SW	7	0	*	52	48	0.16	
Lorient ...	30.18	51	SW	5	o	29.92	-23	51	50	-1	ESE	6	0	6	54	50	—	
SCANDINAVIA.																		
Rochefort ...	30.37	51	WPN	4	o	30.19	-20	44	44	-8	S	4	c	*	54	39	—	
Belfort ...	30.26	43	NW	1	o	30.10	-11	43	?	+7	NW	1	0	*	48	?	0.04	
Lyons ...	30.40	42	WNW	1	c	30.28	-15	32	30	-1	SW	1	c	*	49	31	—	
Nice ...	30.17	48	W	2	c	30.06	-15	49	43	+3	W	2	c	1	57	45	—	
Perpignan ...	30.33	48	NE	1	c	30.23	-19	32	30	-8	W	1	c	*	65	30	—	
Biarritz ...	30.35	52	ENE	2	c	30.13	-29	42	39	0	S	2	c	5	55	37	—	
SCANDINAVIA.																		
Corunna ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Lisbon ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

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

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

‡ Observations taken at 10.45 a.m.

WEATHER CHARTS

for 8 a.m. on

Tuesday, 28th January.

1890.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP

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

Changes since previous morning are stated in words.

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

their barbs and feathers refer to force thus—

— forces above 10; — forces 8 to 10;

— forces 5 to 7; — forces 1 to 4.

⊙—dead calm.

SEA DISTURBANCE—Where considerable, is shown thus:

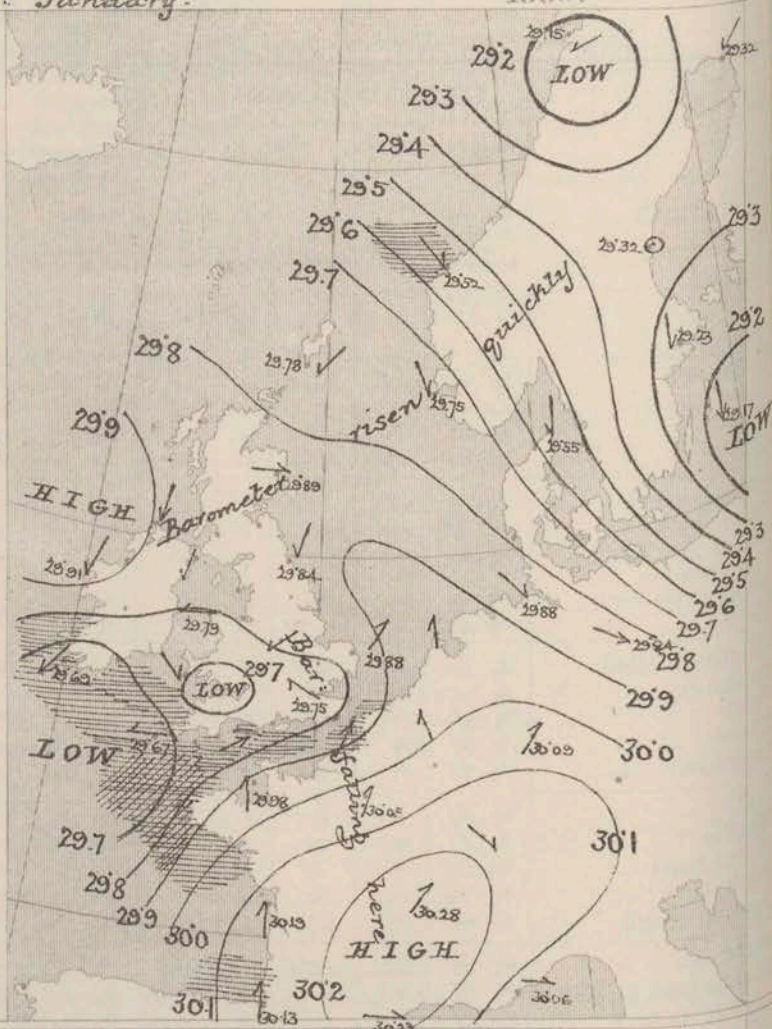
— Rough. — High.

MEAN HEIGHT OF THE BAROMETER

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

During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS.
	ins.
Sumburgh Head	29.685
Stornoway	29.687
Wick	29.725
Nairn	29.753
Aberdeen	29.790
Leith	29.829
Shields	29.886
York	29.935
Loughborough	29.987
Ardrossan	29.840
Donaghadee	29.851
Holyhead	29.896
Liverpool	29.922
Parsonstown	29.886
Valencia	29.869
Roche's Point	29.894
Pembroke	29.926
Sally	29.960
Jersey	30.010
Hurst Castle	29.997
Dover	30.017
LONDON	30.007
Oxford	29.997
Cambridge	29.992
Yarmouth	29.981



TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

TEMPERATURE—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

WEATHER is shown by Letters of the Beaufort Scale.

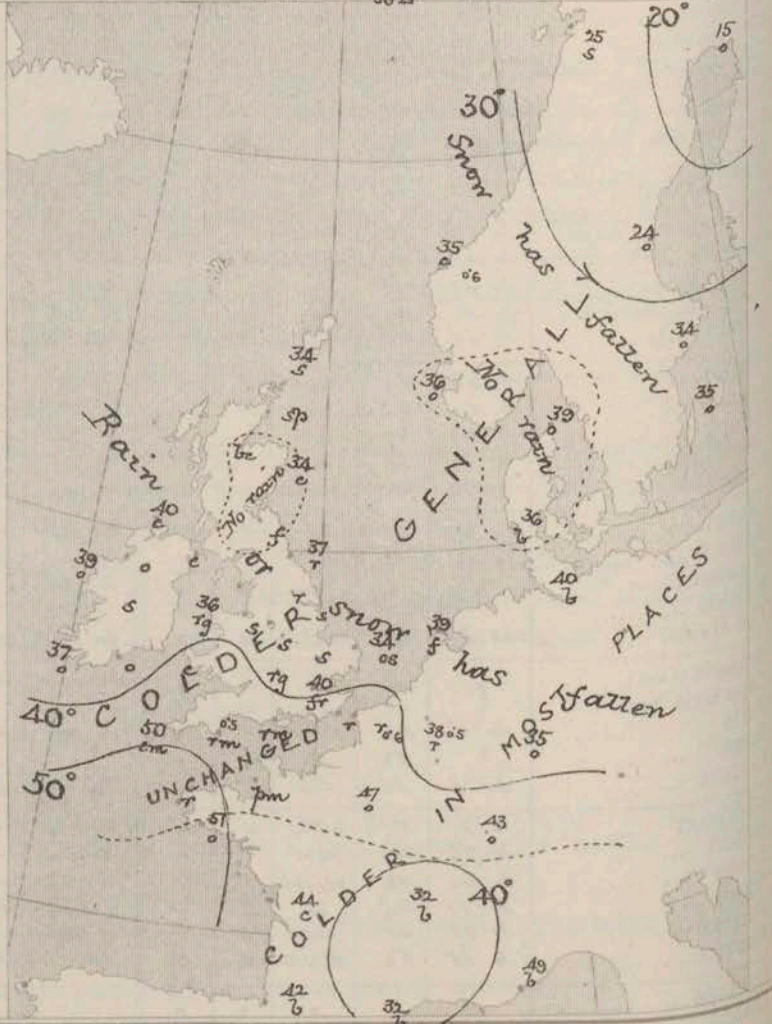
RAINFALL—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of January.)

STATIONS.	TEMPERATURE.				RAINFALL (Inches.)
	Daily Max.	Daily Min.	at 8 a.m.		
			Dry.	Wet.	
Sumburgh Head.....	42.9	35.4	39.4	38.2	3.66
Stornoway	43.0	34.2	39.0	37.8	5.17
Wick.....	42.2	33.2	37.9	36.4	1.97
Nairn	41.9	32.7	36.6	35.0	2.02
Aberdeen	42.4	33.3	37.1	35.4	2.34
Leith.....	44.6	33.7	38.2	36.8	1.98
Shields.....	43.1	34.7	38.0	36.7	1.79
York.....	43.2	33.1	36.8	35.9	1.88
Loughborough	43.5	32.9	36.5	35.5	2.08
Ardrossan	44.4	36.4	39.8	38.5	4.53
Donaghadee	44.4	26.3	39.9	39.1	3.03
Holyhead	45.9	39.0	41.7	40.2	3.49
Liverpool	43.9	35.6	38.7	37.1	2.23
Parsonstown	46.0	34.6	39.0	37.9	3.09
Valencia	49.8	40.5	44.3	43.3	6.79
Roche's Point	47.0	39.7	43.2	42.0	5.63
Pembroke.....	45.8	39.9	42.8	41.2	3.92
Scilly	49.1	43.3	46.5	45.0	3.93
Jersey	46.0	38.7	41.7	40.4	3.24
Hurst Castle	45.3	37.0	40.1	39.7	3.10
Dover	43.7	36.6	39.4	38.2	2.68
LONDON	44.8	34.4	37.9	36.8	2.20
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Cambridge	43.9	32.6	36.5	35.7	1.57
Yarmouth	41.9	34.5	37.7	36.9	2.06

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



GENERAL SITUATION AT 8 A.M.

PRESSURE

(1) 30.0 ins: to 30.3 ins: over France, and 29.9 ins and more in a ridge stretching N^o from Holland and the North Sea
 Highest (2) 29.9 ins: and more in a second anticyclone lying off our northwestern coast.
 Lowest, 29.2 ins: and less, in a depression over the Baltic, and in another near Bodo; 29.7 ins: and less, in a new complex system which has appeared off our southern coast.
 Gradients steep for S winds over Brittany and the Channel, and for NW winds over the Baltic and south of Sweden; slight and very variable elsewhere.
 Barometer rising in the north and northeast, falling decidedly in the southeast and south. At Valencia it is inclined to rise again.

TEMPERATURE

Highest, 51° at Lorient and Brest, 50° at Bally and Hurst Castle, 48° at Wexham, and 47° in Paris.
 Lowest, 15° at Haparanda, 24° at Helsingfors, 25° at Bodo, 33° at Liverpool, Loughborough and Cambridge, and 34° to 37° over the northern and eastern parts of Great Britain as well as at Rouen.
 It has fallen decidedly since yesterday except at the southern stations.

WIND

S⁴ to SE², moderate in the west of France; SW⁴, fresh to strong in the Channel, light on our east coast; NE⁴, moderate in Ireland. Very light and variable in Scotland, and N⁴ to NW⁴ on the eastern shores of the North Sea.
 The changes in direction during the past twenty-four hours have been very considerable, especially in the south.

WEATHER

Quiet, but dull in places on the eastern shores of the North Sea and in Ireland; very unsettled over Ireland, England & the Channel with snow at many of the northern and midland stations and Rouen, rain in the south.

SEA

Rather rough about the mouth of the Channel, moderate to smooth elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

Very unsettled weather is probable, with much rain in the southern district and snow further north. There is, however, no indication of any gale at present.

FORECASTS

For the 24 hours ending at NOON on 29th JAN^y 1890.

DISTRICTS.

FORECASTS.

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

Wind becoming N⁴ and NE⁴; fair at first, snow or rain later.

NE⁴ winds, rain and snow. Cold tonight

Same as N^o 5

Same as N^o 2

Very variable winds, and changeable wet weather.

DISTRICTS.

FORECASTS

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

Same as N^o 0 and 1.

NE⁴ winds, snow or cold rain at times.

Same as N^o 5.

NE⁴ winds, unsettled, cold, snow or cold rain at times.

WARNINGS

NONE ISSUED.

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

YESTERDAY'S 2 P.M. REPORTS.

THER: WIND								THER: WIND							
BAR:	D.	W.	D.	F.	WEA.	SEA		BAR:	D	W	D	F.	WEA	SEA	
Skudesnaes ...	29. 13	42	39	WNW	7	c	6	Holyhead ...	29. 97	43	39	WNW	6	c	5
Sumburgh Head	29. 42	37	35	NNW	4	bc	6	Valencia ...	30. 03	45	42	ENE	1	ov	6
Stornoway ...	29. 67	42	41	N	3	c	2	Scilly ...	30. 04	48	46	ENE	4	o	5
Aberdeen ...	29. 61	40	37	WNW	6	bc	2	Jersey ...	30. 07	53	51	WSW	7	ognd	2
Shields ...	29. 68	44	40	W	6	c	2	Dungeness ...	29. 95	48	44	NW	2	c	4
Ardrossan ...	29. 76	44	42	W	5	c	4	London ...	29. 96	43	43	W	2	bc	4
Malin Head ...	29. 84	44	40	NW	6	c	5	Yarmouth ...	29. 79	44	40	WNW	5	bc	4
Mullaghmore	29. 96	44	40	WNW	6	bc	4	Rocheport ...	30. 14	52	51	WSW	5	o	4
Belmullet ...	30. 00	43	41	NW	3	bc	*								

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

Weather was still very unsettled over the greater part of Europe, especially over the more N^m countries, but inclined to improve somewhat in the British Islands; fine, bright and quiet over Spain, the Mediterranean and S^m Europe, rain or snow falling later over Ireland, England and the N. and W. of France, rather heavy in some places, unsettled and showery over Holland, Germany and N. of Russia.

Temperature risen considerably at the Russian and Austrian stations, beginning to give way over the British Islands, France and Spain. Exceeding 50° on the southern shores of the Mediterranean and the west of France and at the mouth of the Channel, and exceeding 40° in the W. and S. of the United Kingdom, France and N. Germany. Below the freezing point in Lapland, Finland, N^m and central Russia, and as low as -13° at Archangel +10° at Moscow, 12° at Haparanda, 16° at Kuopio, 21° at Kharkov and 29° at Rodo. Very unsettled over the United Kingdom later.

Wind veering to the NWnd and moderating on our N. and W. coasts; strong to a gale from the Wnd in the South and over the North Sea, strong SW^{ly} over eastern Prussia and the Baltic provinces, from SE in Finland and from E. in Lapland. NW^{ly} wind becoming more general in our Islands later, and E^{ly} breezes appearing on our SW^m coasts.

Barometer highest 30.0 ins. and more over all the S^m half of Europe, and also at Valencia, and as high as 30.4 ins. and 30.5 ins. over Algeria, Spain and the S.W. of France. Lowest 28.6 ins. and less in a depression lying over Norway. Said depression moving SE^{ly} later and as a whole pressure increasing decidedly over N^m Europe; fresh fall, however, setting in on our SW coasts, and in the W. of France during afternoon.

GENERAL REMARKS ON THE WEATHER OVER EUROPE FOR THE 24 HOURS ENDING 8 AM 26TH JAN 1890.

Weather fine and bright at the Algerian and most of the other Mediterranean stations, as well as in Sweden, but and unsettled elsewhere, especially over the British Islands and their neighbourhood, where squalls and showers prevailed, snow falling at Archangel and Moscow. Rain over all but the southeastern parts of Europe and the Mediterranean coasts later - amounts not large.

Temperature risen rapidly over western and northwestern Europe, fallen over the central and eastern countries; morning readings above 50° at most Irish, English and French stations, as well as on the Mediterranean coasts; below the freezing point over Lapland, Sweden, the Baltic, Russia and Poland, and as low as 6° F. at St. Petersburg, 10° at Moscow, 11° at Archangel and 14° at Hernösand. Touching 70° at some Algerian stations later, and 65° to 68° on many other parts of the Mediterranean shores; rising to 57° at York, 56° at Oxford, Cambridge and in London. Warm air spreading eastward later, sharp frost over northern Russia.

Wind very variable over the Mediterranean and southern Europe, NW^{ly} over Austria and southern Russia, light and variable over northern Russia. S^{ly} and SW^{ly} gales and strong winds over the British Islands and their neighbourhood, and S^{ly} to SE^{ly} breezes on the eastern shores of the North Sea. Gales over the United Kingdom becoming stronger and more general later.

Barometer highest 30.1 ins. and more over the whole of S^m and SW^m Europe; and exceeding 30.3 ins. over the S. of Spain. Lowest 28.5 ins. and less to the NWnd of the Hebrides, near the centre of a large depression moving NE^{ly}. Depression in NW growing still deeper later (minimum reading 28 ins. and less) gradients very steep off the W. 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 *Wednesday, 29th January, 1890.*
Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.

Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.																		
STATIONS.	YESTERDAY EVENING.					8 A.M. TO DAY.										FAST 24 HOURS.		
	BAROM. Reading at 32° F. and Sea Level.	TEMP. Dry.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Weather.	Sea. (0 to 2.)	SHADE TEMP.			
			Dir.	Force. (0 to 12.)		Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Dir.	Force. (0 to 12.)			Max.	Min.	Amount of Rainfall.	
SCANDINAVIA.																		
Haparanda ...	29.46	14	Z	0	S	29.54	+ 22	10	10	- 5	NE	2	C	*	18	?	0.12	
Hernösand ...	29.47	19	Z	0	G	29.58	+ 26	24	23	- 0	Z	0	G	*	27	12	0.04	
Stockholm ...	29.49	31	WNW	4	O	29.63	+ 40	25	23	- 9	WNW	2	C	*	37	?	-	
Wishy ...	29.51	34	N	6	C	29.62	+ 45	32	31	- 3	N	4	C	*	37	32	-	
Bodö ...	29.34	29	E	2	G	29.39	+ 24	34	33	+ 9	W	4	S	2	?	23	-	
CHRISTIANIA.																		
Christiansund	29.71	35	WNW	6	C	29.84	+ 32	34	33	- 1	WNW	6	S	5	36	32	0.16	
Skudesnaes ...	29.84	32	NNE	2	bc	30.00	+ 25	31	31	- 5	N	1	C	3	36	30	-	
Christiania Fjord (Færder)	29.70	32	WNW	3	G	29.85	+ 33	32	27	- 6	WNW	5	G	1	?	30	-	
Skagen (The Seaw)	29.72	36	WSW	1	G	29.85	+ 30	35	33	- 4	N	1	G	1	41	?	-	
Fanö ...	29.80	33	NW	4	G	29.90	+ 12	31	30	- 5	NW	2	G	*	41	30	-	
SCOTLAND.																		
Sumburgh Head	29.92	33	NNE	1	G	30.09	+ 31	33	33	- 1	NNE	1	O	2	35	29	0.04	
Stornoway ...	30.03	36	W	2	T													
Wick ...	29.99	31	Z	0	bc	30.19	+ 39	31	30	- 3	NW	1	bc	1	37	30	0.08	
Nairn ...	30.02	35	WNW	2	bc	30.20	+ 31	35	34	0	WSW	1	bc	1	40	32	-	
Aberdeen ...	29.98	34	NW	2	G	30.20	+ 31	33	32	- 1	WNW	3	bc	3	39	32	-	
ENGLAND.																		
Leith ...	29.99	38	N	1	G	30.22	+ 33	35	34	+ 1	WSW	1	m	*	42	32	-	
Shields ...	29.92	39	N	2	C	30.20	+ 36	32	31	- 5	WNW	2	bc	2	40	31	0.18	
Spurn Head ...	29.82	39	NNE	3	T	30.17	+ 32	36	34	+ 2	NW	5	G	4	39	33	0.16	
York ...	29.91	38	N	2	T	30.24	+ 37	31	30	- 3	WNW	1	G	*	38	30	0.08	
Loughborough	29.84	35	N	3	O	30.27	+ 43	31	30	- 2	WNW	2	G	*	36	31	0.11	
IRELAND.																		
Adrossan ...	30.02	38	N	1	G	30.30	+ 40	42	40	+ 5	WSW	1	C	0	42	32	-	
Malin Head ...	30.09	41	NNE	5	G	30.31	+ 43	41	40	+ 1	WSW	4	C	3	43	40	-	
Mullaghmore ...	30.14	40	NNE	4	G	30.38	+ 48	37	34	- 3	SW	3	C	2	43	34	-	
Belmullet ...	30.17	41	NNE	4	G	30.36	+ 45	42	40	+ 3	WSW	2	O	*	45	32	0.03	
Donaghadee ...	30.04	42	NE	5	bc	30.33	+ 46	35	35	- 3	W	4	G	2	44	34	0.03	
BRITISH ISLANDS.																		
Liverpool (Bidston)	29.93	37	NNE	3	O	30.30	+ 47	40	39	+ 7	NW	2	O	3	41	33	0.05	
Holyhead ...	29.95	42	NNE	5	C	30.32	+ 53	43	40	+ 7	WNW	5	G	4	43	36	-	
Parsonstown ...	30.05	37	NW	1	G	30.42	+ 60	27	26	- 7	Z	0	G	*	41	26	0.04	
Valencia ...	30.12	42	NNE	3	bc	30.48	+ 79	32	31	- 5	N	1	G	2	43	30	0.01	
Roche's Point...	30.02	40	NNE	5	G	30.44	+ 75	35	32	- 3	N	2	G	1	44	32	-	
EUROPE.																		
Pembroke (St. Ann's Hd.)	29.86	39	NNE	4	C	30.38	+ 71	38	36	- 9	NNE	3	bc	2	48	34	-	
Scilly ...	29.70	44	NNE	6	O	30.39	+ 72	45	43	- 5	N	5	G	5	52	43	0.17	
Prawle Point ...	29.70	45	NNE	5	T	30.36	+ 61	34	33	- 15	N	2	G	2	52	33	0.15	
Jersey (St. Aubin's)	29.69	51	SSW	4	ogm	30.24	+ 26	42	39	- 8	N	5	cm	4	53	41	0.66	
Hurst Castle ...	29.71	42	N	2	md	30.26	+ 50	36	34	- 14	NNE	5	bc	4	52	32	0.63	
FRANCE AND BELGIUM.																		
Dungeness ...	29.65	48	WSW	6	C	30.11	+ 32	37	36	- 11	NNE	6	C	5	48	36	0.44	
London ...	29.75	38	NE	3	ST	30.22	+ 47	35	34	- 5	WNW	3	G	*	51	35	0.24	
Oxford ...	29.86	36	NNE	3	T	30.29	+ 54	33	31	- 3	NW	3	G	*	38	33	0.09	
Cambridge ...	29.83	36	N	2	T	30.22	+ 45	32	32	- 1	N	2	G	*	37	31	0.40	
Yarmouth ...	29.73	39	NNE	5	O	30.11	+ 33	39	37	+ 5	WNW	4	bc	4	39	33	0.32	
GERMANY & HOLLAND.																		
Cuxhaven ...	29.83	37	WNW	1	C	29.92	+ 04	37	35	- 3	N	3	G	*	40	36	-	
Berlin ...	29.81	39	WNW	3	O	29.80	- 04	35	34	- 3	N	3	O	*	41	34	-	
Wiesbaden ...	*	*	*	*	*	29.69	- 40	44	44	+ 4	Z	0	O	*	45	?	0.20	
Munich ...	29.89	35	NE	1	O	29.76	- 33	33	32	- 4	SW	3	O	*	41	32	0.08	
The Helder ...	29.76	38	NE	2	C	30.01	+ 07	37	36	- 2	N	2	G	2	39	34	0.24	
SPAIN & PORTUGAL.																		
Brussels (9 a.m.)	*	*	*	*	*	29.99	+ 02	37	36	- 1	N	2	O	*	52	34	0.63	
Cape Gris Nez	?	48	WSW	6	T	?	?	41	38	- 5	NNE	6	O	6	50	37	0.63	
Paris ...	29.85	46	SW	3	O	29.90	- 15	36	36	- 11	N	5	T	*	46	33	0.16	
Brest ...	?	51	SW	3	T	?	?	42	41	- 9	NNE	4	bc	5	52	39	-	
Lorient ...	29.73	30	SW	5	O	30.23	+ 31	42	39	- 9	N	5	G	6	54	37	0.05	
ITALY.																		
Rochefort ...	29.98	51	SSW	4	O	30.02	- 17	45	42	+ 1	NNE	7	O	?	52	37	0.20	
Belfort ...	29.92	39	NW	1	C	29.74	- 26	37	32	- 6	NW	7	O	*	48	37	-	
Lyons ...	29.98	43	SSW	1	O	29.85	- 43	40	36	+ 8	SSW	1	C	*	46	?	-	
Nice ...	30.01	48	SW	3	bc	29.83	- 23	47	43	- 2	E	4	O	2	59	43	-	
Perpignan ...	30.00	43	SW	2	G	29.87	- 36	44	42	+ 12	W	2	G	*	54	?	-	
Biarritz ...	30.00	52	Z	0	O	29.98	- 15	52	51	+ 10	NW	7	T	7	57	?	0.16	
PORTUGAL.																		
Corunna ...	*	*	*	*	*	30.38	+ 01	50	48	- 5	N	2	C	6	59	50	-	
Lisbon ...	*	*	*	*	*													

For Explanation of Columns, see bottom of p. 4. † Observations taken at 9.30 a.m. ‡ Received too late for insertion in Charts on p. 2.

WEATHER CHARTS

for 8 a.m. on Wednesday, 29th January

1890.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP

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

Changes since previous morning are stated in words.

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

— forces above 10; — forces 8 to 10;

— forces 5 to 7; — forces 1 to 4.

⊙ = dead calm.

SEA DISTURBANCE—Where considerable, is shown thus:

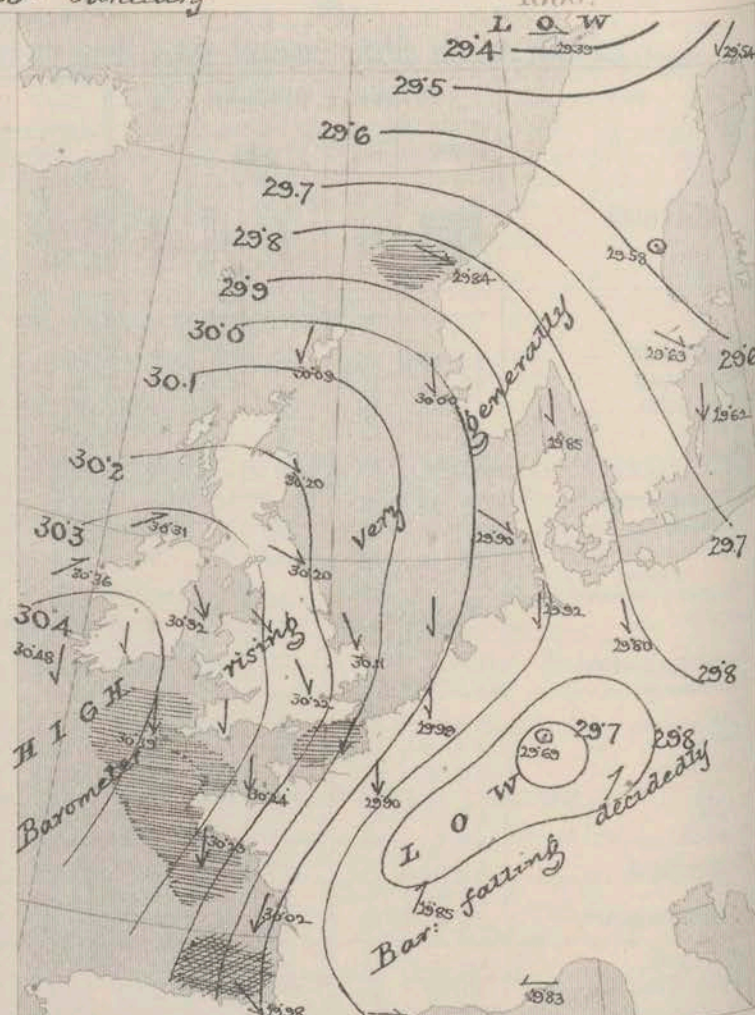
— Rough. — High.

MEAN HEIGHT OF THE BAROMETER

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

During the 15 Years: 1871—1885.

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



TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

TEMPERATURE—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

WEATHER is shown by Letters of the Beaufort Scale.

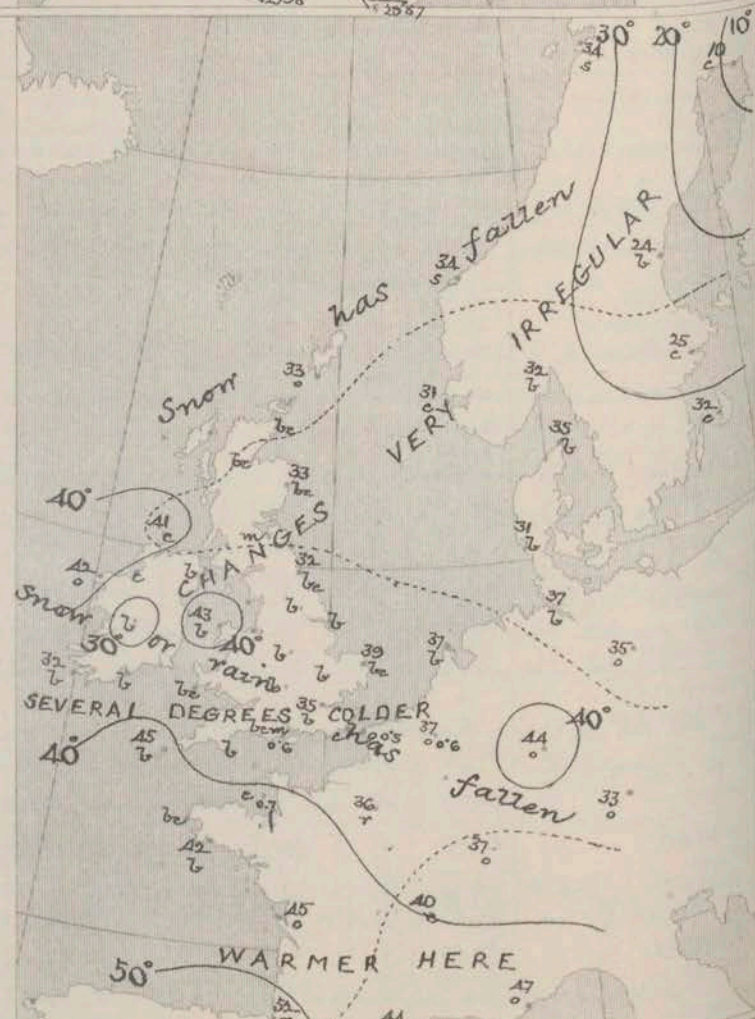
RAINFALL—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of January.)

STATIONS.	TEMPERATURE.				RAINFALL (Inches.)
	Daily Max.	Daily Min.	Dry.	Wet.	
Sumburgh Head	42.9	35.4	39.4	38.2	3.66
Stornoway	43.0	34.2	39.0	37.8	5.17
Wick	42.2	33.2	37.9	36.4	1.97
Nairn	41.9	32.7	36.6	35.0	2.02
Aberdeen	42.4	33.3	37.1	35.4	2.34
Leith	44.6	33.7	38.2	36.8	1.98
Shields	43.1	34.7	38.0	36.7	1.79
York	43.2	33.1	36.8	35.9	1.88
Loughborough	43.5	32.9	36.5	35.5	2.08
Ardrossan	44.4	36.4	39.8	38.5	4.53
Donaghadee	44.4	36.8	39.9	39.1	3.03
Holyhead	45.0	39.0	41.7	40.3	3.49
Liverpool	43.9	35.0	38.7	37.1	2.23
Parsonstown	46.0	34.6	39.0	37.9	3.09
Valencia	49.8	40.5	41.3	43.3	0.79
Roche's Point	47.0	39.7	43.2	42.0	5.03
Pembroke	45.8	39.9	42.8	41.2	3.92
Silly	49.1	43.3	46.5	45.0	3.93
Jersey	46.0	38.7	41.7	40.4	3.24
Hurst Castle	45.3	37.0	40.4	39.7	3.10
Dover	43.7	36.6	39.4	38.2	2.68
LONDON	44.8	34.4	37.9	36.8	2.20
Oxford	43.8	34.4	37.5	36.5	2.33
Cambridge	43.9	32.6	36.5	35.7	1.37
Yarmouth	41.9	34.5	37.7	36.9	2.06

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



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30.4 in: and more, in an anticyclone covering the southern half of Ireland and the adjacent parts of the Atlantic.
 Lowest, 29.5 in: and less, in a complex depression lying over the west of Germany and the east of France; 29.7 in: at Mirbaden.
 Gradient moderate, for N. winds over Bay of Biscay, the north of France, and southeast of England, slight and variable elsewhere.
 Barometer rising in our Islands generally, most in the east and south; the rise in the northwest is now slight.

TEMPERATURE

Highest, 51° at Biscay, 50° at Lisbon, 47° at Nice, 45° at Leith, 44° at Perpignan and Mirbaden.
 Lowest, 10° at Haparanda, 24° at Hermand, 25° at Stockholm, 27° at Amsterdam, 31° at Loughboro', York and Mirk, 32° at Valencia, Shields and Nisby.
 It has fallen very decidedly over our Islands during the night and in London the thermometer on the grass went down to 29° and has just crossed in many open places.

WIND

Moderate to strong from the N. over the Channel and Bay of Biscay; a moderate gale from N. at Rockport and from NW. at Biscay.
 Moderate from NW. over the north of England — light from W. in Scotland.
 Light from SW. in the northwest of Ireland — very light N. at Valencia and Rocher Point.

WEATHER

Cloudy and unsettled over France and Germany, with rain at Paris.
 Clear and bright over nearly the whole of the United Kingdom, Brittany, the Channel, and North Sea.
 Snow is falling in the west of Norway. Snow or rain fell in most places yesterday — heavily over the Channel and neighbouring parts of England and France.

SEA

Very rough over the Bay of Biscay, rough in the Channel, rather so at Christiansund, moderate to smooth elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

As the ridge now prevailing over our Islands moves southwards the wind is likely to become SW. again — first in the northward and west, and subsequently over England — while the N. wind in the south will die down.

A decided rise of temperature is likely in Ireland and Scotland, a very sharp night over England, followed in all probability by milder weather tomorrow.

FORECASTS

For the 24 hours ending at NOON on 30th JAN^y 1890.

DISTRICTS.

FORECASTS.

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

SW. and S. breezes, freshening, some showers, becoming milder.
 W. and SW. breezes, light or moderate; fair, milder.
 Wind backing to NW. and W. fair generally.
 Very cold tonight, milder tomorrow.

DISTRICTS.

FORECASTS

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

SW. and S. breezes, freshening; becoming showery, milder.
 NW. to SW. breezes, light or moderate; fair as a whole, milder.
 Same as No 6
 NW. to SW. breezes, becoming milder, rain in the west, fair in the east.

WARNINGS

NONE ISSUED AT PRESENT.

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

YESTERDAY'S 2 P.M. REPORTS.

	BAR.	THER.		WIND		WEA.	SEA		BAR.	THER.		WIND		WEA.	SEA
		D.	W.	D.	F.					D.	W.	D.	F.		
Skudesnaes ...	29.78	36	35	NW	2	o sh	4	Holyhead ...	29.82	40	39	NE	4	cg	5
Sumburgh Head ...	29.87	35	33	N	1	b	4	Valencia ...	29.93	42	40	NNE	5	bc	6
Stornoway ...	29.98	41	40	NE	2	bc	3	Scilly ...	29.60	48	48	NNE	5	rm	4
Aberdeen ...	29.89	39	35	NW	3	b	3	Jersey ...	29.11	52	51	SSW	3	c	5
Shields ...	29.85	39	38	E	1	r	2	Dungeness ...	29.65	45	45	SW	7	r	5
Ardrossan ...	29.93	41	38	N	1	b	1	London ...	29.66	47	46	WNW	4	c	5
Malin Head ...	29.98	41	39	NNE	5	b	4	Yarmouth ...	29.69	38	37	E	7	o d	5
Mullaghmore ...	29.98	43	39	NNE	6	bc	4	Rocheport ...	30.08	50	46	S	4	o	5
Belmullet ...	30.04	45	41	NE	4	bc	*								

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

Weather fine and bright over the southwest of France, the Spanish Peninsula and the lower part of the Mediterranean and temporarily fine in some parts of North Germany; very dull and unsettled elsewhere, snow at Moscow, Bodö, Sumburgh Head, and in many parts of Ireland and England, rain in south of England, the Channel and north of France. Rainfall in latter districts heavy during day, comparatively slight elsewhere.

Temperature falling decidedly in the British Islands, changing irregularly elsewhere, 50° at several Mediterranean stations, at Lisbon and on the coast of Brittany, and just touching 50° at Prawke Point and Sully; highest reading, 54° at Malta and 55° at Lisbon. Below the freezing point in Lapland, Finland, northern and central Russia, as well as at Madrid, as low as -11° F at Archangel, $+15^{\circ}$ at Haparanda, Uleaborg and Kuopio, 24° at Hermösand, 25° at Bodö, falling again over the United Kingdom towards night, rising in France.

Wind light and variable over southern Europe (small cyclonic circulation over the Gulf of Genoa) strong from SW in the Channel, moderate from NE in Ireland. Moderate to strong N^W winds over Scandinavia, moderate gales from W in Germany, and fresh NW^W breezes in Austria and Hungary. Very light from the S^W over central Russia, and from SE in Finland. NE^W and N^W winds blowing in Channel and S of England later, but SW^W wind freshening over France.

Barometer 30.3 ins. to 30.4 ins. and more over Algeria and Spain, and 30.1 ins. to 30.2 ins. in a ridge stretching thence across central France; 29.6 ins. to 29.8 ins. over the White Sea and north of Russia, and exceeding 29.9 ins. in new high-pressure area off our NW coasts. Lowest, below 29.0 ins. in a depression over the Baltic Provinces, 29.2 ins. and less in a small disturbance in the N of Norway, 29.7 ins. and less in a double depression lying over the SW of our Islands, and about 30.0 ins. over Gulf of Genoa. The complete system in the SW of our Islands, moving SE^W during the day, and the barometer rising quickly over the United Kingdom.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

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

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

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

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

DAILY WEATHER REPORT.

for *Thursday, 30th January, 1890.*
Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.

STATIONS.	YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
	BAROM.	TEMP.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Weather.	Sea. (0 to 6.)	SHADE TEMP.		Amount of Rainfall.	
			Reading at 32° F. and Sea Level.	Dry.		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.
SCANDINAVIA.																		
Haparanda ...	29.71	9	Z	0	S	29.92	+ 38	1	0	- 9	Z	0	0	*	16	?	0.04	
Heraosand ...	29.70	21	Z	0	b	29.90	+ 32	23	22	- 1	Z	0	0	*	34	16	-	
Stockholm ...	29.78	27	NW	2	b	29.90	+ 27	22	21	- 3	WNW	2	0	*	32	?	-	
Wishy ...	29.82	36	N	4	b	29.89	+ 27	31	29	- 1	NW	6	0	*	34	30	-	
Bodo ...	29.60	31	E	2	r	29.89	+ 50	29	27	- 5	E	2	?	0	?	27	-	
CHRISTIANIA.																		
Christiansund ...	29.94	35	WNW	6	S	30.08	+ 24	34	33	0	WSW	1	0	5	36	32	0.75	
Skudesnaes ...	30.10	30	Z	0	c	30.14	+ 14	32	31	+ 1	ESE	2	0	3	34	25	-	
Christiania Fjord (Færdar)	29.96	33	NW	2	b	30.06	+ 21	28	25	- 4	WNW	2	0	1	34	28	-	
Skagen (The Scaw)	30.00	30	Z	0	b	30.06	+ 21	33	31	- 2	NE	1	0	1	37	28	-	
Fanø ...	30.14	33	NW	4	b	30.12	+ 22	34	33	+ 3	SW	1	0	3	36	30	-	
SCOTLAND.																		
Sumburgh Head ...	29.99	38	SW	1	r	30.03	- 06	39	39	+ 6	Z	0	0	3	43	33	0.36	
Stornoway ...																		
Wick ...	30.08	39	SW	2	r	30.09	- 10	43	43	+ 12	Z	0	0	0	43	31	0.21	
Nairn ...	30.10	42	WSW	2	c	30.09	- 11	46	45	+ 11	Z	0	0	1	46	34	-	
Aberdeen ...	30.20	48	SSW	2	or	30.14	- 06	43	42	+ 10	W	1	0 dm	3	44	33	0.05	
ENGLAND.																		
Leith ...	30.27	41	WSW	1	0	30.22	- 00	46	44	+ 11	WSW	2	0 m	*	47	33	0.04	
Shields ...	30.31	40	W	2	m	30.22	+ 02	43	41	+ 11	W	3	0 c	2	45	32	0.08	
Spurn Head ...	30.34	37	WNW	3	c	30.24	+ 07	42	41	+ 6	WSW	4	0	4	42	35	0.09	
York ...	30.36	38	W	1	b	30.29	+ 05	43	41	+ 12	W	2	0	*	43	31	0.05	
Loughborough ...	30.42	37	W	1	b	30.36	+ 09	41	39	+ 10	WNW	2	0	*	45	30	0.02	
IRELAND.																		
Ardrossan ...	30.27	42	W	1	m	30.24	- 06	45	45	+ 3	SW	2	0	1	49	41	0.08	
Malin Head ...	30.23	45	WSW	6	or	30.21	- 10	46	46	+ 5	SW	5	0	3	46	40	0.11	
Mullaghmore ...	30.36	45	SW	4	0	30.31	- 07	47	45	+ 10	SW	5	0 m	3	47	36	0.06	
Belmullet ...	30.37	48	WSW	6	0	30.30	- 06	49	49	+ 7	N	5	0	*	49	41	-	
Donaghadee ...	30.35	39	WSW	4	0	30.34	+ 01	43	42	+ 8	SW	2	0	1	43	35	0.01	
BRITISH ISLANDS.																		
Liverpool (Bidston) ...	30.42	41	W	5	0	30.34	+ 04	44	42	+ 4	W	6	0	4	44	40	-	
Holyhead ...	30.45	42	WSW	1	0 g	30.39	+ 07	46	44	+ 3	W	2	0 g	2	46	41	0.04	
Parsonstown ...	30.46	38	Z	0	c	30.41	- 01	43	41	+ 16	Z	0	0	*	44	26	-	
Valencia ...	30.51	47	WSW	3	0	30.47	- 01	49	47	+ 17	WSW	4	0 m	4	49	31	-	
Roche's Point ...	30.52	43	WNW	2	b	30.45	+ 01	44	41	+ 9	WSW	2	0 c	3	46	35	-	
SCOTLAND.																		
Pembroke (St. Ann's Hd.) ...	30.52	43	W	3	c	30.48	+ 10	47	45	+ 9	WNW	4	0 g	3	47	38	-	
Scilly ...	30.56	45	NW	3	b	30.52	+ 13	49	46	+ 4	WNW	5	0	4	49	43	-	
Pravle Point ...	30.53	41	NW	3	b	30.50	+ 14	44	42	+ 10	WNW	3	0 g	1	49	33	-	
Jersey (St. Aubin's) ...	30.49	44	WNW	4	b m	30.52	+ 28	45	42	+ 3	NW	3	0 c	3	45	40	-	
Hurst Castle ...	30.48	42	N	2	b	30.46	+ 20	43	40	+ 7	NW	4	0 c	3	45	35	-	
ENGLAND.																		
Dungeness ...	30.35	37	N	2	b	30.36	+ 25	39	37	+ 2	NW	4	0	2	42	30	0.06	
London ...	30.45	39	NW	1	b m	30.38	+ 16	39	38	+ 4	WSW	2	0	*	43	32	0.05	
Oxford ...	30.48	36	NW	2	b	30.42	+ 13	39	38	+ 6	W	2	0	*	42	33	0.03	
Cambridge ...	30.41	34	NW	1	b	30.35	+ 11	39	38	+ 7	NW	1	0	*	43	31	0.14	
Yarmouth ...	30.30	39	WNW	4	b	30.27	+ 16	39	38	0	WNW	4	0 g m	3	41	31	0.07	
GERMANY.																		
Cuxhaven ...	30.04	36	NW	3	b	30.19	+ 27	35	34	- 2	WSW	2	0 c	*	37	33	-	
Berlin ...	30.06	32	WNW	2	b	30.23	+ 43	30	29	- 5	W	3	0	*	39	27	-	
Wiesbaden ...	*	*	*	*	*	30.40	+ 71	27	26	- 17	N	1	0	*	45	25	0.08	
Munich ...	29.89	30	WNW	6	S	30.36	+ 60	25	24	- 8	NW	5	0	*	48	25	0.39	
The Helder ...	30.29	38	N	1	b	30.25	+ 24	39	38	+ 2	WSW	2	0	2	39	37	-	
FRANCE AND BELGIUM.																		
Brussels (3 a.m.) ...	*	*	*	*	*	30.38	+ 39	35	34	- 2	WSW	2	0	*	42	34	0.04	
Cape Gris Nez ...	?	41	NE	4	b	?	?	39	38	- 2	NE	3	0	3	50	?	0.08	
Paris ...	30.34	39	N	4	c	30.48	+ 58	31	31	- 5	S	1	0	*	44	29	-	
Brest ...	?	44	NE	2	b	?	?	48	46	+ 6	WNW	4	0	?	48	41	-	
Lorient ...	30.52	44	N	4	b	30.51	+ 28	45	43	+ 3	NW	4	0 c	4	50	41	-	
SPAIN.																		
Rochefort ...	30.47	45	N	6	b	30.57	+ 55	41	39	- 4	N	4	0 c	?	52	34	-	
Belfort ...	29.99	39	N	1	m	30.34	+ 60	28	27	- 9	N	1	0 c	*	45	27	0.08	
Lyons ...	30.15	32	N	5	S	30.36	+ 51	32	30	- 8	N	6	0	*	45	31	0.28	
Nice ...	29.74	47	ESE	4	b	29.78	- 05	45	41	- 2	NW	3	0	1	55	39	-	
Perpignan ...	30.10	42	NW	6	0	30.18	+ 31	39	33	- 5	NW	7	0	*	58	37	-	
Biarritz ...	30.39	48	N	6	c	30.52	+ 54	39	36	- 13	E	3	0	3	54	37	0.12	
PORTUGAL.																		
Corunna ...	*	*	*	*	*													
Lisbon ...	*	*	*	*	*													

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

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

WEATHER CHARTS

for 8 a.m. on

Thursday, 30th January.

1890.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP

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

Changes since previous morning are stated in words.

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

their barbs and feathers refer to force thus—

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

→ = forces 5 to 7; → = forces 1 to 4.

⊙ = dead calm.

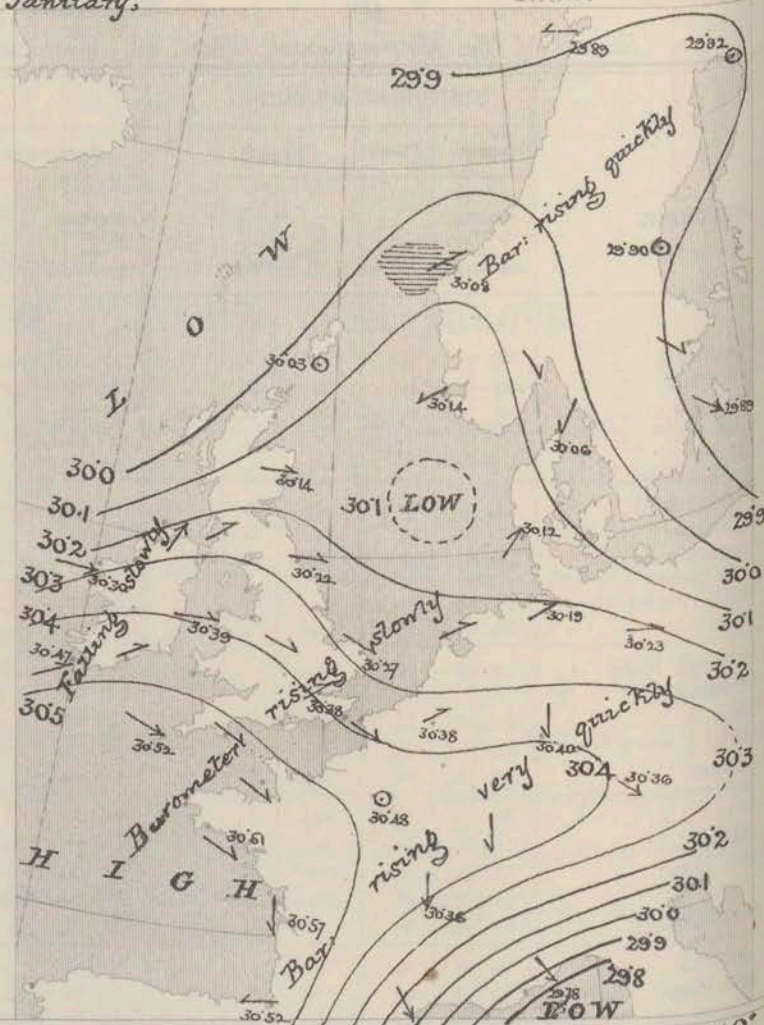
SEA DISTURBANCE—Where considerable, is shown thus:

— Rough. — High.

MEAN HEIGHT OF THE BAROMETER

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

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



TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

TEMPERATURE—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

WEATHER is shown by Letters of the Beaufort Scale.

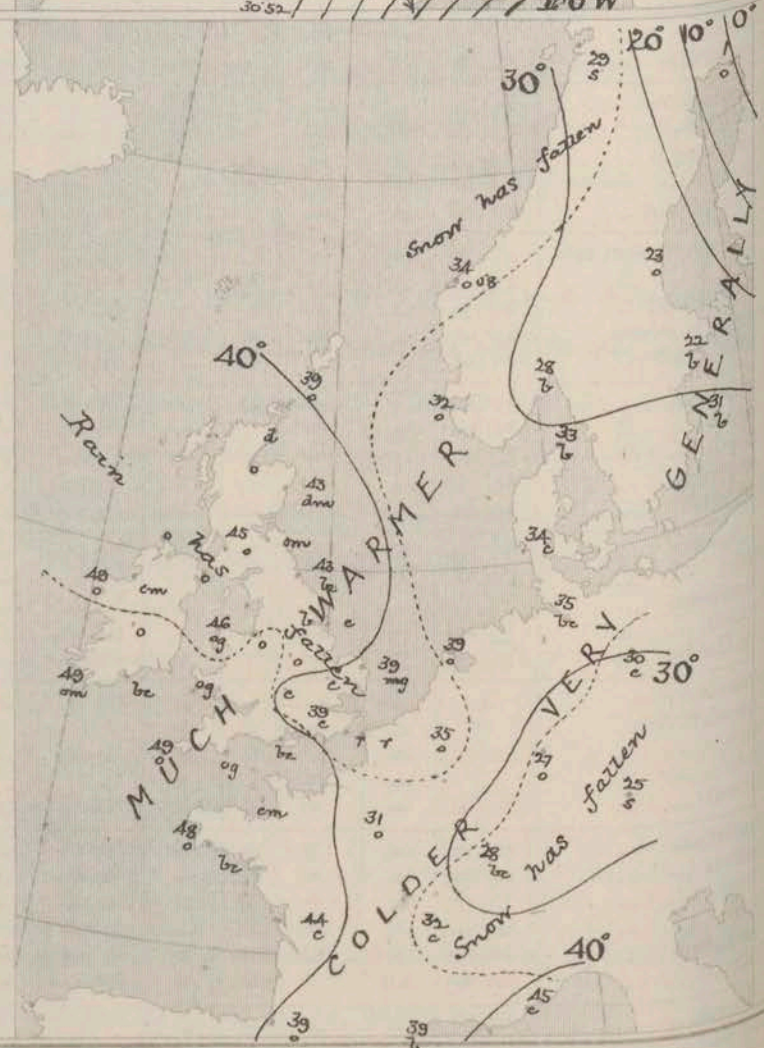
RAINFALL—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of January.)

STATIONS.	TEMPERATURE.				RAINFALL (Inches.)
	Daily Max.	Daily Min.	Dry, at 8 a.m.	Wet.	
Sumburgh Head.....	42.9	35.4	39.4	38.2	3.66
Stornoway	43.0	34.2	39.0	37.8	5.17
Wick	42.2	33.2	37.9	36.4	1.97
Nairn	41.9	32.7	36.6	35.0	2.02
Aberdeen	42.4	33.3	37.1	35.4	2.34
Leith	44.6	33.7	38.2	36.8	1.98
Shields	43.1	34.7	38.0	36.7	1.79
York	43.2	33.1	36.8	35.9	1.88
Loughborough	43.5	32.9	36.5	35.5	2.08
Ardrossan	44.4	36.4	39.8	38.5	4.53
Donaghadee	44.4	36.3	39.9	39.1	3.03
Holyhead	45.9	39.0	41.7	40.2	3.49
Liverpool	43.9	35.6	38.7	37.1	2.23
Parsonstown	46.0	34.6	39.0	37.9	3.09
Valencia	49.8	40.5	44.3	43.3	6.79
Roche's Point	47.9	39.7	43.2	42.0	5.63
Pembroke	45.8	39.9	42.8	41.2	3.92
Scilly	49.1	43.3	46.5	45.0	3.93
Jersey	46.0	38.7	41.7	40.4	3.24
Hurst Castle	45.3	37.0	40.4	39.7	3.10
Dover	43.7	36.6	39.4	38.2	2.68
LONDON	44.8	34.4	37.0	36.8	2.20
Oxford	43.8	34.4	37.5	36.5	2.33
Cambridge	45.9	32.6	36.5	35.7	1.57
Yarmouth	41.9	34.5	37.7	36.9	2.06

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



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30.3 in. to nearly 30.6 in., in an anticyclonic system, stretching from the Atlantic across France, Germany, and the southern half of our Islands.
 Lowest, 29.8 in. and less, over the Gulf of Genoa, 29.9 in. and less, over the Baltic, and 30.0 in. and less, off our extreme northwest coast.

TEMPERATURE

Gradients were steep over Switzerland and the Pyrenees and the south of France.
 Barometer was apparently falling in the west and northwest, but inclined to rise in the southeast, after falling somewhat in the night.
 Highest, 48° at Balmuccia, Valencia, and Sicily, 47° at Mullaghmore and Bonhothe, 45° at Quimper, Jersey and Androsan.
 Lowest, (1) 17° at Haparanda, 22° at Stockholm, 23° at Helsingfors, 25° at Vaasa, 25° at Helsingfors, 27° at Wismar, 28° at Belfast, 30° at Berlin, 31° at Paris.
 Over our Islands the readings are higher. In London after falling to 32° in the shade and 23° on the grass in the night, it has again risen to 33° in the shade and 37° on the grass at 8 am; on the whole it has risen rapidly over the United Kingdom since yesterday.

WIND

Calm in Scotland — SW^{ly} moderate in Ireland — W^{ly} to NW^{ly} over England, NW^{ly} to N^{ly} in the west and south of France (strong at Lyons).
 In Holland and Holstein it was light from SW, and in Sweden from NW. — while in Norway it was very variable.

WEATHER

Clear and bright in Denmark and the south of Sweden, fair over the southern parts of France, but has become cloudy and damp over the British Isles — rain has fallen at our northern and eastern stations.
 Solar and lunar halo were seen in many parts of the Kingdom yesterday, mock suns on the southwestern side of London at 4 pm.

SEA

gone down generally, but still moderate at some western stations and at Lumbly, slight or smooth elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The low pressure area lying to the northwestward of our Islands seems to be spreading over the Kingdom, so that unsettled showery weather is probable on our own coast.

FORECASTS

For the 24 hours ending at NOON on 31st JAN^y 1890.

DISTRICTS.

FORECASTS.

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

SW^{ly} breezes, wet and unsettled; very doubtful later.

NW^{ly} to SW^{ly} winds; changeable, showery to fair and vice versa.

DISTRICTS.

FORECASTS

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

Same as Nos 0 and 1.

Same as Nos 2 to 5.

Same as Nos 0 and 1.

WARNINGS

The NORTH CONE was hoisted last evening in district 0. and parts of 1. and 6.

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

YESTERDAY'S 2 P.M. REPORTS.

	BAR.	THER:		WIND		WEA	SEA		BAR.	THER:		WIND		WEA	SEA
		D.	W.	D.	F.					D.	W.	D.	F.		
Skudesnaes ...	30.06	34	33	MMW	1	c	3		Holyhead ...	30.43	43	40	MMW	4	0
Sumburgh Head ...	30.00	37	37	20	0	o	2		Valencia ...	30.51	49	44	SW	3	bcm
Stornoway ...	30.10	43	43	SW	4	r	4		Scilly ...	30.51	46	44	MMW	4	b
Aberdeen ...	30.24	39	36	SW	2	c	4		Jersey ...	30.39	45	40	MMW	4	b
Shields ...	30.29	41	37	MMW	2	c	2		Dungeness ...	30.25	43	39	MMW	5	bc
Ardrossan ...	30.31	40	37	W	2	m	2		London ...	30.34	43	41	MMW	3	b
Malin Head ...	30.30	41	41	MSW	5	o	3		Yarmouth ...	30.23	41	39	MMW	4	bcm
Mullaghmore ...	30.37	43	40	SSW	4	o	3		Rochefort ...	30.30	47	41	MMW	7	bc
Belmullet ...	30.37	43	46	SSW	3	o	*								

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

Weather very fine and bright over the United Kingdom as well as at many stations in Spain, Algeria, and southern Europe; cloudy and unsettled elsewhere, with rain in some parts of France, fog over Austria, snow in many parts of Germany, Russia and Norway. Rain falling later in the northern and eastern parts of the British Islands, several parts of France, and snow in Germany. Brilliant Solar halo seen over the United Kingdom, mock suns near London.

Temperature highest 50° and more at several Mediterranean stations and in Portugal, much lower elsewhere; below 40° at United Kingdom, North Sea, Central and Eastern Europe, and below freezing point at many inland stations. Lowest readings -10° F. at Archangel, +10° at Haparanda, 14° at St Petersburg, 24° at Helsingfors, 27° at Parnostorow, 31° at York. Rising fast over British Islands later.

Wind varying greatly, W over the north of Norway, N over the Baltic, Denmark, Holland, England, France and Portugal, NW to W in Spain. Calm in Scotland, but becoming SW again on our northwest coast. Cyclonic circulations of light winds over Germany and Russia. SW breezes becoming general in Ireland later.

Barometer, highest 30.0 in. to 30.4 in. over Spain, the Bay of Biscay, Brittany and the United Kingdom; lowest, 29.4 in. and less in Lapland, 29.3 in. and less, in a depression near Moscow, 29.7 in. and less in another over Northern Germany, and 29.8 in. and less, in a very shallow system over the Mediterranean. Falling west and north of our Islands later, rising fast over the Continent.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

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

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

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

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DAILY WEATHER REPORT.

for Friday, 31st January, 1890.

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

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STATIONS.	YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
	BAROM. Reading at 32° F. and Sea Level.	TEMP. Dry.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Weather.	Sea. (0 to 4.)	SHADE TEMP.			
			Dirce.	Force. (0 to 12.)		Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Dirce.	Force. (0 to 12.)			Max.	Min.	Amount of Rainfall.	
SCANDINAVIA.																		
Haparanda ...	30.13	6	Z	0	c	30.21	+ 2.9	-6	-6	- 7	Z	0	0		10	?		
Hernösand ...	30.22	10	Z	0	b	30.19	+ 2.9	5	4	- 18	ZS	0	b		25	?		
Stockholm ...	30.17	28	Z	2	0	30.28	+ 3.8	25	23	+ 3	W	2	bc		32	21		
Wisby ...	30.14	32	WNW	4	0	30.23	+ 3.4	30	27	- 1	N	4	0		34	28		
Bodö ...	30.05	37	SW	4	bc	29.67	- 2.2	36	33	+ 7	SSE	2	0	2	37	27		
SCANDINAVIA.																		
Christiansund	30.13	33	ESE	2	bc	29.71	- 3.7	42	39	+ 8	SW	2	r	4	?	32	0.06	
Skudesnaes ...	30.24	35	ESE	5	b	30.21	+ 0.7	37	36	+ 5	SSE	6	i	5	?	32		
Christiania Fjord (Færder)	30.24	31	NNW	2	b	30.28	+ 2.2	32	30	+ 4	NSW	3	c	1	32	27		
Skagen (The Seaw)	30.26	35	NE	1	b	30.32	+ 2.6	31	30	- 2	SW	1	0	0	36	28		
Fanö ...	30.27	31	E	2	b	30.39	+ 2.7	28	?	- 6	E	1	c	*	37	27		
SCANDINAVIA.																		
Sumburgh Head	29.97	44	SSE	1	r	29.94	- 0.9	48	48	+ 9	NSW	3	0	4	49	39	0.10	
Stornoway ...	30.00	51	W	5	0													
Wick ...	29.98	43	Z	0	c	30.00	- 0.9	49	48	+ 6	W	1	c	1	52	40	0.20	
Nairn ...	30.07	51	W	2	c	30.08	- 0.1	51	49	+ 5	NSW	3	c	1	52	44	0.12	
Aberdeen ...	30.12	45	SSW	1	0	30.16	+ 0.2	47	45	+ 4	SW	1	c	2	47	42	0.19	
SCANDINAVIA.																		
Leith ...	30.18	45	SW	3	0	30.21	- 0.1	51	49	+ 5	SW	1	0		51	44	0.09	
Shields ...	30.19	46	W	2	r	30.24	+ 0.2	50	48	+ 7	NSW	2	c	2	50	42	0.18	
Spurn Head ...	30.23	42	WNW	3	r	30.29	+ 0.5	44	43	+ 2	W	2	f d	3	44	41	0.09	
York ...	30.27	45	W	2	r	30.31	+ 0.2	47	47	+ 4	W	1	f c	*	48	41	0.05	
Loughborough	30.33	45	NW	1	r	30.35	- 0.1	48	47	+ 7	WNW	2	0	*	48	40	0.02	
SCANDINAVIA.																		
Ardrossan ...	30.22	50	SW	3	0	30.26	+ 0.2	49	49	+ 4	SW	3	d	2	50	41	0.30	
Malin Head ...	30.21	48	SW	5	of	30.24	+ 0.3	48	48	+ 2	NSW	5	of	4	48	46		
Mullaghmore ...	30.31	49	SW	4	0	30.33	+ 0.2	48	48	+ 1	SW	4	dm	4	50	46	0.04	
Belmullet ...	30.31	49	SW	5	0	30.33	+ 0.3	50	50	+ 1	SW	2	om		50	49	0.04	
Donaghadee ...	30.29	50	NSW	4	0	30.33	- 0.1	48	48	+ 5	NSW	4	0	2	50	42		
SCANDINAVIA.																		
Liverpool (Bidston)	30.32	46	W	5	0	30.37	+ 0.3	47	46	+ 3	W	4	0	3	47	44	0.01	
Holyhead ...	30.37	49	W	2	of	30.39	0.0	48	47	+ 2	WNW	2	ogm	2	50	46	0.01	
Parsonstown ...	30.39	48	SW	1	0	30.41	0.0	47	46	+ 4	Zo	0	0		49	42	0.02	
Valencia ...	30.46	51	NSW	4	om	30.46	- 0.1	50	49	+ 1	NSW	3	om	3	53	48	0.01	
Roche's Point...	30.45	48	W	2	b	30.45	0.0	47	45	+ 3	W	2	0	3	50	43		
SCANDINAVIA.																		
Pembroke (St. Ann's Hd.)	30.44	48	W	3	c	30.44	- 0.4	48	47	+ 1	WNW	3	og	3	49	47		
Scilly ...	30.49	49	WNW	4	0	30.47	- 0.5	48	48	- 1	WNW	5	odm	5	50	47		
Prawle Point ...	30.46	46	NW	2	0	30.43	- 0.7	45	45	+ 1	NW	2	bc	1	47	43		
Jersey (St. Aubin's)	30.45	48	WNW	3	c	30.49	- 1.2	50	48	+ 5	WNW	4	ogm	3	50	44		
Hurst Castle ...	30.40	46	NW	2	c	30.39	- 0.7	48	46	+ 5	WNW	2	ogm	2	48	42		
SCANDINAVIA.																		
Dungeness ...	30.30	42	WNW	3	c	30.32	- 0.4	44	44	+ 5	WNW	2	f	1	47	37	0.08	
London ...	30.35	45	WNW	2	0	30.34	- 0.4	47	47	+ 8	WNW	1	ogf		48	39	0.03	
Oxford ...	30.37	44	NSW	2	0	30.38	- 0.4	47	46	+ 8	NW	2	og		48	38		
Cambridge ...	30.34	44	W	1	r	30.33	- 0.2	46	46	+ 7	Zo	0	r		48	38	0.13	
Yarmouth ...	30.26	44	NW	3	c	30.33	+ 0.6	41	41	+ 2	Zo	0	f	3	45	37	0.10	
SCANDINAVIA.																		
Cuxhaven ...	30.18	33	W	1	c	30.40	+ 2.1	29	28	- 6	SSW	1	b		37	28		
Berlin ...	30.20	33	WNW	4	0	30.34	+ 1.1	26	25	- 4	NW	2	b		34	25	0.04	
Wiesbaden ...						30.27	- 1.3	35	34	+ 8	NE	2	c		37	?		
Munich ...	30.32	19	W	4	b	30.24	- 1.2	22	21	- 3	SW	3	c		28	18		
The Helder ...	30.21	41	WNW	1	c	30.36	+ 1.1	35	35	- 4	ESE	1	f	1	43	?		
SCANDINAVIA.																		
Brussels (3 a.m.)						30.33	- 0.5	38	37	+ 3	ENE	2	0		42	?	0.20	
Cape Gris Nez	?	45	NW	4	0	?	?	44	43	+ 5	E	1	0	1	46	39	0.08	
Paris ...	30.36	40	S	1	0	30.30	- 1.8	42	41	+ 11	NW	1	0		?	?	0.04	
Brest ...	?	49	WNW	3	0	?	?	48	46	0	NSW	5	0	4	52	41	0.08	
Lorient ...	30.50	48	NW	3	0	30.40	- 1.1	49	48	+ 4	WNW	3	0	3	48	43		
SCANDINAVIA.																		
Rochefort ...	30.49	47	WNW	4	0	30.39	- 1.8	44	43	+ 3	NE	3	r	?	50	37	0.08	
Belfort ...	30.29	38	S	1	bc	† 30.16	- 1.8	27	22	- 1	SW	1	bc		47	?		
Lyons ...	30.38	?	WNW	?	?	?	?	32	32	0	?	2	S		37	30		
Nice ...	29.91	18	ESE	4	b	29.95	+ 1.7	35	31	- 10	E	1	b	2	55	36		
Perpignan ...	30.20	42	NW	6	b	† 30.14	- 0.4	42	?	+ 3	NW	6	bc		46	?		
Biarritz ...	30.47	43	NE	4	0	30.36	- 1.6	44	41	+ 5	SSE	3	r	2	46	39	0.12	
SCANDINAVIA.																		
Corunna ...																		
Lisbon ...	30.38	51	NNE	5	c	30.32		44	39		N	4	bc	?	57	45		

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

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

WEATHER CHARTS

for 8 a.m. on

Friday, 31st January

1890

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP.

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

Changes since previous morning are stated in words.

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

their barbs and feathers refer to force thus—

— = forces above 10; — = forces 8 to 10;

— = forces 5 to 7; — = forces 1 to 4.

○ = dead calm.

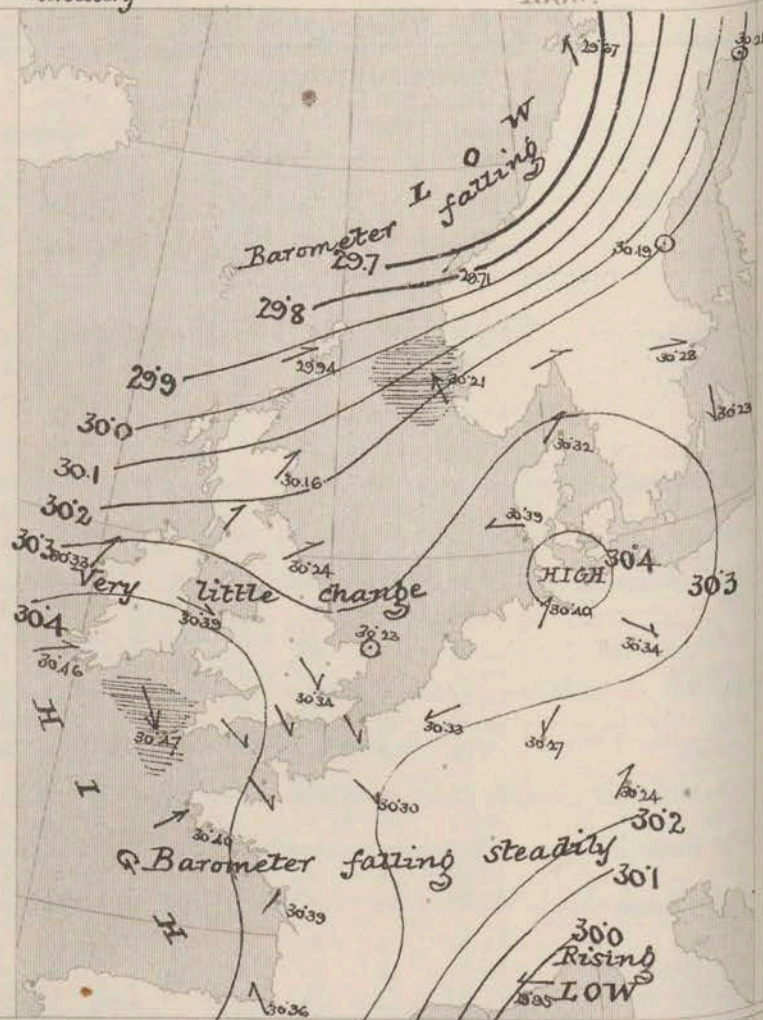
SEA DISTURBANCE—Where considerable, is shown thus:

— = Rough. — = High.

MEAN HEIGHT OF THE BAROMETER

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

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



TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

TEMPERATURE—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

WEATHER—is shown by letters of the Beaufort Scale.

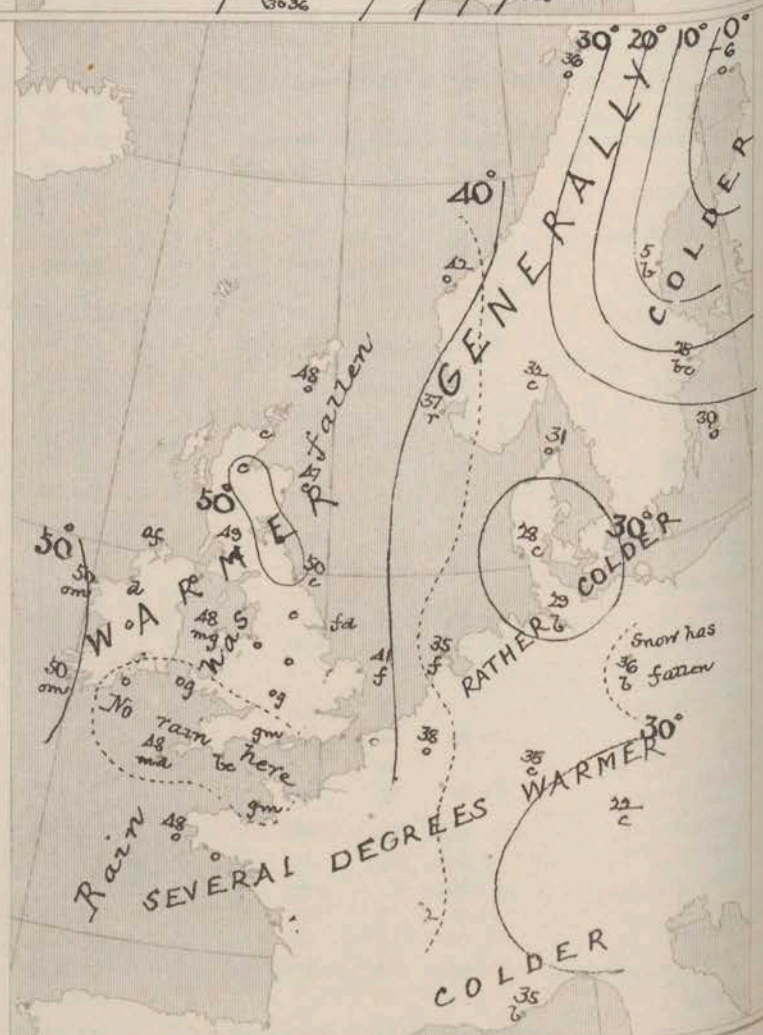
RAINFALL—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of January.)

STATIONS.	TEMPERATURE.				RAINFALL (Inches.)
	Daily Max.	Daily Min.	at 8 a.m. Dry.	Wet.	
Sumburgh Head.....	42.9	35.4	39.4	38.2	3.66
Stornoway.....	43.0	34.2	39.0	37.8	5.17
Wick.....	42.2	33.2	37.9	36.4	1.97
Nairn.....	41.9	32.7	36.6	35.0	2.02
Aberdeen.....	42.4	33.3	37.1	35.4	2.34
Leith.....	44.6	33.7	38.2	36.8	1.98
Shields.....	43.1	34.7	38.0	36.7	1.79
York.....	43.2	33.1	36.8	35.9	1.88
Loughborough.....	43.5	32.9	36.5	35.5	2.08
Ardrossan.....	44.4	36.4	39.8	38.5	4.53
Donaghadee.....	44.4	36.3	39.9	39.1	3.03
Holyhead.....	45.9	39.0	41.7	40.2	3.49
Liverpool.....	43.0	35.0	38.7	37.1	2.23
Parsonstown.....	46.0	34.6	39.0	37.9	3.09
Valencia.....	49.8	40.5	44.3	43.3	6.79
Roche's Point.....	47.9	39.7	43.2	42.0	5.03
Pembroke.....	45.8	39.9	42.8	41.2	3.92
Scilly.....	49.1	43.3	46.5	45.0	3.93
Jersey.....	46.0	38.7	41.7	40.4	3.24
Hurst Castle.....	45.3	37.0	40.4	39.7	3.10
Dover.....	43.7	36.6	39.4	38.2	2.68
LONDON.....	44.8	34.4	37.0	36.8	2.20
Oxford.....	43.8	34.4	37.5	36.5	2.33
Cambridge.....	43.9	32.6	36.5	35.7	1.57
Yarmouth.....	41.9	34.5	37.7	36.9	2.06

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



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30.4 ins: and more, over the southwestern parts of our Islands and the Bay of Biscay.
 Lowest, 29.7 ins: and less, in a ridge extending thence across England and the Netherlands to Denmark and the south of Sweden.
 Gradients steep over Norway and also over the southeast of France.
 Barometer almost stationary in our Islands.

TEMPERATURE

Highest, 51° at Nain and Seith, 50° at Shields, Belmullet, Valencia and Jersey.
 Lowest, -6° F. at Hafnarvanda, +5° at Helsingfors, 22° at Munich, 25° at Stockholm, 26° at Berlin.
 At Paris it had risen to 42° and in London to 47° during the night. It is from 10° to 14° above the average for the time of year at most of the English and Scotch stations.

WIND

Light to moderate in force generally. SW^{ly} over the northern parts of our Islands — SE^{ly} in Norway.
 NW^{ly} over the southern half of England and the greater part of France.
 E^{ly} over the Netherlands, and also at Nice.

WEATHER

Fine at several of the German and Swedish stations, cloudy or overcast and damp elsewhere, with slight rain in several localities, snow at Lyons.
 The rainfall during the past twenty-four hours has been very slight.

SEA

Rather rough at Seith and off the coast of Norway, moderate off the north and northwest of Ireland, slight or smooth elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

There is no indication of any important change.

FORECASTS

For the 24 hours ending at NOON on 1st FEB^{ry} 1890.

DISTRICTS.

FORECASTS.

DISTRICTS.

FORECASTS

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

W^{ly} and SW^{ly} breezes, light or moderate;
 some rain occasionally, mild.

Varying airs; dull, damp, misty.

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

Same as N^o 0 to 2

NW^{ly} breezes, light; cloudy, fair.

Same as N^o 0 to 2.

WARNINGS

NONE ISSUED.

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

YESTERDAY'S 2 P.M. REPORTS.

	BAR:	THER:		WIND		WEA.	SEA		BAR:	THER:		WIND		WEA.	SEA
		D.	W.	D.	F.					D.	W.	D.	F.		
Skudesnaes ...									Holyhead ...						
Sumburgh Head									Valencia ...						
Stornoway ...									Scilly ...						
Aberdeen ...									Jersey ...						
Shields ...									Dungeness ...						
Ardrossan ...									London ...						
Malin Head ...									Yarmouth ...						
Mullaghmore ...									Rocheport ...						
Belmullet ...							*								

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

Weather fine and bright at several of the Baltic and German stations, as well as in the west of France, Portugal and Spain. Fair over several parts of England, dull and unsettled elsewhere, with rain in several parts of Scotland and Norway, snow at St Petersburg. Rain falling in many parts of the Mediterranean also. Slight rain later in Ireland, Scotland, the east of England, and most French stations.

Temperature increasing over the British Isles, falling on the Continent, morning readings above 50° at certain Mediterranean stations only, but ranging from 49° over the greater part of the British Islands, and on the Atlantic coasts of France, Spain and Portugal. Below the freezing point over most of the inland parts of the Continent, and as low as 1° at Kaparanda, 3° at Tripoli, 13° at St Petersburg, 21° at Stockholm, 27° at Kieboaden, and 31° at Paris. Rising throughout the British Islands and France later.

Wind light to moderate from NW. over the Baltic, Germany, and Austria, as well as over the greater part of England and the west and north of France, SW. in Ireland and Scotland, variable in Norway. Well marked cyclonic circulation over the Mediterranean and south of France, causing gales from N. or NW. at Perpignan, Barcelona, and Algiers. No important change later.

Barometer highest 30.5 ins. to 30.6 ins. over the extreme southeast of England, the east of France, north of Spain and Bay of Biscay, and exceeding 30.0 ins. over the whole of Western Europe; lowest 29.7 ins. and less, in a complex depression over the Mediterranean, as well in another over Russia, 30.0 ins. and less, to the northward of our Islands. An extremely shallow local depression found over the North Sea. Barometer falling somewhat in France later, rising over the Baltic and Northern Europe.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

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

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

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

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

ADDITIONS AND CORRECTIONS TO THE

REPORTS

1. REPORTS RECEIVED TOO LATE FOR INSERTION DAILY.

DATE.	STATIONS.	YESTERDAY EVENING.						8 A.M. TO-DAY.										PAST 24 HOURS.		
		Barometer at 32° F. and Sea Level.	Temp. in Shade.	WIND.		Weather.	Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	SHADE TEMP.		WIND.		Weather.	Sea (0 to 8.)	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.		
1	Perpignan	30.17	37	NW	3	7	29.97	- .36	37	37	+ 12	NW	3	7	2	43	?	1.02		
"	Corunna	"	"	"	"	"	30.12	"	36	35	"	NE	2	0	4	50	32	"		
"	Lisbon	30.05	43	N	4	6	30.05	- .05	39	33	"	N	3	6	4	50	37	"		
2	The Helder	30.41	28	SE	1	1	30.27	- .20	26	26	- 3	E	1	1	1	30	25	"		
"	Lyons	30.22	29	NW	1	0	30.12	- .10	28	27	+ 2	E	1	0	2	31	?	0.04		
"	Corunna	"	"	"	"	"	29.97	- .15	37	37	+ 1	ENE	1	6	4	48	34	"		
3	Corunna	"	"	"	"	"	29.69	- .28	37	35	0	ENE	1	6	4	50	34	"		
4	Corunna	"	"	"	"	"	29.70	+ .01	47	46	+ 10	SSE	4	7	5	54	36	0.04		
6	Belmullet	29.22	46	WSW	10	0	29.60	+ .69	49	48	0	S	8	0	"	50	39	0.37		
"	Corunna	"	"	"	"	"	30.39	+ .26	60	55	+ 2	S	5	5	4	61	55	"		
7	Belfort	30.52	44	WNW	1	6c	30.53	- .04	37	"	- 2	NW	1	6c	"	52	33	"		
"	Lisbon	30.49	55	ENE	2	6	30.52	+ .02	43	42	- 4	NNE	4	6	"	59	43	"		
9	Lisbon	30.51	52	N	2	6	30.51	0.00	48	42	+ 5	NE	4	6	"	54	43	"		
10	Corunna	"	"	"	"	"	30.39	"	56	55	"	SSE	1	0	4	57	52	"		
11	Nice	30.28	44	NE	2	c	30.05	- .33	42	40	- 5	E	4	6	2	55	39	"		
"	Corunna	"	"	"	"	"	30.49	+ .10	56	55	0	SW	1	6	3	59	44	0.10		
12	Stormoway	"	"	"	"	"	29.32	- .43	44	43	+ 2	SW	8	0	6	48	40	0.12		
"	Corunna	"	"	"	"	"	30.40	- .05	43	43	- 8	NNE	1	m	5	57	39	"		
"	Lisbon	30.33	57	N	3	6	30.35	+ .01	47	44	+ 3	NNE	3	6	"	63	?	"		
14	Sumburgh Hd.	"	"	"	"	"	29.56	+ .24	41	40	- 4	SW	3	c	6	46	40	0.37		
"	Stormoway	"	"	"	"	"	29.48	+ .16	46	45	+ 2	SW	6	0	6	46	35	0.50		
"	Corunna	"	"	"	"	"	30.24	- .16	51	49	+ 8	ENE	1	6	5	55	39	"		
15	Haparanda	29.50	22	SW	2	0	29.39	- .19	28	27	+ 13	Z	0	0	"	?	10	0.28		
"	Stormoway	29.19	40	W	3	7	29.69	+ .21	41	41	- 5	SW	4	0	4	46	35	0.48		
"	Pembroke	29.97	49	SSW	6	0	30.05	- .00	49	49	+ 1	SSW	5	8	5	50	48	0.07		
"	Stormoway 2pm	"	"	"	"	"	29.63	"	43	43	"	SW	4	8	4	"	"	"		
16	Stormoway	29.49	45	SW	7	7	29.43	- .26	50	50	+ 9	SW	8	7	6	50	39	0.12		
"	Lisbon	30.26	58	N	3	6	30.26	- .04	44	42	- 2	NNE	4	6	"	61	45	"		
"	Stormoway 2pm	"	"	"	"	"	29.38	"	53	52	"	SW	7	0	6	"	"	"		
17	Stormoway	29.31	54	SW	8	c	29.46	+ .03	42	42	- 8	W	6	0	6	55	40	0.42		
"	Corunna	"	"	"	"	"	30.19	+ .03	50	49	+ 1	S	2	6c	5	59	46	0.12		
18	Stormoway	"	"	"	"	"	28.91	- .55	45	44	+ 3	SE	5	c	5	47	40	0.08		
"	Brussels	"	"	"	"	"	29.92	- .33	35	34	- 6	?	2	c	"	42	33	"		
"	Corunna	"	"	"	"	"	30.15	- .04	54	53	+ 4	S	1	0	6	63	50	0.12		
"	Stormoway 2pm	"	"	"	"	"	28.86	"	41	"	"	SW	5	c	"	"	"	"		
"	Mullaghmore 2pm	"	"	"	"	"	28.87	"	44	43	"	S	10	cpm	7	"	"	"		
19	Belmullet	28.74	47	WSW	11	0	28.97	- .29	44	43	+ 1	W	12	0	"	53	?	0.28		
20	Stormoway	28.50	39	W	6	7	28.85	+ .62	37	37	- 6	SW	5	0	5	45	34	0.25		
"	Mulin Head	28.89	39	WSW	9	0	29.07	+ .48	35	34	- 5	SSW	5	0	5	42	34	0.40		
"	Mullaghmore	29.08	42	WSW	7	0	29.18	+ .29	37	36	- 7	WSW	6	chg	5	45	34	0.10		
"	Belmullet	29.14	44	W	9	0	29.21	+ .24	36	35	- 8	W	4	0	"	44	36	0.24		
"	Brussels	"	"	"	"	"	29.52	- .13	40	"	- 9	WSW	4	0	"	52	39	0.32		
"	orient	29.82	49	WSW	6	0	29.81	- .04	46	"	- 6	W	6	0	7	55	41	0.08		
"	Corunna	"	"	"	"	"	30.16	0.00	53	51	- 5	SSW	4	c	6	57	50	0.08		
"	Stormoway 2pm	"	"	"	"	"	28.94	"	33	33	"	W	2	s	"	"	"	"		
"	Belmullet 2pm	"	"	"	"	"	29.24	"	40	39	"	WSW	4	0	"	"	"	"		
21	Stormoway	28.94	33	NW	3	3	28.95	+ .10	35	34	- 2	NW	4	0	4	37	32	0.05		
"	Belfort	29.79	48	NW	2	0	29.72	- .07	47	"	+ 1	NW	2	0	"	53	42	0.47		
"	Lyons	29.96	48	WSW	2	c	29.92	- .10	38	"	- 10	SSW	2	c	"	54	37	0.08		
"	Corunna	"	"	"	"	"	30.12	- .04	50	49	- 3	SW	3	0	5	59	46	0.39		
"	Stormoway 2pm	"	"	"	"	"	28.86	"	33	33	"	NW	3	0	3	"	"	"		
22	Haparanda	29.52	0	NE	2	6	29.54	+ .09	0	- 1	- 13	N	2	0	"	18	- 2	"		
"	Stormoway	28.75	35	SW	5	3	28.76	- .19	31	31	- 4	Z	0	c	3	38	25	0.20		
"	Belfort	28.50	43	NW	1	0	29.51	- .21	44	"	- 3	SW	2	0	"	48	36	"		
"	Corunna	"	"	"	"	"	29.83	- .29	58	54	+ 8	SSW	6	0	5	59	?	0.04		
"	Stormoway 2pm	"	"	"	"	"	28.78	"	32	32	"	NW	2	6c	3	"	"	"		
23	Stormoway	28.77	36	W	3	9	28.77	+ .01	36	36	+ 5	W	3	c	3	38	28	"		
"	Corunna	"	"	"	"	"	29.79	- .04	60	58	- 2	SSW	7	7	6	63	48	0.28		
"	Lisbon	30.24	58	SW	5	0	30.26	+ .06	57	56	0	SW	5	0	7	59	57	0.24		
"	Stormoway 2pm	"	"	"	"	"	28.87	"	41	40	"	SW	3	6c	"	"	"	"		
24	Jaeger	29.08	37	SSW	6	0	29.38	+ .32	35	35	- 1	ENE	2	0	2	37	36	"		
"	Stormoway	28.96	36	NW	2	6	29.22	+ .45	32	32	- 4	NW	2	6c	2	41	28	"		
"	The Helder	28.89	39	N	2	c	29.62	- .32	40	"	+ 3	WSW	2	c	4	43	37	0.39		
"	Brest	?	51	W	7	0	?	?	48	"	- 2	W	4	0	2	57	43	1.02		
"	Corunna	"	"	"	"	"	30.17	+ .38	60	58	0	SSW	4	c	5	63	57	0.35		
"	Stormoway 2pm	"	"	"	"	"	29.82	"	40	39	"	SW	2	c	2	"	"	"		
25	Jaeger	29.65	36	W	2	0	29.65	+ .27	39	39	+ 4	SSE	4	0	2	?	32	"	"	
"	Stormoway	29.24	42	S	5	0	28.52	- .70	48	48	+ 16	SW	8	7	6	48	32	0.50		
"	Corunna	"	"	"	"	"	30.08	- .09	53	52	- 5	SSW	5	c	5	64	54	"		
26	Stormoway	28.34	48	SW	8	7	28.86	- .34	44	43	- 4	W	8	7	7	44	42	0.75		

1. REPORTS RECEIVED TOO LATE FOR INSERTION DAILY. (continued).

DATE.	STATIONS.	YESTERDAY EVENING.					8 A.M. TO-DAY.								PAST 24 HOURS.			
		Barometer at 32° F. and Sea Level.	Temp. in Shade.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Weather.	Sea (0 to 9.)	SHADE TEMP.		Amount of Rainfall.
				Dir.	Force (0 to 12.)		Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Dir.	Force (0 to 12.)			Max.	Min.	
27	Stornoway	-	-	-	-	-	29.40	+ .54	38	37	- 6	7	6	0	6	45	36	0.20
	Corunna	*	*	*	*	*	30.50	+ .09	49	46	+ 1	SEA	2	2	59	43	-	
28	Stornoway	-	-	-	-	-	29.90	+ .50	35	35	- 3	2	4	0	4	42	31	0.05
	Corunna	*	*	*	*	*	30.15	- .35	54	51	+ 5	5	8	0	2	50	46	-
	Lisbon	30.37	52	70	0	6	30.32	- .12	55	53	+ 9	24	0	0	?	59	45	-
29	Stornoway	-	-	-	-	-	30.18	+ .28	37	37	+ 2	W	2	0	3	41	33	0.06
	Corunna	*	*	*	*	*	30.39	+ .24	51	47	- 3	2	5	0	4	59	50	0.35
30	Stornoway	30.05	44	SW	4	0	30.00	- .18	48	48	+ 11	SW	4	7	4	48	35	0.10
	Corunna	*	*	*	*	*	30.64	+ .25	40	39	+ 11	NE	1	6	3	54	36	-
	Lisbon	30.34	51	N	4	6c	30.41	+ .08	43	38	- 7	NNE	5	6	9	57	43	-
	St. Michael's 2pm	-	-	-	-	-	30.19	-	33	30	-	SEA	2	0	3	-	-	-
	Sumburgh 2pm	-	-	-	-	-	30.01	-	42	41	-	SEA	1	7	3	-	-	-
	Stornoway 2pm	-	-	-	-	-	30.01	-	51	51	-	W	3	7	3	-	-	-
	Aberdeen 2pm	-	-	-	-	-	30.10	-	46	45	-	SEA	2	07m	3	-	-	-
	Shields 2pm	-	-	-	-	-	30.21	-	45	44	-	SW	2	7	2	-	-	-
	Ardrrossan 2pm	-	-	-	-	-	30.22	-	47	47	-	SW	3	7	2	-	-	-
	Main 2pm	-	-	-	-	-	30.19	-	48	48	-	WSW	5	0	3	-	-	-
	Mullaghmore 2pm	-	-	-	-	-	30.30	-	50	49	-	SW	5	0m	4	-	-	-
	Belmullet 2pm	-	-	-	-	-	30.31	-	50	50	-	SW	5	0d	4	-	-	-
	Holyhead 2pm	-	-	-	-	-	30.37	-	46	46	-	WSW	2	0m	2	-	-	-
	Valencia 2pm	-	-	-	-	-	30.45	-	53	51	-	SW	5	cm	5	-	-	-
	Scilly 2pm	-	-	-	-	-	30.49	-	50	48	-	WNW	5	0	4	-	-	-
	Jersey 2pm	-	-	-	-	-	30.49	-	48	44	-	NW	3	0	3	-	-	-
	Bungness 2pm	-	-	-	-	-	30.33	-	46	43	-	WNW	4	6c	3	-	-	-
	London 2pm	-	-	-	-	-	30.35	-	48	48	-	WSW	4	2	4	-	-	-
	Garmouth 2pm	-	-	-	-	-	30.24	-	44	43	-	NW	4	cm	3	-	-	-
	Rochefort 2pm	-	-	-	-	-	30.54	-	46	44	-	WNW	4	0	2	-	-	-
31	Stornoway	-	-	-	-	-	30.08	+ .08	47	47	- 1	W	3	6c	4	51	46	0.12
2. CORRECTIONS.																		
1	Mullaghmore	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.20
2	Shields	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	No rain
	Loughborough	-	-	-	-	-	-	-	-	-	-	-	-	-	-	42	-	-
	Main	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.02
3	Loughborough	-	-	-	-	-	29.77	- .45	-	-	-	-	-	-	-	-	-	-
4	Shields	-	-	-	-	-	-	-	-	-	-	-	-	-	-	24	-	-
7	Roches Point	-	-	-	-	-	-	-	38	-	- 10	-	-	-	-	-	-	0.14
8	Main Head	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Donaghadee	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	49	-
	Jersey	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	46	-
10	Sumburgh Hd	-	-	-	-	-	29.55	+ .29	-	-	-	-	-	-	-	-	-	-
	Spurn Head	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Portonmouth	-	-	-	-	-	-	-	45	41	+ 1	-	-	-	-	-	-	-
	Pravle Point	-	-	-	-	-	-	-	-	-	-	-	-	-	-	52	-	-
12	London	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.15
13	Loughborough	-	-	-	-	-	30.06	-	-	44	-	-	-	-	-	-	-	-
14	Holyhead	-	-	-	-	-	-	-	-	47	-	-	-	-	-	-	-	-
15	Jersey	-	-	-	-	-	30.59	-	-	-	-	-	-	-	-	-	-	-
	Penbrooke	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	47	-
	Valencia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.17
	Pravle Point	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.08
	Jersey	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01
18	Bungness	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	No rain
	Mullaghmore	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.32
	Donaghadee	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01
20	Ardrrossan	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.90
21	Scilly	-	-	-	-	-	-	-	-	-	-	-	-	-	-	50	-	-
	Main	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Mullaghmore	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Hurst Castle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	Portonmouth	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	45	-
28	Roches Point	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.13
	Jersey	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.02
	Cambridge	-	-	-	-	-	29.88	- .15	-	-	-	-	-	-	-	-	-	-
29	Valencia	-	-	-	-	-	-	-	-	32	-	-	-	-	-	-	-	0.03
	Jersey	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.76
	Sumburgh Hd 2pm	-	-	-	-	-	30.08	-	-	-	-	-	-	-	-	-	-	-
31	Mullaghmore 2pm	-	-	-	-	-	30.42	-	-	-	-	-	-	-	-	-	-	-
	Ardrrossan	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Roches Point	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-