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LONDON.

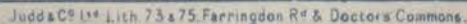
DAILY WEATHER REPORTS.

1ST JULY — 31ST DECEMBER,
1889.

See Reg. Lond.

July to December 1889.

July to December 1889.



DAILY WEATHER REPORT.

for *Tuesday, 1st October, 1889.*
Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.

STATIONS.		YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
		Barometer at 32° F. and Sea Level.	Temp. in Shade.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Sea. (0 to 5.)	SHADE TEMP.		Amount of Rainfall.		
				Dirce.	Force. (0 to 12.)		Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Dirce.	Force. (0 to 12.)		Max.	Min.			
SCANDINAVIA.	Haparanda ...	29.95	45	sw	2	b	30.15	+ .58	36	35	- 11	2	0	bc	*	?	?	-	
	Hernösand ...	30.01	45	sw	0	bc	30.13	+ .42	43	42	- 3	NNE	2	0	*	55	43	-	
	Stockholm ...	29.91	51	SE	2	bc	29.91	+ .32	48	47	- 1	N	4	0	*	54	46	-	
	Wisby ...	29.81	50	E	1	0	29.82	+ .10	51	50	+ 2	N	4	0	*	57	43	0.08	
	Bodö ...	29.97	44	sw	0	0	30.19	+ .56	41	39	- 2	SE	1	b	0	46	37	-	
	Christiansund	29.95	48	ENE	3	r	30.12	+ .43	43	42	- 1	E	1	b	3	48	41	-	
	Skudesnaes ...	29.83	51	NW	4	c	30.00	+ .40	50	46	+ 1	NNE	2	b	2	?	46	-	
	Christiania Fjord (Færdor)	29.84	51	NE	4	c	30.01	+ .37	49	48	+ 1	NNE	5	0	3	52	48	-	
	Skagen (The Scaw)	29.77	51	SE	3	0	29.93	+ .36	51	50	+ 2	ESE	1	0	1	55	43	0.08	
	Fanö ...	29.68	48	ENE	4	bc	29.76	+ .27	49	49	0	ENE	4	bc	*	57	46	-	
BRITISH ISLANDS.	Sumburgh Head	29.94	46	N	1	c	30.09	+ .85	47	45	+ 2	N	1	c	4	50	42	0.02	
	Stornoway ...	30.06	46	N	4	0	30.16	+ .27	46	46	- 2	NE	3	0	3	49	38	0.02	
	Wick ...	30.00	45	NE	2	bc	30.15	+ .32	49	47	+ 2	NE	2	bc	1	52	40	-	
	Nairn ...	30.00	48	NW	3	0	30.13	+ .33	48	45	+ 2	NW	2	c	3	51	44	0.01	
	Aberdeen ...	29.95	47	N	3	c	30.16	+ .34	49	46	+ 2	NW	2	bc	4	51	42	0.04	
	Leith ...	29.94	48	NE	4	c	30.11	+ .34	46	43	- 4	NW	1	c	*	55	42	-	
	Shields ...	29.84	50	NNE	3	p	30.01	+ .38	49	48	- 1	N	3	c	5	52	49	0.01	
	Spurn Head ...	29.74	51	NNE	6	bc	29.91	+ .38	53	51	+ 4	NNE	5	c	4	54	48	0.06	
	York ...	29.60	50	N	1	b	29.98	+ .30	51	48	+ 1	N	1	bc	*	53	45	0.02	
	Loughborough	29.79	49	N	3	c	29.97	+ .27	49	48	0	NW	3	0	*	53	45	0.03	
BRITISH ISLANDS.	Ardrossan ...	29.95	?	NNE	2	c	30.11	+ .30	49	45	- 4	sw	0	b	0	58	48	-	
	Malin Head ...	30.00	50	N	5	0	30.13	+ .21	49	45	- 4	N	2	0	2	54	48	-	
	Mullaghmore ...	30.03	53	NNE	6	c	30.14	+ .18	50	47	- 3	N	4	0	2	58	48	-	
	Belmullet ...	30.07	53	N	4	0	30.16	+ .14	50	48	- 5	E	2	0	*	56	47	0.02	
	Donaghadee ...	29.94	54	ENE	4	c	30.12	+ .28	51	49	- 3	NE	4	b	2	56	50	-	
	Barrow-in-Furness	29.85	51	NNE	2	bc	30.02	+ .32	47	45	- 6	NNE	2	bc	*	50	46	-	
	Liverpool (Bidston)	29.87	51	NNE	2	c	30.04	+ .31	49	46	- 4	NNE	3	bc	3	53	46	-	
	Holyhead ...	29.89	53	NNE	5	c	30.07	+ .29	52	45	- 2	NE	4	c	4	53	50	-	
	Parsonstown ...	29.98	54	NW	1	c	30.14	+ .20	44	43	- 9	sw	0	c	*	50	39	-	
	Valencia ...	30.05	56	NW	3	c	30.14	+ .09	52	48	- 4	NE	2	c	3	59	47	-	
BRITISH ISLANDS.	Roche's Point...	29.94	57	N	5	b	30.11	+ .18	48	44	- 7	NW	3	b	3	61	44	-	
	Pembroke (St. Ann's Hd.)	29.87	54	NNE	4	bc	30.03	+ .22	51	49	- 2	NNE	2	b	2	57	46	0.01	
	Scilly ...	29.87	56	N	6	c	30.01	+ .12	55	51	0	NE	4	c	4	58	52	-	
	Prawle Point ...	29.78	52	NNE	4	bc	29.96	+ .15	54	49	+ 2	N	4	bc	2	62	43	0.02	
	Jersey (St. Aubin's)	29.67	58	NW	4	op	29.91	+ .08	53	50	- 2	N	4	op	3	61	51	0.15	
	Hurst Castle ...	29.70	53	NNE	6	c	29.90	+ .17	51	50	- 1	NNE	4	m	2	60	46	0.01	
	Dungeness ...	29.62	49	NW	4	r	29.81	+ .14	51	49	+ 4	N	4	c	3	58	44	0.21	
	London ...	29.67	50	N	3	r	29.86	+ .16	51	49	+ 4	N	3	0	*	58	46	0.06	
	Oxford ...	29.81	46	N	3	b	29.94	+ .24	50	48	+ 2	NW	3	0	*	56	45	0.09	
	Cambridge ...	29.72	50	N	2	r	29.91	+ .24	50	48	+ 1	N	2	r	*	55	44	0.16	
GERMANY.	Yarmouth ...	29.66	50	NE	4	c	29.82	+ .19	52	50	+ 6	N	4	bc	4	52	45	0.15	
	Cuxhaven ...	29.61	51	NE	2	c	29.76	+ .27	51	50	- 1	E	2	1	*	53	50	-	
	Berlin ...	29.74	52	S	2	0	29.77	+ .17	48	47	0	E	3	0	*	57	46	0.04	
	Wiesbaden ...	*	*	*	*	*	29.73	+ .09	47	46	- 1	sw	0	0	*	52	43	0.04	
	Munich ...	29.69	44	SE	1	0	29.68	- .05	48	42	- 1	W	3	r	*	52	41	0.12	
FRANCE AND NETHERLANDS.	The Helder ...	29.65	51	N	1	b	29.78	+ .23	51	49	+ 1	N	1	c	1	52	43	0.16	
	Brussels (9 a.m.)	*	*	*	*	*	29.80	+ .18	46	46	- 2	W	1	1	*	51	46	0.39	
	Cape Gris Nez	?	50	NE	2	0	?	?	50	48	0	ENE	1	c	2	57	48	0.63	
	Paris ...	29.63	47	SE	1	0	29.80	+ .04	46	45	- 2	N	1	0	*	52	42	0.28	
	Brest ...	?	58	NW	5	bc	?	?	50	46	- 5	NNE	2	b	1	63	46	-	
FRANCE AND NETHERLANDS.	Lorient ...	29.74	57	NW	5	0	29.90	- .01	51	49	- 3	NW	4	bc	4	54	50	-	
	Rochefort ...	29.75	57	NW	6	r	29.89	- .06	50	?	- 4	NW	6	bc	2	61	45	0.20	
	Belfort ...	29.65	45	NW	1	0	29.75	- .01	43	38	- 3	NW	1	0	*	52	40	0.12	
	Lyons ...	29.74	46	NW	2	r	29.72	- .15	42	41	- 3	W	1	1	*	53	41	-	
	Nice ...	29.56	50	NE	5	bc	29.60	+ .04	49	45	- 4	E	3	bc	2	66	43	0.35	
FRANCE AND NETHERLANDS.	Perpignan ...	29.76	58	NW	3	0	29.65	- .14	55	50	- 1	W	3	bc	*	63	48	0.20	
	Biarritz ...	29.87	60	NW	6	0	29.82	- .11	59	53	+ 7	N	7	r	4	61	52	0.43	
PENIN. SULA.	Coruana ...	*	*	*	*	*	30.00	+ .08	57	54	- 1	N	4	b	?	68	55	-	
	Lisbon ...	29.97	59	NW	6	b	30.00	+ .08	57	54	- 1	N	4	b	?	68	55	-	

For Explanation of Columns, see bottom of p 4.

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

WEATHER CHARTS

for 8 a.m. on Tuesday, 1st October.

1889.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP

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

Changes since previous morning are stated in words.

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

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

→ = forces 5 to 7; → = forces 1 to 4.

⊙ = dead calm.

SEA DISTURBANCE—Where considerable, is shown thus:

☼ = Rough. ☼ = High.

MEAN HEIGHT OF THE BAROMETER

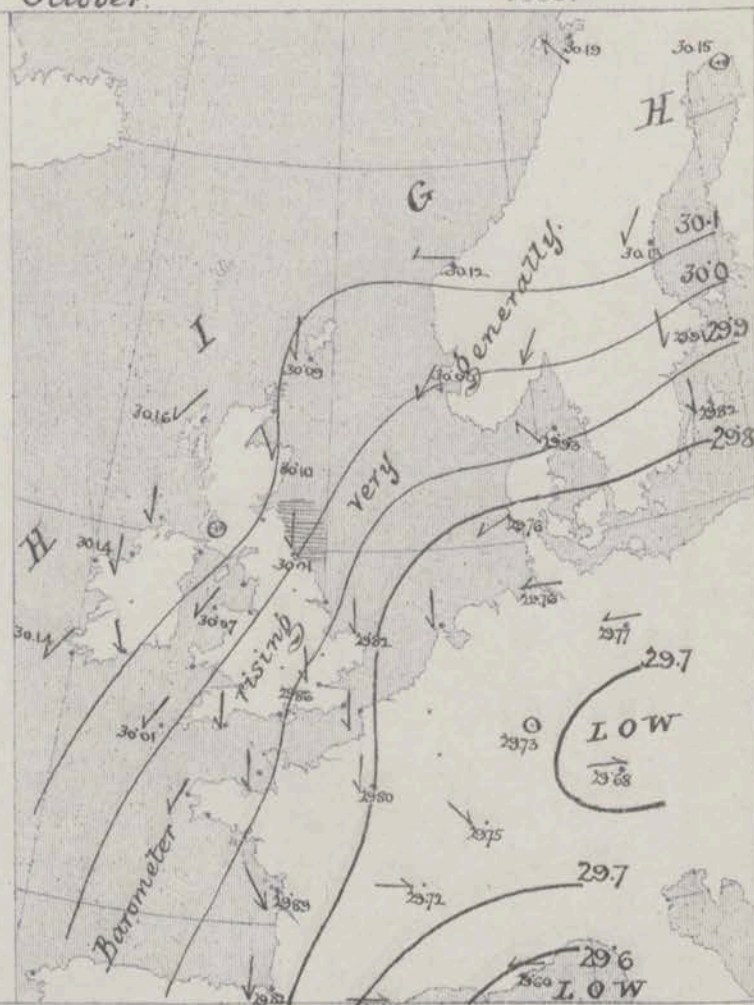
at 8.0 a.m. for the month of October.

During the 15 Years: 1871—1885.

STATIONS.

MEAN READINGS.

STATIONS.	MEAN READINGS.
Sunburgh Head	29.708
Stornoway	29.735
Wick	29.745
Nairn	29.761
Aberdeen	29.774
Leith	29.804
Shields	29.835
York	29.872
Loughborough	29.891
Ardrossan	29.813
Donaghadee	29.832
Holyhead	29.853
Liverpool	29.864
Parsonstown	29.881
Valencia	29.873
Roche's Point	29.870
Pembroke	29.868
Scilly	29.804
Jersey	29.904
Hurst Castle	29.907
Dover	29.909
LONDON	29.911
Oxford	29.910
Cambridge	29.909
Yarmouth	29.886



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.

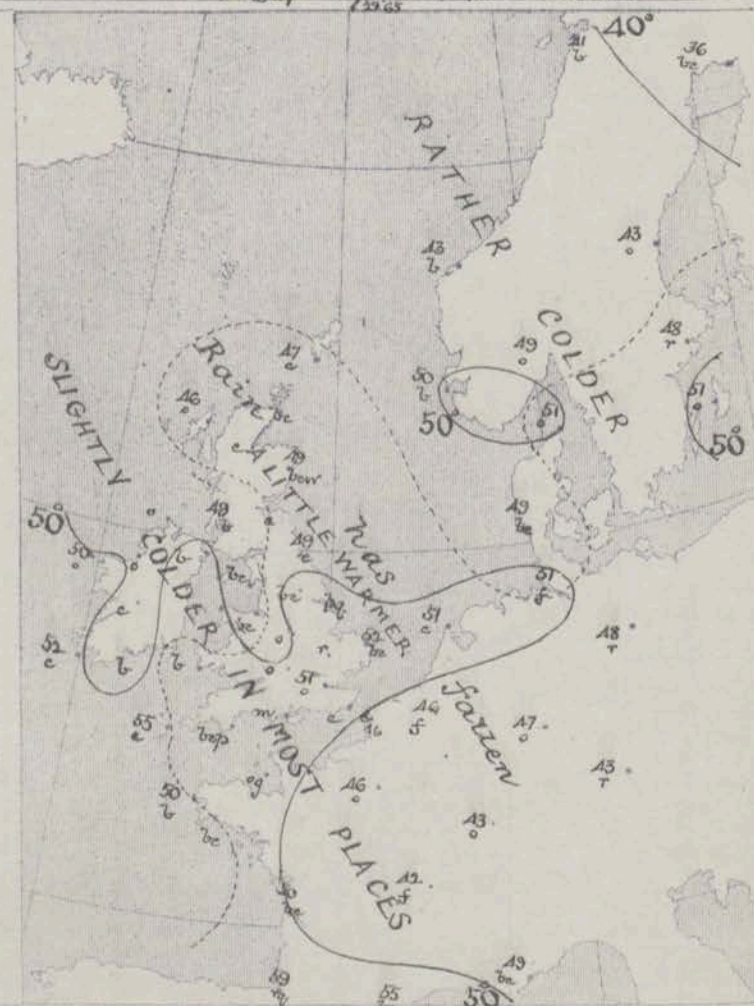
RAINFALL—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of October.)

STATIONS.	TEMPERATURE.				RAINFALL (Inches.)
	Daily Max.	Daily Min.	At 8 a.m.	At 8 a.m.	
			Dry.	Wet.	
Sunburgh Head	49.7	41.6	46.0	44.3	4.33
Stornoway	50.5	39.5	45.3	44.1	4.94
Wick	51.0	40.1	46.1	44.3	2.94
Nairn	51.6	40.6	44.5	42.5	2.38
Aberdeen	52.3	41.0	46.5	43.5	3.88
Leith	54.7	41.5	46.5	44.7	1.94
Shields	53.0	42.8	47.1	45.4	2.46
York	54.8	41.0	45.0	44.5	2.64
Loughborough	55.3	41.4	46.4	45.0	2.98
Ardrossan	53.5	43.6	47.6	45.6	4.31
Donaghadee	53.2	43.3	47.7	46.5	3.35
Holyhead	51.5	47.0	50.2	48.2	4.63
Liverpool	53.6	44.6	47.8	46.8	3.02
Parsonstown	54.7	41.1	46.4	44.7	3.27
Valencia	56.6	46.5	51.3	49.1	6.09
Roche's Point	55.8	45.9	50.2	48.4	4.17
Pembroke	54.8	48.0	51.2	49.1	4.13
Scilly	50.6	50.3	53.8	51.7	3.84
Jersey	58.1	49.2	53.6	51.1	4.34
Hurst Castle	57.1	46.0	51.4	49.6	3.24
Dover	55.8	47.0	50.7	48.7	3.28
LONDON	56.6	48.2	48.0	46.4	2.74
Oxford	55.3	42.5	46.7	45.0	2.72
Cambridge	56.4	41.2	46.4	43.4	2.36
Yarmouth	54.3	44.8	49.2	47.9	2.97

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



GENERAL SITUATION AT 8 A.M.

PRESSURE	Highest, 30.1 in. and upwards, in a large anticyclone lying over Ireland, Scotland, the north of Scandinavia, and the adjacent parts of the Atlantic. Lowest, 29.6 in. at Aix, 29.7 in. and less, in a shallow depression lying over South Germany.
TEMPERATURE	Gradients slight generally. Barometer rising in all localities excepting the southern part of France and Germany. Highest, 59° at Biarritz, 57° at Brest, 55° at Bielefeld and Leipzig, 54° at Havre, and 53° at Spitzbergen and Jurey. Lowest, 36° at Haparanda, 41° at Rode, 42° at Lyons, and 43° at Helsingfors, Christiansund, Belfast and Munich. The maxima registered over our islands yesterday were below 60° at all but our southernmost stations, and below 55° in the north, and east of Great Britain.
WIND	Chiefly N th or NE th , and light or moderate in force, but strong in the west of France. Over South Germany and the east and south of France light variable breezes are reported.
WEATHER	Fair generally, but showery in the east and south of England, and raining at some of the Swedish and German stations. Showers fell yesterday in nearly all parts of Great Britain and heavy rain in some parts of France.
SEA	Rather rough at Shields, but moderate or slight elsewhere.



PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The barometer appears to be rising steadily in most places, and moderate breezes from the Nth or NEth are likely to continue for a time. The slight irregularities in pressure which exist over France and Germany will probably occasion a continuance of showery weather at our eastern and southern stations, but a gradual improvement is likely even in those districts.

FORECASTS

For the 24 hours ending at NOON on 2nd OCT^r 1889.

DISTRICTS.	FORECASTS.	DISTRICTS.	FORECASTS
0 { SCOTLAND NORTH	N th and NE th winds, light; fair generally	6 { SCOTLAND WEST	Same as Nos 0 and 1.
1 { SCOTLAND EAST		7 { ENGLAND N.W.	NE th winds, moderate; fair generally.
2 { ENGLAND N.E.	N th and NE th winds, moderate or fresh; changeable, some showers.	8 { ENGLAND S.W.	Same as No 5.
3 { ENGLAND EAST		9 { IRELAND NORTH	Same as No 7.
4 { MIDLAND COUNTIES		0 { IRELAND SOUTH	
5 { ENGLAND SOUTH		WARNINGS	NONE ISSUED.

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

YESTERDAY'S 2 P.M. REPORTS.

	Bar:	Ther:		Wind		Wea:	Sea		Bar:	Ther:		Wind		Wea:	Sea
		D	W	D	F					D	W	D	F		
Skudesnaes ...	29.78	62	53	24	0	bc	2	Holyhead ...	29.83	54	50	4	6	bc.g	6
Sumburgh Head ...	29.87	48	46	11	2	c	4	Valencia ...	30.04	53	55	11W	4	cm	4
Stornoway ...	29.99	48	48	11E	4	r	4	Scilly ...	29.84	57	54	11W	7	0	5
Aberdeen ...	29.86	51	48	11	4	bc.g	5	Jersey ...	29.70	58	56	11W	3	c	3
Shields ...	29.76	50	50	11W	4	r	6	Dungeness ...	29.59	54	49	11	3	0	3
Ardrossan ...	29.88	56	49	11E	3	b	2	London ...	29.65	52	49	11W	4	07	4
Malin Head ...	29.94	53	48	11W	6	bc	4	Yarmouth ...	29.59	57	50	11W	3	c	3
Mullaghmore ...	30.00	57	53	11W	5	b	3	Rocheport ...	29.90	59	54	11W	3	0	2
Behnullet ...	30.06	55	54	11	3	0p	3								

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

The reports for yesterday morning showed that pressure had decreased a little in our Islands, increased considerably over Russia, and that readings ranged from between 30.0 ins. and 30.2 ins. in the latter region, and from 30.0 ins. and more, in the extreme western part of Ireland and the northwest of Spain to 29.5 ins. and less, in a depression lying over Moldavia, and to 29.6 ins. and less, in another disturbance over the Gulf of Genoa and north of Italy. The winds over western Europe were NW^{ly} to NE^{ly} in direction, and over the British Islands they were moderate to strong in force; over Russia, Poland and the Baltic, on the contrary, they were S^{ly}, and in Scandinavia SE^{ly}. The weather was clear and bright over Russia, cloudy and unsettled elsewhere, with rain at times in many localities, especially over the British Islands, Austria and eastern Germany. Temperature had fallen over Russia, but was rising in Austria and Poland, while in the British Islands the changes were slight and irregular. The highest morning values were 73° at Malta and Spoo, 72° at Brindisi and La Halle, 71° at Palma, and 70° at Oren, in all other places they were much below 70°, over many of the inland parts of Europe, as well as in the North, they were below 50°, and over Central Russia below 40°. The lowest morning readings were 39° at Moscow, 43° at Bodo, 44° at Nam Fahrenwasser, 45° at Sumburgh Head, 46° at Kharkov, Kiev, Belfort, Hernisand and Kairn, and 48° at Madrid, Toulon, Paris, Berlin, Kropis, and Stornoway.

REMARKS ON THE WEATHER FOR THE 24 HOURS ENDING 8 AM 29TH SEPT. 1889

The reports for yesterday morning showed that pressure varied from 30.1 ins. and more, over Spain, the Bay of Biscay and west of Ireland, and from 29.4 ins. and more over southern Russia to 29.2 ins. and less, in a depression advancing over the west of Norway from the Atlantic to 29.3 ins. and less, over the south of Sweden, and to 30.0 ins. and less, over the northern and central part of the Mediterranean. The wind was consequently NW^{ly} over the whole of the British Islands and west of France, and though moderate at the western French stations was strong in force over the British Islands generally, and blew a moderate gale on our northern and northwestern coasts; in the Netherlands and Germany the wind was W^{ly}, while on the eastern shores of the Baltic it was strong from the S^{ly}. Over South Europe it was very variable. The weather was fine over Spain and the south of France, cloudy or overcast elsewhere, squally at many northern stations and becoming very unsettled generally; rain was falling in many districts, and at which the appearance was threatening. Temperature was decreasing over the United Kingdom, though it had risen decidedly in France, Germany and the southern and central parts of Russia. The highest individual values were 78° at Spoo, 76° at Nemours, 75° at Cagliari, 73° at Malta, 71° at Brindisi, 69° at Barcelona, 67° at Langunsaire; over the greater part of the British Islands and at several of the North Sea and Baltic stations it was above 50°, as well as over central and southeastern Europe; the lowest were 46° at Leningrad and Lyons, 47° at Belfort, 48° at Hernisand, Christiansund, Skudesnaes, Stornoway and Wick, 49° at Bodo and Sumburgh Head and Kairn.

Later in the day the NW^{ly} gale spread southward down our western and eastern coasts, and temperature continued to decrease over northwestern Europe generally, with dull, squally weather, and cold rain in many places.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

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

* 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 2ND OCT^R 1889.

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

STATIONS.	YESTERDAY EVENING.						8 A.M. TO DAY.										PAST 24 HOURS.		
	Barometer at 32° F. and Sea Level.	Temp. in Shade.	WIND.			Weather.	BAROMETER.		SHADE TEMP.			WIND.			Sea. (0 to 8.)	SHADE TEMP.			
			Direc.	Force. (0 to 12.)	Reading at 32° F. and Sea Level.		Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Direc.	Force. (0 to 12.)	Weather.	Max.		Min.	Amount of Rainfall.		
SCANDINAVIA.	Haparanda ...	30.3.9	47	NNE	2	C	30.43	+2.8	41	40	+5	ENE	2	0	*	48	34	—	
	Hernösand ...	30.23	47	NNE	2	T	30.24	+1.1	48	48	+5	ENE	4	7	*	48	43	0.12	
	Stockholm ...	30.02	51	E	2	T	29.96	+0.5	53	52	+5	E	2	0	*	46	46	0.04	
	Wisby ...	29.89	53	E	4	C	29.91	+0.9	56	53	+5	SE	4	0	*	56	46	—	
	Bodö ...	30.35	41	E	0	C	30.34	+1.5	42	38	+1	ENE	4	0	2	45	37	—	
	Christiansund	30.17	44	NNE	1	C	30.07	-0.5	45	42	+2	E	4	0	3	50	41	—	
	Skudesnaes ...	30.07	50	E	0	bc	29.87	-1.3	50	46	0	NNW	4	7	3	63	48	—	
	Christiania Fjord (Færder)	29.90	50	E	5	T	29.72	-2.1	53	53	+2	E	6	7	4	53	50	0.53	
	Skagen (The Scaw)	29.80	48	NNE	4	C	29.57	-1.9	50	50	+1	E	0	0	*	57	48	0.16	
	Fanö ...	30.15	46	NNNE	1	C	30.02	-0.7	48	47	+1	NNNE	1	0	2	51	43	0.02	
BRITISH ISLANDS.	Sumburgh Head	30.16	47	NE	2	C	30.02	-1.4	50	48	+4	SE	3	C	3	51	46	—	
	Stornoway ...	30.14	46	N	2	C	30.02	-1.3	48	47	-1	NW	1	bc	1	54	44	0.02	
	Wick ...	30.14	48	E	0	C	30.04	-0.9	44	44	-4	E	0	0	1	54	38	0.03	
	Nairn ...	30.13	47	NNW	2	C	30.02	-0.8	48	44	-4	NNW	3	bcw	3	53	40	0.01	
	Aberdeen ...	30.10	47	W	2	C	30.03	-0.8	46	43	0	W	1	cm	*	56	42	—	
	Leith ...	30.04	51	N	3	C	29.97	-0.4	52	51	+3	NNNE	3	0	4	53	48	0.11	
	Shields ...	29.92	53	NNNE	6	C	29.90	-0.1	52	50	-1	NNNE	4	0	4	54	50	0.17	
	Spurn Head ...	30.02	52	N	2	bc	29.96	-0.2	50	49	-1	N	1	C	*	57	45	0.09	
	York ...	29.99	49	NNW	2	bc	29.96	-0.1	49	48	0	NNW	2	ogm	*	53	45	0.03	
	Loughborough	30.11	50	E	0	C	30.03	-0.8	46	43	-3	E	0	bc	0	58	40	—	
GERMANY.	Ardrossan ...	30.13	49	E	0	C	30.03	-1.0	47	45	-2	SE	1	ow	0	53	45	—	
	Malin Head ...	30.13	50	N	1	C	30.02	-1.2	47	45	-2	E	1	C	1	53	42	—	
	Mullaghmore ...	30.14	51	NNE	1	0	30.01	-1.5	48	45	-3	SE	2	0	*	52	47	—	
	Belmullet ...	30.11	52	NE	3	C	30.03	-0.9	47	46	-4	NNW	3	bc	1	57	45	—	
	Donaghadee ...	30.04	52	NNNE	1	bc	29.98	-0.4	50	48	+3	N	2	bc	*	57	48	—	
	Barrow-in-Furness	30.05	50	N	2	bc	30.00	-0.4	48	46	-1	NNNE	1	0	2	53	46	—	
	Liverpool (Bidston)	30.07	53	NNNE	4	bc	30.01	-0.6	54	50	+2	E	0	bcw	0	54	46	—	
	Holyhead ...	30.12	52	E	0	C	30.04	-1.0	35	34	-9	E	0	bc	*	53	34	—	
	Parsonstown ...	30.12	51	N	1	bcw	30.02	-1.2	51	48	-1	E	1	0	1	57	48	—	
	Valencia ...	30.11	53	SE	1	C	30.04	-0.7	50	48	+2	N	1	C	3	62	48	—	
FRANCE AND NETHERLANDS.	Roche's Point...	30.05	51	NNNE	3	bc	30.01	-0.2	51	47	0	NNE	2	bc	1	57	46	—	
	Pembroke (St. Ann's Hd.)	30.04	53	NNNE	4	bc	30.00	-0.1	53	50	0	NNNE	3	bc	4	57	52	—	
	Scilly ...	30.01	52	N	1	0	29.98	+0.2	53	50	+1	N	2	bc	0	57	43	—	
	Prawle Point...	29.96	54	NNW	3	ogm	29.96	+0.5	54	50	+1	NNW	2	bcw	2	56	49	0.17	
	Jersey (St. Aubin's)	29.96	56	NNNE	4	Cm	29.94	+0.4	50	49	-1	N	3	cm	2	58	45	0.01	
	Hurst Castle ...	29.87	51	NNNE	3	C	29.85	+0.4	50	48	-1	NNNE	3	C	2	56	47	—	
	Dungeness ...	29.93	52	N	3	0	29.92	+0.6	50	49	-1	N	2	og	*	57	48	0.09	
	Oxford ...	29.98	46	N	3	bc	29.95	+0.1	49	47	-1	N	2	og	*	58	45	—	
	Cambridge ...	29.92	51	N	2	C	29.91	0.0	50	49	0	N	1	C	*	56	46	0.03	
	Yarmouth ...	29.86	51	NE	4	Tog	29.86	+0.4	53	51	+1	N	3	bcv	3	53	49	0.38	
PENINSULA.	Cuxhaven ...	29.80	51	ENE	4	T	29.68	-1.0	51	50	0	SW	3	C	*	56	50	0.05	
	Berlin ...	29.68	48	NW	1	T	29.84	+0.7	46	46	-2	SW	3	0	*	52	45	0.24	
	Wiesbaden ...	29.82	44	W	1	0	29.84	+1.1	44	43	-3	NNNE	1	C	*	53	37	—	
	Munich ...	29.82	44	W	1	0	29.81	+1.3	42	42	-1	NW	2	T	*	48	3	0.24	
	The Helder ...	29.83	53	NNNE	1	C	29.78	0.0	52	50	+1	NNW	1	T	1	53	50	0.08	
	Brussels (9 a.m.)	?	54	*	*	*	29.84	+0.4	47	47	+1	WSW	1	Y	*	53	46	0.08	
	Cape Gris Nez	?	54	NE	4	0	?	?	53	51	+3	NNNE	4	C	3	57	48	0.47	
	Paris ...	29.87	48	N	1	bc	29.87	+0.7	46	45	0	SW	1	0	*	56	42	—	
	Brest ...	?	57	NNNE	1	bc	?	?	49	47	-1	NNW	1	bc	0	63	45	—	
	Lorient ...	29.97	53	N	4	C	29.96	+0.6	52	49	+1	WSW	2	C	2	57	50	—	
Rochefort ...	29.98	56	NW	4	0	30.02	+1.3	53	51	+3	NNW	3	C	2	63	46	—		
Belfort ...	29.88	48	NW	3	0	29.96	+2.4	44	42	+2	ENE	1	C	*	53	?	—		
Lyons ...	29.69	53	E	3	bc	29.71	+1.1	50	47	+1	E	4	bc	1	63	?	—		
Nice ...	29.87	53	NW	2	bc	29.92	+2.7	54	48	-1	NW	3	bc	*	63	48	—		
Perpignan ...	29.96	59	N	3	0	29.98	+1.6	56	52	-3	SW	3	0	2	63	54	0.04		
Biarritz ...	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?		
Corunna ...	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?		
Lisbon ...	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?		

For Explanation of Columns, see bottom of p 4.

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

for 8 a.m. on Wednesday, 2nd October, 1889.

EXPLANATION OF MAP



Changes since previous morning are stated in words.

$\Rightarrow \Rightarrow \Rightarrow$ forces above 10; $\Rightarrow \Rightarrow \Rightarrow$ forces 8 to 10;

$\longrightarrow =$ forces 5 to 7; $\longrightarrow =$ forces 1 to 4.

⊙ = dead calm.

SEA DISTURBANCE—Where considerable, is shown thus:

 = *Rough*,  = *High*.

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

During the 15 Years: 1871—1885.

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

WEATHER is shown by Letters of the Beaufort Scale.

RAINFALL—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0·5 in. or more, are quoted in figures.

(For the month of October.)

A hand-drawn map of the British Isles, including Great Britain and Ireland, with various handwritten annotations and isotherms. The map is drawn on a grid of latitude and longitude lines. Key features include:

- Handwritten Text:**
 - "RATHER" written vertically along the east coast of England.
 - "SLIGHTLY" written vertically along the west coast of Ireland.
 - "COLDEST" written vertically along the west coast of England.
 - "WARMER" written vertically along the east coast of England.
 - "has" written horizontally across the center of the map.
 - "RAIN" written vertically along the west coast of England.
 - "PLACES" written horizontally at the bottom of the map.
 - "Rain has fallen" written at the bottom left.
- Isotherms:**
 - A solid line labeled "50°" curves across the map, passing through the English Channel and the North Sea.
 - A dashed line labeled "40°" is located in the west of Ireland.
 - A dashed line labeled "48°" is located in the north of Scotland.
 - A dashed line labeled "52°" is located in the north of England.
 - A dashed line labeled "54°" is located in the south of England.
 - A dashed line labeled "56°" is located in the south of Scotland.
 - A dashed line labeled "58°" is located in the south of Ireland.
- Other Annotations:**
 - Various small letters and numbers are scattered across the map, including "ow", "be", "16", "15", "14", "13", "12", "11", "10", "9", "8", "7", "6", "5", "4", "3", "2", "1", "0", "1", "2", "3", "4", "5", "6", "7", "8", "9", "10", "11", "12", "13", "14", "15", "16", "17", "18", "19", "20", "21", "22", "23", "24", "25", "26", "27", "28", "29", "30", "31", "32", "33", "34", "35", "36", "37", "38", "39", "40", "41", "42", "43", "44", "45", "46", "47", "48", "49", "50", "51", "52", "53", "54", "55", "56", "57", "58", "59", "60", "61", "62", "63", "64", "65", "66", "67", "68", "69", "70", "71", "72", "73", "74", "75", "76", "77", "78", "79", "80", "81", "82", "83", "84", "85", "86", "87", "88", "89", "90", "91", "92", "93", "94", "95", "96", "97", "98", "99", "100".
 - Small circles and dots are scattered across the map, some containing numbers.

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

GENERAL SITUATION AT 8 A.M.

PRESSURE	<p>Highest, 30.4 in. and upwards, in the north of Sweden. Lowest, 29.6 in. and less, in a depression lying over Denmark. Gradient moderate over Scandinavia and Denmark, but slight elsewhere. Barometer falling briskly on the eastern shores of the North Sea and slightly in our Islands, but rising in the north of Scandinavia and the south of France.</p>
TEMPERATURE	<p>Highest, 56° at Misty and Bianchy, 55° at Billy and Poullefont, and 54° at Holyhead, Jersey, and Perpignan. Lowest, 35° at Arcachon, 41° at Haparanda, 42° at Rost and Helsingfors, and 44° at Kain, Nisbaden, and Bygones. The maxima registered over our Islands yesterday were below 55° at several of our northern stations.</p>
WIND	<p>Variable over the greater part of Ireland and Scotland, but SE^r in the extreme west. Light from the N^o over England and the north of France, but SW^r at some of the French and German stations. Moderate from the Est in Scandinavia and the north of Denmark.</p>
WEATHER	<p>Fair over the greater part of our Islands and France as well as in the west of Norway. Rainy in the south of Scandinavia and also at the Hellesund and Helsingfors. Showers fell yesterday in most parts of Great Britain and lightning was seen at Yarmouth at night.</p>
SEA	<p>Moderate off the east of England as well as at the mouth of the Channel, but slight or smooth elsewhere.</p>

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The high-pressure system to the westward of our Islands is apparently breaking up, but a decided anticyclone is located over Lapland and Northern Europe. The depression which has appeared over Denmark in the course of the night is therefore likely to move slowly in a westerly or northwesterly direction, and to occasion freshening N^o winds on the east coast of Great Britain. The disturbance is at present of no very great intensity.

FORECASTS

For the 24 hours ending at NOON on 3rd OCT^r 1889.

DISTRICTS.	FORECASTS.	DISTRICTS.	FORECASTS
0 { SCOTLAND NORTH	N ^o winds, freshening; fair to squally and showery.	6 { SCOTLAND WEST	Variable breezes, finally N ^o ; fine to showery
1 { SCOTLAND EAST		7 { ENGLAND N.W.	N ^o winds light or moderate; fair generally.
2 { ENGLAND N.E.		8 { ENGLAND S.W.	
3 { ENGLAND EAST		9 { IRELAND NORTH	Variable breezes, finally N ^o ; fair generally.
4 { MIDLAND COUNTIES	N ^o to NW ^o winds freshening; changeable some showers	0 { IRELAND SOUTH	
5 { ENGLAND SOUTH			
		WARNINGS	NONE ISSUED.

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

YESTERDAY'S 2 P.M. REPORTS.

	Bar:	Ther:		Wind		Wea:	Sea		Bar:	Ther:		Wind		Wea:	Sea.
		D	W	D	F					D	W	D	F		
Skudesnaes ...	30.06	62	50	SE	2	c	2	Holyhead ...	30.08	54	49	NNE	4	c	4
Sumburgh Head ...	30.13	50	47	NNE	2	c	3	Valencia ...	30.14	57	51	N	2	bc m	2
Stornoway ...	30.13	52	50	NE	3	bc	3	Scilly ...	30.04	56	51	NNE	4	bc	4
Aberdeen ...	30.13	49	47	N	3	c p	4	Jersey ...	29.93	56	52	NNW	3	ogmp	3
Shields ...	30.03	54	53	NNE	3	c	5	Dungeness ...	29.84	56	52	ENE	3	c	3
Ardrossan ...	30.11	56	49	NNE	2	c	1	London ...	29.92	52	50	NNE	4	o p	*
Malin Head ...	30.14	53	50	N	1	c	1	Yarmouth ...	29.85	54	52	NNE	4	c p	4
Mullaghmore ...	30.14	52	48	N	1	o v	1	Rochefort ...	29.96	60	54	NNW	4	c	2
Belmullet ...	30.15	52	49	NE	1	o	*								

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

The reports for yesterday morning showed that pressure was still highest 30.3 in: and upwards, over Central Russia, but that a vast and very extensive area of high readings, 30.1 in: and upwards, had appeared to the westward and northward of our Islands. The lowest pressures, 29.7 in: and less, were found in a large area lying over Austria, northern Italy and the southern part of Germany and France. Light to fresh breezes from the Nnd or NEnd were reported in nearly all parts of Western and Northern Europe, but in Spain the wind drew into the NWnd, while in Italy, Austria, and the south of Russia it was light from the SEnd or Snd. In Germany the wind was somewhat variable. The weather was fair in the western parts of our Islands and Norway, as well as in Spain and Algeria, but cloudy or overcast elsewhere, with showers in the east and south of Great Britain, and rain in some parts of Central Europe. Temperature had risen at several of the Russian, German, and Austrian stations, but fallen in most other localities; readings ranged from a little above 70° in the neighbourhood of the south of Italy, and a little above 65° at several of the Mediterranean and Adriatic stations to a little below 45° over the northern parts of Russia and Scandinavia and the central part of Ireland and France and to a little below 40° in Lapland. The highest individual readings were 75° at Malta, 73° at Rindin, 72° at Sfax, 71° at Cagliari, 70° at Palermo, and 68° at Oran and Constantinople; the lowest were 36° at Haparanda, 41° at Lodi and Le Mans, 42° at Uleaborg and Lyons, 43° at Helsingfors, Christianund, and Munich, and 44° at Archangel and Plesetsk.

In the course of the day the barometer fell a little on our extreme western and northern coasts, but no material change was observed in the winds or weather.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

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

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

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

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

DAILY WEATHER REPORT.

for *Thursday, 3rd October, 1889.*
 Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.

STATIONS.	YESTERDAY EVENING.						8 A.M. TO DAY.									PAST 24 HOURS.		
	Barometer at 32° F. and Sea Level.	Temp. in Shade.	WIND.		Weather.	Barometer. Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	SHADE TEMP.			WIND.		Weather.	Sea. (0 to 8.)	SHADE TEMP.			
			Dir.	Force. (0 to 12.)				Dry.	Wet.	Difference from 8 a.m. yesterday.	Dir.	Force. (0 to 12.)			Max.	Min.	Amount of Rainfall.	
SCANDINAVIA.																		
Haparanda ...	30.44	47	20	0	0	30.35	- .08	51	50	+ 10	ESE	2	0	*	?	86	0.04	
Hernösand ...	30.21	51	NE	4	7	30.21	- .03	52	51	+ 4	20	0	0	*	52	46	0.51	
Stockholm ...	30.11	55	ESE	2	0	29.99	+ .03	56	55	+ 3	ESE	4	0	*	59	48	0.04	
Wisby ...	30.01	58	ESE	4	0	29.83	- .08	58	57	+ 2	ESE	6	0	*	61	43	-	
Bodö ...	30.18	48	ESE	6	6	30.13	- .05	55	49	+ 13	SE	4	0	2	?	?	-	
Christiansund	29.87	49	ESE	2	6	29.91	- .16	55	50	+ 10	ESE	5	0	2	56	?	-	
Skudesnaes ...	29.82	55	E	2	7	29.83	- .01	53	51	+ 3	2	0	0	3	55	48	-	
Christiania Fjord (Fierder)	29.98	54	ESE	5	0	29.85	- .13	52	51	+ 1	ESE	5	0	3	55	50	0.43	
Skagen (The Scaw)	29.93	53	SE	5	0	29.69	- .03	55	55	+ 2	ESE	4	0	4	55	50	0.04	
Fanö ...	29.80	50	ESE	4	6	29.66	+ .09	48	47	- 2	N	4	0	?	57	48	0.20	
Sumburgh Head	29.84	48	20	0	0	29.74	- .28	49	48	+ 1	NNE	1	0	2	52	45	0.08	
Stornoway ...	29.87	47	SE	3	0	29.73	- .29	42	42	- 8	NE	2	0	2	52	37	-	
Wick ...	29.87	48	NE	1	0	29.76	- .26	46	45	- 2	20	0	0	1	55	42	-	
Nairn ...	29.87	47	20	0	0	29.76	- .28	41	40	- 3	20	0	0	0	51	38	-	
Aberdeen ...	29.87	48	NNE	2	0	29.77	- .25	46	44	+ 1	NNE	1	0	3	54	44	-	
Leith ...	29.88	45	W	1	6	29.76	- .27	43	42	- 3	SE	1	0	3	54	39	-	
Shields ...	29.89	50	N	1	0	29.77	- .20	46	45	- 6	SW	1	0	3	54	45	0.01	
Spurn Head ...	29.90	51	NNE	2	0	29.79	- .11	50	48	- 2	S	3	0	3	58	47	-	
York ...	29.91	52	N	1	0	29.78	- .18	44	44	- 6	NNE	1	0	?	58	41	0.08	
Loughborough	29.93	51	W	1	0	29.81	- .15	46	46	- 3	ESE	1	0	?	56	41	0.01	
Ardrossan ...	29.88	49	20	0	6	29.73	- .30	46	45	0	ESE	2	0	1	61	40	0.04	
Malin Head ...	29.86	50	ESE	2	0	29.66	- .37	47	46	0	SE	1	0	1	54	46	0.08	
Mullaghmore ...	29.85	50	S	1	0	29.70	- .32	50	49	+ 3	NNE	4	0	6	57	46	0.27	
Belmullet ...	29.84	51	SW	2	7	29.79	- .22	53	46	+ 5	NW	4	0	?	54	47	0.40	
Donaghadee ...	29.90	50	SEW	2	0	29.70	- .33	48	48	+ 1	ESE	2	0	0	56	45	0.05	
Barrow-in-Furness	29.90	52	NW	1	6	29.74	- .24	46	45	- 4	NE	2	0	?	55	45	-	
Liverpool (Bidston)	29.93	50	NNE	1	0	29.73	- .27	46	45	- 2	SE	2	0	3	56	41	0.04	
Holyhead ...	29.93	51	20	0	0	29.70	- .31	48	48	- 6	S	1	0	2	56	48	0.32	
Parsonstown ...	29.89	50	20	0	0	29.81	- .23	47	45	+ 12	NNE	1	0	?	53	34	0.18	
Valencia ...	29.93	54	NW	5	0	29.94	- .08	50	49	- 1	NW	3	0	4	54	43	0.32	
Roche's Point...	29.92	53	SW	2	7	29.88	- .16	49	46	- 1	W	4	0	4	58	46	0.20	
Pembroke (St. Ann's Hd.)	29.95	53	W	1	0	29.81	- .20	51	49	0	NNE	6	0	5	56	50	0.12	
Scilly ...	29.96	54	SW	3	0	29.93	- .07	55	51	0	NNE	6	0	5	59	51	0.12	
Prawle Point ...	29.98	53	S	2	0	29.87	- .11	52	49	- 3	W	4	0	2	60	49	0.06	
Jersey (St. Aubin's)	29.98	55	NW	3	0	29.91	- .05	56	53	+ 2	SW	4	0	3	59	44	-	
Hurst Castle ...	29.95	55	N	1	7	29.84	- .10	53	53	+ 3	SW	4	0	2	58	48	0.07	
Dungeness ...	29.91	54	NNE	2	0	29.87	+ .02	52	49	+ 2	NNE	3	0	2	58	45	0.11	
London ...	29.93	55	NNE	1	0	29.86	- .06	49	47	- 1	S	2	0	?	56	46	0.01	
Oxford ...	29.95	49	SW	1	0	29.82	- .13	47	46	- 2	S	2	0	?	50	44	0.02	
Cambridge ...	29.93	50	20	0	0	29.82	- .09	48	47	- 2	S	1	0	?	59	42	0.01	
Yarmouth ...	29.88	53	NNE	2	0	29.84	- .02	48	47	- 5	NNE	2	0	2	56	46	0.01	
Cuxhaven ...	29.76	53	SW	2	7	29.65	- .03	53	52	+ 2	NW	6	0	?	56	52	0.20	
Berlin ...	29.70	48	NW	4	7	29.84	0.00	48	48	+ 2	SE	2	0	?	56	46	0.22	
Wiesbaden ...	*	*	*	*	*	29.91	+ .07	49	47	+ 5	W	3	0	?	55	?	-	
Munich ...	29.89	43	SW	4	0	30.02	+ .21	45	43	+ 3	SW	5	0	?	45	41	0.35	
FRANCE AND NETHERLANDS.																		
The Helder ...	29.84	52	NW	2	6	29.82	+ .04	53	49	+ 1	NNE	2	0	3	54	50	0.08	
Brussels (9 a.m.)	*	*	*	*	*	?	?	52	49	- 1	NNE	2	0	?	59	50	0.16	
Cape Gris Nez	?	53	NE	3	0	?	?	41	41	- 5	S	3	0	?	58	38	-	
Paris ...	29.95	49	W	1	0	30.01	+ .14	41	41	- 5	N	3	0	?	61	48	0.08	
Brest ...	?	48	NNE	2	0	?	?	55	51	+ 6	N	3	0	0	?	?	-	
Lorient ...	29.99	56	NW	3	0	29.98	+ .02	55	54	+ 3	NNE	2	0	2	61	50	0.12	
Rochefort ...	30.06	58	NW	4	6	30.10	+ .08	55	49	+ 2	S	3	0	2	66	48	-	
Belfort ...	29.90	47	NW	1	0	30.03	+ .19	45	41	0	NW	1	0	?	53	42	-	
Lyons ...	30.01	49	NNE	1	0	30.12	+ .16	43	42	- 1	NW	1	0	?	56	42	0.04	
Nice ...	29.76	58	E	2	6	29.96	+ .25	50	45	0	NE	5	0	2	64	46	-	
Perpignan ...	30.01	59	N	1	0	30.12	+ .20	46	45	- 8	SW	1	0	?	64	43	-	
Biarritz ...	30.04	61	NNE	3	0	30.10	+ .12	57	52	+ 1	SW	3	0	2	63	54	0.08	
PENIN. SULA.																		
Corunna ...	*	*	*	*	*	?	?	?	?	?	?	?	?	?	?	?	-	
Lisbon ...	29.99	60	NNE	4	6	30.02	+ .03	58	55	0	NNE	4	0	2	72	55	-	

For Explanation of Columns, see bottom of p 4.

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

WEATHER CHARTS

for 8 a.m. on

Thursday, 3rd October.

1889.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP

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

Changes since previous morning are stated in words.

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

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

→ = forces 5 to 7; → = forces 1 to 4.

☉ = dead calm.

SEA DISTURBANCE—Where considerable, is shown thus:

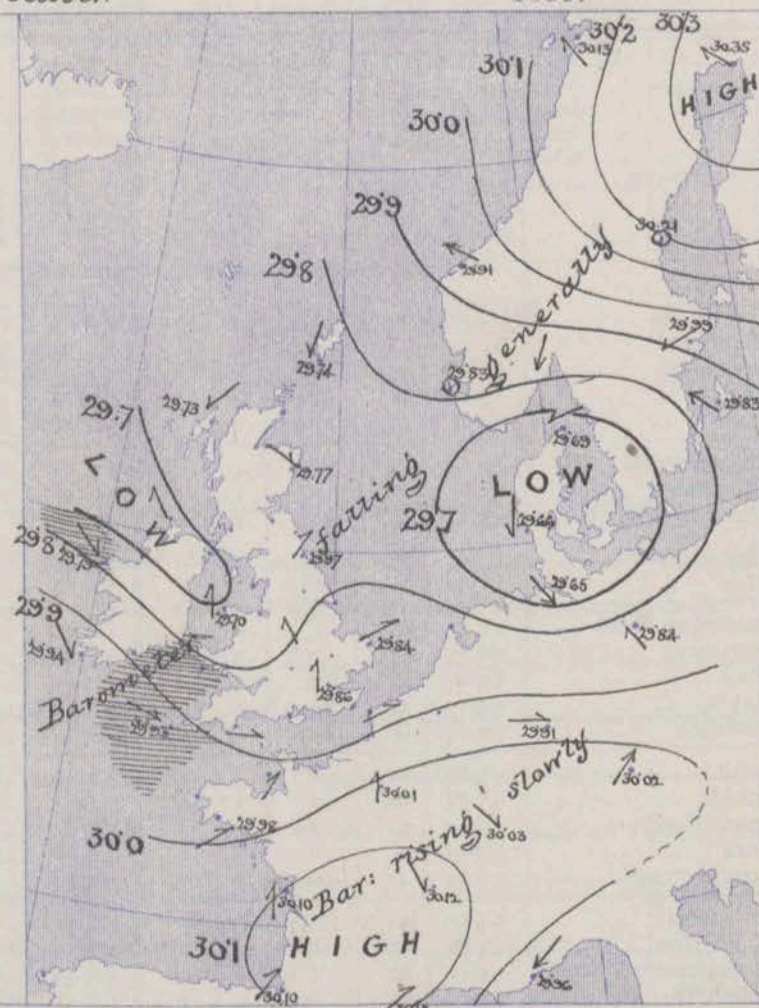
☼ = Rough. ☼ = High.

MEAN HEIGHT OF THE BAROMETER

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

During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS.
Sumburgh Head	29.708
Stornoway	29.735
Wick	29.745
Nairn	29.761
Aberdeen	29.774
Leith	29.804
Shields	29.835
York	29.872
Loughborough	29.891
Ardrossan	29.813
Donaghadee	29.832
Holyhead	29.853
Liverpool	29.864
Parsonstown	29.881
Valencia	29.873
Roche's Point	29.870
Pembroke	29.868
Scilly	29.894
Jersey	29.904
Hurst Castle	29.907
Dover	29.909
LONDON	29.911
Oxford	29.910
Cambridge	29.900
Yarmouth	29.886



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.

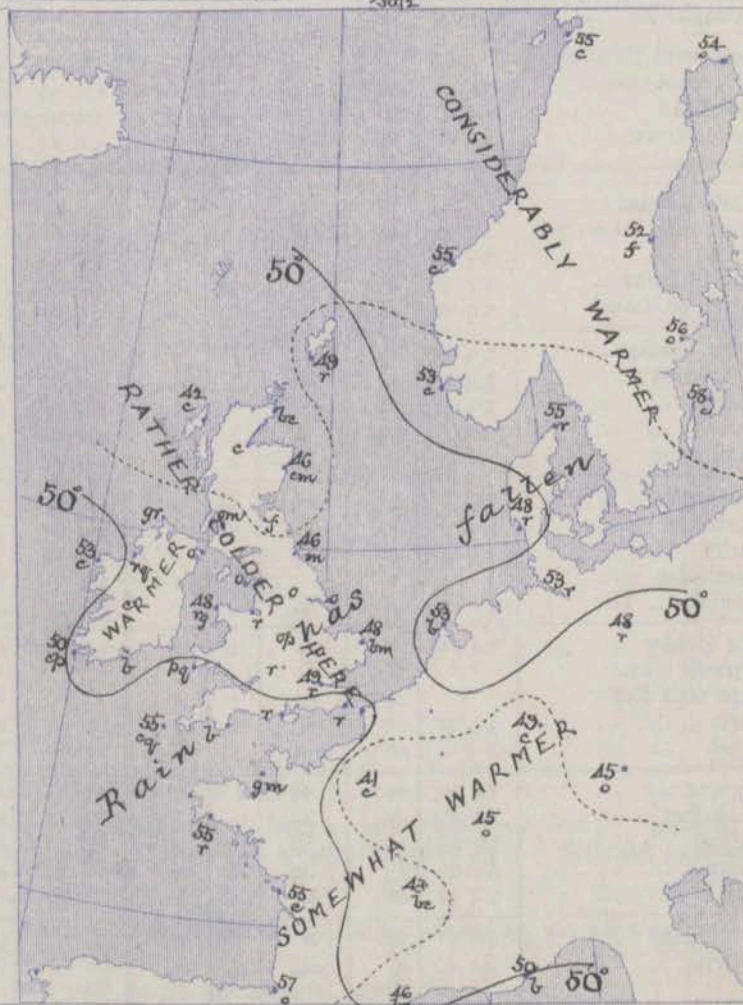
RAINFALL—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of October.)

STATIONS.	TEMPERATURE.				RAINFALL (Inches.)
	Daily Max.	Daily Min.	at 8 a.m.		
			Dry.	Wet.	
Sumburgh Head.....	49.7	41.6	46.0	44.3	4.33
Stornoway	50.5	39.5	45.3	44.1	4.94
Wick	51.6	40.1	46.1	44.3	2.94
Nairn	51.6	40.6	44.5	42.5	2.38
Aberdeen	52.3	41.0	45.5	43.5	2.88
Leith.....	54.7	41.5	46.5	44.7	1.94
Shields	53.0	42.8	47.1	45.4	2.46
York	54.8	41.0	45.9	44.5	2.64
Loughborough	55.3	41.4	46.4	45.0	2.98
Ardrossan	53.5	43.6	47.6	45.6	4.31
Donaghadee.....	53.2	43.3	47.7	46.5	3.35
Holyhead.....	54.5	47.0	50.2	48.2	4.53
Liverpool	53.6	44.6	47.8	46.8	3.62
Parsonstown	54.7	41.1	46.4	44.7	3.27
Valencia	56.6	46.5	51.3	49.1	6.09
Roche's Point	55.8	45.9	50.2	48.4	4.17
Pembroke.....	54.8	48.0	51.2	49.1	4.13
Scilly	56.6	50.3	53.8	51.7	3.84
Jersey	58.1	49.2	53.6	51.1	4.31
Hurst Castle	57.1	46.0	51.4	49.6	3.24
Dover	55.8	47.0	50.7	48.7	3.28
LONDON	56.6	43.2	48.0	46.4	2.74
Oxford	55.3	42.5	46.7	45.3	2.72
Cambridge	56.4	41.2	46.4	45.4	2.36
Yarmouth	54.3	44.8	49.2	47.9	2.97

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



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30.3 ins. and upwards, over the north of Sweden, 30.1 ins. and upwards over the south of France.
 Lowest, 29.7 ins. and less, in a depression lying over Denmark, and also in a V-shaped disturbance lying over the extreme northwest of our islands.
 Gradients moderate over Scandinavia and the southwest of our islands, but slight elsewhere.
 Barometer falling at all but the French and German stations, — most in the northern parts of our islands.

TEMPERATURE

Highest, 58° at Leeds and Falmouth, 57° at Birmmgham, 56° at Stockholm and Jassy, and 55° at Copenhagen, Christiania, Riga, Odessa, and Rostoff.
 Lowest, 41° at Kain and Paris, 42° at Stomora, 43° at Leth and Tjorn, 44° at York, and 45° at Munich.
 The maxima registered over our islands yesterday, were below 60° at all stations excepting Ardara, where the thermometer rose to 61°.

WIND

Variable in Scotland, but moderate to strong from the West or N.W. in the extreme west and southwest of our islands.
 Light from the S.W. or S. over the east and southeast of England and the greater part of France.
 Moderate or fresh from the E. or S.E. in Scandinavia; N.W. in the south of Denmark.

WEATHER

Rainy in several parts of the United Kingdom as well as in Denmark and North Germany.
 Cloudy in most other localities, but fine in Scotland and the south of France.
 Moderate or fresh from the E. or S.E. in Scandinavia; N.W. in the south of Denmark.

SEA

Rough at Mullaghmore, and rather rough off the southwest of England, but moderate to smooth elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The depression over our northwest coast is likely to move slowly eastward, and severe winds are therefore probable over the eastern parts of England. The existence of two high-pressure areas, — one over northern, the other over Southern Europe, is, however, favourable for the constant formation of depressions in the intervening regions, and the weather is likely to remain very unsettled in all parts of the Kingdom.

FORECASTS

For the 24 hours ending at NOON on 4TH OCTOBER 1889.

DISTRICTS.

FORECASTS.

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

Light variable breezes; changeable, rain at times.

S^W to W^W winds, light or moderate; changeable, some showers.

DISTRICTS.

FORECASTS



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

Variable breezes, finally NW^W; changeable, rain at times.

W^W and NW^W winds, backing later; changeable, some rain.

WARNINGS

NONE ISSUED.

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

YESTERDAY'S 2 P.M. REPORTS.

	Bar.	Ther.		Wind		Wea.	Sea		Bar.	Ther.		Wind		Wea.	Sea.
		D	W	D	F					D	W	D	F		
Skudesnaes ...	29.77	55	41	20	0	P	2	Holyhead ...	29.96	54	50	NNE	1	b	1
Sumburgh Head ...	29.84	51	47	NNE	2	c	3	Valencia ...	29.95	53	51	S	3	pm	3
Stornoway ...	29.92	51	49	SE	3	0	3	Scilly ...	29.93	57	52	W	2	c	4
Aberdeen ...	29.91	53	46	NW	2	bc	3	Jersey ...	29.97	57	57	NW	3	bc	3
Shields ...	29.90	54	52	N	3	c	4	Dungeness ...	29.87	58	51	NNE	2	c	2
Ardrossan ...	29.93	60	55	20	0	b	0	London ...	29.92	55	50	NW	3	c	3
Malin Head ...	29.92	53	49	NW	1	c	0	Yarmouth ...	29.87	55	52	NW	3	bc	3
Mullaghmore ...	29.91	53	48	SSW	2	sm	1	Rochefort ...	30.06	64	55	NW	3	bc	2
Belmullet ...	29.91	53	48	S	2	0	*								

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

The reports for yesterday morning showed that pressure was highest, 30.4 in. and upwards, in a large anticyclone lying over Lapland and the northern and central part of Russia, but high, 30.1 in. and upwards, in a smaller system lying over the north of Spain. The lowest readings, 29.6 in. and less, were found in two small depressions, one lying over Central Denmark, and the other over the southwest of Austria. The wind was light or moderate from the E. over Russia and Scandinavia, and light from the SE. in the extreme west of the United Kingdom. Over Great Britain and France, however, NW or N breezes were general, and in Italy, SW breezes, while over Central Europe, Spain and Algeria the wind was variable. The weather was fine in the west of Norway, and the west and north of Great Britain, as well as at the Spanish, Algerian, and Mediterranean stations. Elsewhere, however, the sky was mostly overcast with fog over Southern and Southwestern Russia, and rain in many parts of Central Europe. Temperature had risen a little in the more northern and fallen in the more central countries, but elsewhere the changes were very irregular; readings ranged from between 65° and 75° over the eastern and southern parts of the Mediterranean to 45° or less, over the north of Scandinavia, the east of Scotland, and some parts of France and Germany and to below 40° over Central Ireland. The highest individual readings were 75° at Malta, 72° at Brindisi, 70° at Constantinople, 69° at Palermo, 68° at Oran, Algiers, Laballe and Sfax, and 67° at Legh; the lowest were 35° at Banarman, 41° at Haparanda, 42° at Rode and Alumnich, and 44° at Krim, Berlin, Wiesbaden and Lyons.

In the course of the day the barometer fell somewhat decidedly in the extreme west of our Islands, and a shallow depression advanced to our northwest coast. S. winds and rain consequently set in at several of our western stations, but in the east the weather remained fair.

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, 4th October,* 1889.
 Issued by the Meteorological Office, 63, Victoria Street, London. *R. H. SCOTT, Secretary.*

STATIONS.	YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
	Barometer at 32° F. and Sea Level.	Temp. in Shade.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Sea. (0 to 9.)	SHADE TEMP.		Amount of Rainfall.		
			Dirce.	Force. (0 to 12.)		Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Dirce.	Force. (0 to 12.)		Max.	Min.			
SCANDINAVIA.	Haparanda ...	30.32	SE	2	0	30.20	-1.5	51	50	0	ESE	2	bc	*	54	45	.	
	Hernösand ...	30.14	NE	2	0	30.09	-1.2	51	51	-1	ESE	2	0	*	55	50	0.12	
	Stockholm ...	29.92	E	2	0	29.98	-0.1	54	52	-2	SSE	2	0	*	61	46	0.04	
	Wisby ...	29.87	SSE	4	0	29.97	+1.4	51	50	-7	ESE	4	0	*	59	?	0.08	
	Bodö ...	30.10	ESE	6	bc	30.01	-1.2	55	52	+3	E	4	0	2	59	50	.	
	Christiansund ...	29.81	E	3	bc	29.72	-1.9	58	55	+3	E	3	0	2	?	55	.	
	Skudesnaes ...	29.60	NNE	2	0	29.67	-1.6	55	50	+2	ESE	4	0	4	57	52	0.47	
	Christiania Fjord (Frøder)	29.73	ESE	4	0	29.82	-0.3	52	51	0	E	5	0	4	57	52	0.20	
	Skagen (The Scaw)	29.63	S	6	0	29.82	+1.3	51	50	-4	SW	3	0	3	57	50	0.08	
	Fanö ...	29.50	WSW	4	m	29.76	+1.0	50	49	+2	S	4	0	*	55	48	0.30	
BRITISH ISLANDS.	Sumburgh Head	29.73	NE	1	0	29.89	-1.5	52	52	+3	W	0	0	3	53	47	0.50	
	Stornoway ...	29.77	NE	2	0	29.67	-0.6	50	50	+8	NE	6	0	4	54	40	0.06	
	Wick ...	29.72	NW	2	0	29.56	-2.0	53	52	+7	SE	1	0	2	55	44	0.70	
	Nairn ...	29.71	W	0	0	29.56	-2.0	50	50	+9	NNE	2	0	2	54	39	0.36	
	Aberdeen ...	29.70	NW	2	0	29.49	-2.8	51	49	+5	NNE	3	0	4	54	46	0.19	
	Leith ...	29.71	SE	1	0	29.54	-2.2	47	46	+4	W	1	0	*	52	42	0.36	
	Shields ...	29.64	NE	1	m	29.55	-2.2	45	44	-1	WSW	2	0	2	52	43	.	
	Spurn Head ...	29.61	SSE	3	0	29.61	-1.8	46	45	-4	SSE	1	0	2	54	42	.	
	York ...	29.64	E	1	0	29.58	-2.0	43	42	-1	NNE	1	0	*	55	41	0.01	
	Loughborough	29.63	SW	2	0	29.57	-2.4	34	34	-12	W	1	0	*	60	32	0.02	
BRITISH ISLANDS.	Ardrossan ...	29.66	NE	3	0	29.58	-1.5	48	47	+2	WNW	2	0	1	61	40	0.08	
	Malin Head ...	29.70	NNE	4	0	29.65	-0.1	51	49	+4	N	5	0	3	51	47	0.04	
	Mullaghmore ...	29.70	N	6	org	29.70	-0.0	50	48	0	N	5	0	4	51	49	0.26	
	Belmullet ...	29.78	NNE	5	0	29.76	-0.3	51	49	-2	N	5	0	*	52	50	0.48	
	Donaghadee ...	29.65	NE	3	0	29.61	-0.9	51	49	+3	NE	5	0	3	52	47	0.07	
	Barrow-in-Furness	29.56	NNE	1	0	29.54	-2.0	47	45	+1	NNE	2	0	*	52	45	0.04	
	Liverpool (Bidston)	29.57	SSE	1	0	29.57	-1.6	47	45	+1	NE	1	0	1	53	46	0.02	
	Holyhead ...	29.57	N	2	orgm	29.58	-1.2	51	47	+3	NNE	5	0	5	53	48	1.13	
	Parsonstown ...	29.70	NW	1	0	29.70	-1.1	47	45	0	W	0	0	*	52	45	.	
	Valencia ...	29.85	WNW	4	bcp	29.78	-1.6	51	50	+1	NNE	4	0	4	57	48	0.18	
GERMANY.	Roche's Point...	29.74	NW	5	bcp	29.70	-1.8	50	48	+1	NNE	4	0	3	55	48	.	
	Pembroke (St. Ann's Hd.)	29.67	WNW	5	0	29.56	-2.5	51	48	0	NNE	5	0	4	54	48	0.27	
	Scilly ...	29.75	W	4	0	29.62	-3.1	53	51	-2	NNE	6	0	6	56	49	0.34	
	Prawle Point ...	29.73	S	6	0	29.52	-3.5	49	48	-3	NNE	3	0	2	57	45	0.18	
	Jersey (St. Aubin's)	29.83	WSW	5	bc	29.62	-2.9	52	49	-4	SW	7	0	5	60	48	0.37	
	Hurst Castle ...	29.84	W	4	qcp	29.45	-3.9	48	48	-5	ESE	1	0	2	58	45	1.15	
	Dungeness ...	29.71	W	6	qcp	29.51	-3.6	51	48	-1	S	8	0	6	58	51	0.28	
	London ...	29.71	SW	2	0	29.41	-4.5	48	47	-1	WNW	1	0	*	56	43	0.30	
	Oxford ...	29.67	W	4	0	29.53	-2.9	43	43	-4	NW	1	0	*	59	39	0.10	
	Cambridge ...	29.67	S	1	0	29.47	-3.5	46	46	-2	NE	1	0	*	54	37	0.34	
FRANCE AND NETHERLANDS.	Yarmouth ...	29.66	SEW	1	0	29.55	-2.9	51	50	+3	SSE	6	0	5	55	43	0.31	
	Cuxhaven ...	29.61	W	6	0	29.84	+1.9	47	46	-6	S	3	0	*	53	47	0.24	
	Berlin ...	29.88	SW	3	0	30.02	+1.8	44	43	-4	SSE	2	0	*	50	41	0.12	
	Wiesbaden ...	*	*	*	*	29.97	+0.6	44	46	0	SW	1	0	*	55	45	.	
	Munich ...	30.06	NW	1	0	30.08	+0.6	39	37	-6	SE	3	0	*	52	32	0.04	
	The Helder ...	29.69	SSE	1	0	29.72	-1.0	48	47	-5	S	1	0	3	55	46	0.16	
	Brussels (9 a.m.)	*	*	*	*	29.76	-1.6	50	49	+4	SWW	5	0	*	57	45	0.08	
	Cape Gris Nez	?	W	5	0	?	?	50	48	-2	SW	6	0	6	57	46	0.24	
	Paris ...	29.88	SSW	3	0	29.78	-2.3	49	48	+8	S	3	0	*	60	?	0.12	
	Brest ...	?	WSW	5	0	?	?	54	53	-1	WNW	4	0	4	61	48	0.16	
FRANCE AND NETHERLANDS.	Lorient ...	29.92	WSW	4	0	29.73	-2.5	53	47	-2	W	3	0	4	59	50	0.16	
	Rochefort ...	30.04	NW	3	0	29.89	-2.1	50	49	-5	NE	3	0	2	63	45	0.32	
	Belfort ...	29.99	NW	1	0	29.96	-0.7	39	36	-6	NW	1	0	*	55	34	.	
	Lyons ...	30.04	SSE	1	0	30.00	-1.2	46	42	+3	S	1	0	*	62	?	.	
	Nice ...	30.02	SW	3	0	30.04	+0.8	51	49	+1	NE	5	0	2	66	48	.	
	Perpignan ...	30.06	W	0	0	29.97	-1.5	53	51	+7	SW	1	0	*	71	?	.	
	Biarritz ...	30.05	W	3	0	29.90	-2.0	57	52	0	SWW	3	0	3	63	55	.	
	Corunna ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	.	
	Lisbon ...	30.04	NNE	5	0	30.05	+0.3	57	53	-1	N	5	0	4	72	55	.	

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

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

WEATHER CHARTS

for 8 a.m. on Friday, 4th October.

1889.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP.

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

Changes since previous morning are stated in words.

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

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

→ = forces 5 to 7; → = forces 1 to 4.

⊙ = dead calm.

SEA DISTURBANCE—Where considerable, is shown thus:

⊙ = Rough. ⊙ = High.

MEAN HEIGHT OF THE BAROMETER

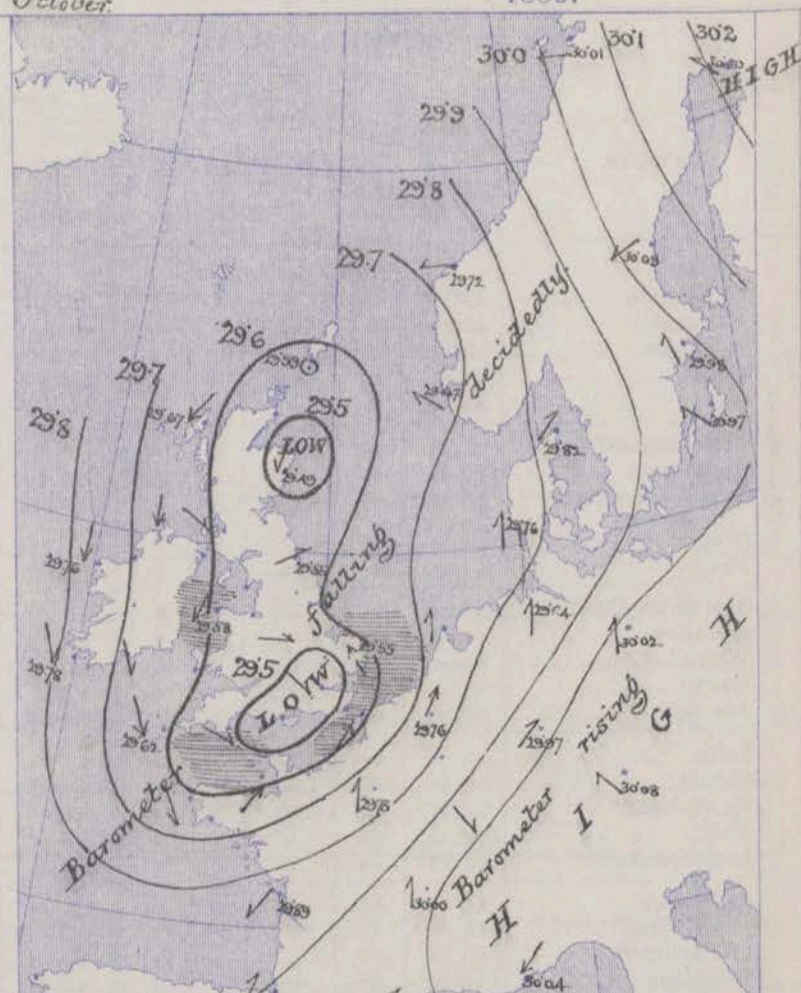
at 8.0 a.m. for the month of October.

During the 15 Years: 1871—1885.

STATIONS.

MEAN READINGS.

STATIONS.	MEAN READINGS.
Sumburgh Head	29.708
Stornoway	29.735
Wick	29.745
Nairn	29.761
Aberdeen	29.774
Leith	29.804
Shields	29.835
York	29.872
Loughborough	29.891
Ardrossan	29.813
Donaghadee	29.832
Holyhead	29.853
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Parsonstown	29.881
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Roche's Point	29.870
Pembroke	29.868
Scilly	29.891
Jersey	29.904
Hurst Castle	29.907
Dover	29.909
LONDON	29.911
Oxford	29.910
Cambridge	29.900
Yarmouth	29.886



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.

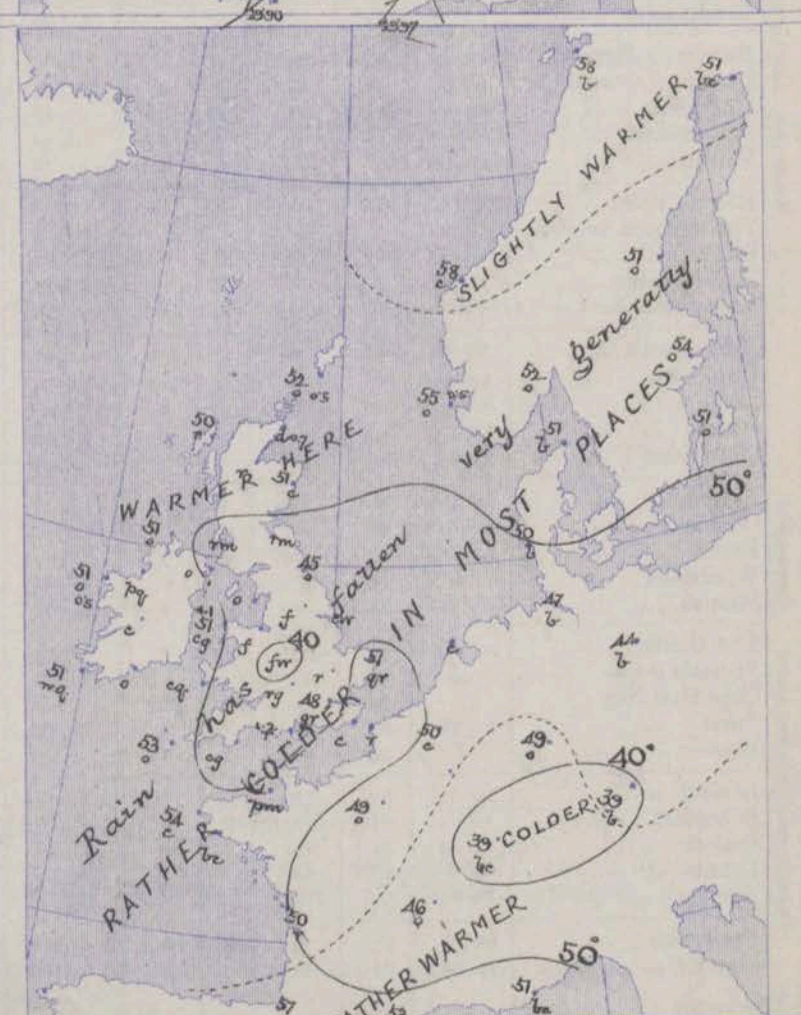
RAINFALL—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of October.)

STATIONS.	TEMPERATURE.				RAINFALL. (Inches.)
	Daily Max.	Daily Min.	at 8 a.m.		
			Dry.	Wet.	
Sumburgh Head.....	49.7	41.6	46.0	44.3	4.33
Stornoway.....	50.5	39.5	45.3	44.1	4.94
Wick.....	51.6	40.1	46.1	44.3	2.94
Nairn.....	51.6	40.6	44.5	42.5	2.38
Aberdeen.....	52.3	41.0	45.5	43.5	2.88
Leith.....	51.7	41.5	46.5	44.7	1.94
Shields.....	53.0	42.8	47.1	45.4	2.46
York.....	54.8	41.0	45.9	44.5	2.64
Loughborough.....	55.3	41.4	46.4	45.0	2.98
Ardrossan.....	53.5	43.6	47.6	45.6	4.31
Donaghadee.....	53.2	43.3	47.7	46.5	3.35
Holyhead.....	51.5	47.0	50.2	48.2	4.53
Liverpool.....	53.6	44.6	47.8	45.8	3.62
Parsonstown.....	54.7	41.1	46.4	44.7	3.27
Valencia.....	56.6	46.5	51.3	49.1	6.09
Roche's Point.....	55.8	45.9	50.2	48.4	4.17
Pembroke.....	54.8	48.0	51.2	49.1	4.13
Scilly.....	56.6	50.3	53.8	51.7	3.84
Jersey.....	58.1	49.2	53.6	51.1	4.34
Hurst Castle.....	57.1	46.0	51.4	49.6	3.24
Dover.....	55.8	47.0	50.7	48.7	3.28
LONDON.....	56.6	43.2	48.0	46.4	2.74
Oxford.....	55.3	42.5	46.7	45.3	2.72
Cambridge.....	56.4	41.2	46.4	45.4	2.36
Yarmouth.....	54.3	44.8	49.2	47.0	2.97

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



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30.20 ins. at Haparanda; 30.0 ins. and upwards over Germany and the south of France.
 Lowest, 29.5 ins. and less, in a depression lying off the east of Scotland, and also in another disturbance lying over the southeast of England.
 Gradients moderate over the Channel, the Netherlands, and north of France, but slight elsewhere.
 Barometer falling at all but the Danish and German stations;—decidedly in the eastern parts of Great Britain.

TEMPERATURE

Highest, 58° at Bodo and Christiansund, 57° at Rioniz and Rebo, 55° at Alversund, and 54° at Stockholm and Umeå.
 Lowest, 34° at Loughborough, 33° at Belfast and Munich, 43° at York and Oxford, 44° at Berlin and 45° at Shields.
 At Loughborough the sheltered thermometer fell last night to 32°.

WIND

Fresh or strong, from the N^{west} on our western coast; variable in the northeast of Great Britain.
 S^{light} over France, Germany, the Netherlands, Denmark, and the southeast of England, with a gale in the Strait of Dover.
 Light or moderate from the E^{ast} in Scandinavia.

WEATHER

Fine in Denmark, Germany, and the north of Scandinavia, as well as in the extreme south of France.
 Cloudy or overcast elsewhere, with rain in many parts of Great Britain, and fog in the north of England.
 The largest amount of rain measured this morning was 1.2 ins. at Hurst Castle and 1.1 ins. at Holyhead. Thunder and lightning have occurred in the east of England.

SEA

Rough in the Channel and rather rough at Holyhead, but moderate to smooth elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The future behaviour of the depressions which exist in the neighbourhood of Great Britain is at present somewhat uncertain, but it is not unlikely that the systems will gradually fill up. The distribution of pressure is likely to remain very irregular and unsettled weather will probably continue in most districts.

FORECASTS

For the 24 hours ending at NOON on 5TH OCT^R 1889.

DISTRICTS.

FORECASTS.

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

N^{orth} winds, freshening; cloudy, rain at times.

Wind varying greatly both in direction and force; changeable; rain at times.

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.

N^{orth} or NW^{est} winds, fresh or strong; squally, some showers.

WARNINGS

NONE ISSUED.

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

YESTERDAY'S 2 P.M. REPORTS.

	Bar:	Ther:		Wind		Wea:	Sea			Bar:	Ther:		Wind		Wea:	Sea:
		D	W	D	F						D	F				
Skadesnaes ..	29. 69	53	51	NE	2	r	3	Holyhead	29. 62	49	49	NE	2	rgm	2	
Sumburgh Head ..	29. 72	52	51	SE	2	o	3	Valencia	29. 87	54	49	NE	4	bc q	4	
Stornoway	29. 74	54	53	NE	3	c	3	Scilly	29. 85	55	51	NE	6	o q	6	
Aberdeen	29. 72	51	47	N	1	c q	2	Jersey	29. 40	55	53	W	5	bc	4	
Malta	29. 67	51	50	ENE	2	o	3	Dungeness	29. 71	56	53	NE	6	cp	5	
Crossan	29. 68	51	48	NE	2	o	1	London	29. 72	56	53	NE	3	bc	3	
Malin Head	29. 66	50	48	E	3	o	2	Yarmouth	29. 74	54	51	SE	2	c	2	
Malaghmore	29. 68	50	49	NE	7	rg	5	Rochefort	30. 07	62	57	NE	5	c	2	
Balmullet	29. 79	52	47	NE	6	o	3									

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

The reports for yesterday morning showed that pressure was highest, 30.6 ins. and upwards, over the northern part of Central Russia, but high, 30 ins. and upwards, over Algeria and the southern part of France and Spain. The lowest pressures, 29.6 ins. and less, were found in a depression lying over the southern part of the Baltic, but another disturbance, with readings below 29.7 ins., lying over the extreme northwest of our Islands. The wind was light to fresh from the SEth or Eth over Russia, Scandinavia, and the Baltic, but variable in the northern parts of Great Britain, and strong from the Wth or NWth in the west and northwest of our Islands. Over Germany, the north of France, and the south of England SW breezes were reported, while over Southern Europe and the Mediterranean the wind was very variable. The weather was fair over Southern Europe, as well as in the west of Norway, and the greater part of Scotland, but cloudy or overcast elsewhere, with rain in Denmark, North Germany, and many parts of England and Ireland. Temperature had changed very irregularly, and readings ranged from a little above 70° in the neighbourhood of the south of Italy to 45° or less over Scotland, and Central France and to 40° at Archangel. The highest individual readings were 74° at Sfor, 72° at Brindisi and La Cella, 71° at Palermo and Malta, 68° at Algiers, and 66° at Cagliari and San Fernando. The lowest were 40° at Archangel, 41° at Kain and Paris, 42° at Stornoway, 43° at Reith, Le Mans and Lyons, 44° at York and Limoges, and 45° at Breslau, Munich, Buda Pesth, and Belfort.

In the course of the day the depression over the northwest of our Islands moved slowly southwards, and increased somewhat in depth. Rainy weather was therefore experienced in many parts of 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 5TH OCTOBER.

1889.

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

STATIONS.		YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
		Barometer at 5 p.m. and Sea Level.	Temp. in Shade.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Sea. (0 to 2.)	SHADE TEMP.				
				Dir.	Force. (0 to 12.)		Reading at 8 a.m. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Dir.	Force. (0 to 12.)		Weather.	Max.	Min.	Amount of Rainfall.	
SCANDINAVIA.	Haparanda ...	20.12	50	S	2	bc	20.14	-0.06	48	48	-3	X	0	0	*	57	48	-	
	Hernösand ...	20.12	51	S	0	0	20.12	+0.03	50	49	-1	X	0	0	*	55	50	-	
	Stockholm ...	20.05	51	S	0	0	20.00	+0.02	53	52	-1	ENE	2	0	*	59	48	0.12	
	Wisby ...	20.03	51	ENE	4	T	20.07	0.00	52	50	+1	W	2	0	*	54	48	0.24	
	Bodö ...	20.05	09	E	4	b	20.01	0.00	50	48	-2	WSE	1	0	1	63	50	-	
	Christiansund	20.01	54	W	7	b	20.05	+0.20	49	47	-2	ENE	2	0	2	64	46	-	
	Skudesnaes ...	20.00	54	ENE	6	b	20.06	+0.19	57	51	+2	ENE	6	0	4	54	54	-	
	Christiania Fjord (Færder)	20.05	54	ENE	2	0	20.04	+0.22	52	50	0	ENE	2	0	2	54	52	-	
	Skagen (The Scaw)	20.00	53	ENE	1	b	20.00	+0.17	52	50	+1	ENE	1	0	1	53	50	-	
	Fanö ...	20.08	52	ENE	4	C	20.05	+0.09	50	49	0	ENE	5	0	*	57	48	-	
BRITISH ISLANDS.	Sumburgh Head	20.06	51	ENE	3	0	20.04	+0.05	51	48	-1	ENE	4	0	5	53	47	0.20	
	Stornoway ...	20.05	52	NE	3	P	20.01	-0.16	51	50	+1	NE	2	0	2	52	41	0.12	
	Wick ...	20.05	49	ENE	4	0	20.05	+0.01	51	49	-2	S	5	0	4	54	47	0.20	
	Nairn ...	20.04	52	ENE	2	0	20.03	-0.03	42	40	-2	S	0	0	0	53	57	0.06	
	Aberdeen ...	20.03	49	ENE	6	0	20.08	+0.09	51	48	0	ENE	3	0	5	53	42	0.09	
	Leith ...	20.04	47	ENE	1	T	20.04	0.00	47	46	0	S	1	0	*	52	45	0.00	
	Shields ...	20.04	50	S	0	0	20.05	+0.02	46	41	-4	SW	1	0	2	52	40	-	
	Spurn Head ...	20.08	49	SW	3	C	20.09	-0.02	47	46	+1	S	3	0	3	52	45	0.11	
	York ...	20.05	50	S	1	b	20.05	+0.01	46	46	-2	ENE	1	0	*	54	58	-	
	Loughborough	20.05	47	ENE	1	bc	20.05	+0.02	45	44	+1	ENE	1	0	*	59	54	0.04	
GERMANY.	Ardrossan ...	20.04	51	WNW	1	0	20.02	-0.06	49	48	+1	NE	1	0	1	64	40	0.22	
	Malin Head ...	20.04	50	WNW	5	0	20.02	-0.10	51	50	0	WNW	2	0	2	53	50	0.08	
	Mullaghmore ...	20.05	51	NW	5	0	20.05	-0.10	52	51	+2	WNW	6	0	5	54	49	0.17	
	Belmullet ...	20.04	52	WNW	4	0	20.03	-0.10	51	49	0	WNW	2	0	*	54	49	-	
	Donaghadee ...	20.02	52	ENE	2	0	20.03	-0.08	50	50	-1	WSE	2	0	0	53	50	0.44	
	Barrow-in-Furness	20.01	49	S	2	T	20.00	-0.04	48	46	+1	ENE	3	0	*	53	46	0.06	
	Liverpool (Bidston)	20.06	49	WSE	2	0	20.04	-0.03	48	47	+1	ENE	1	0	2	54	45	0.02	
	Holyhead ...	20.06	50	WSE	1	T	20.03	-0.05	54	50	0	S	0	0	0	54	45	0.30	
	Parsonstown ...	20.06	51	NW	1	0	20.04	-0.06	49	47	+2	2	0	0	53	46	0.20		
	Valencia ...	20.07	53	NW	3	C	20.02	-0.06	51	48	0	NW	1	0	1	56	48	0.17	
FRANCE AND NETHERLANDS.	Roche's Point...	20.09	50	WNW	5	C	20.09	-0.01	50	48	0	NW	3	0	3	53	48	-	
	Pembroke (St. Ann's Hd.)	20.03	51	NW	4	T	20.01	+0.05	51	50	0	WNW	5	0	4	54	48	0.44	
	Scilly ...	20.08	52	NW	4	C	20.07	+0.05	53	51	0	W	3	0	4	55	51	0.08	
	Prawle Point ...	20.06	49	WNW	2	C	20.09	+0.17	52	50	+3	WNW	4	0	2	56	56	0.25	
	Jersey (St. Aubin's)	20.04	53	WSE	4	C	20.04	+0.12	54	51	+2	WSE	4	0	3	54	47	0.38	
	Hurst Castle ...	20.01	51	N	2	C	20.06	+0.21	53	53	+5	SW	5	0	4	54	46	0.33	
	Dungeness ...	20.01	53	SW	3	T	20.08	+0.17	53	52	+4	SW	5	0	5	56	49	0.10	
	London ...	20.00	49	S	2	bc	20.06	+0.25	49	48	+1	S	2	0	*	54	42	0.24	
	Oxford ...	20.00	49	NW	2	0	20.02	+0.09	47	46	+4	S	3	0	*	56	42	0.04	
	Cambridge ...	20.00	50	S	1	0	20.04	+0.17	48	47	+2	S	1	0	*	55	42	0.05	
PENINSULA.	Yarmouth ...	20.03	52	WSE	3	bc	20.06	+0.11	49	48	-2	WSE	4	0	4	53	44	0.12	
	Cuxhaven ...	20.03	50	WSE	3	b	20.09	+0.05	49	47	+2	WSE	3	0	*	57	47	-	
	Berlin ...	20.05	52	ENE	2	b	20.02	0.00	45	44	+1	SE	3	0	*	57	43	-	
	Wiesbaden ...	20.05	52	ENE	2	b	20.01	-0.06	47	44	-2	S	0	0	*	61	41	-	
	Munich ...	20.09	44	2	0	b	20.05	-0.10	44	39	+2	ENE	2	0	*	57	34	-	
	The Helder ...	20.02	50	S	5	C	20.02	+0.06	48	47	-2	S	3	0	*	56	47	0.04	
	Brussels (9 a.m.)	20.02	50	S	5	C	20.02	+0.06	48	47	-2	S	3	0	*	59	46	0.71	
	Paris ...	20.02	50	WSE	2	0	20.04	+0.06	48	47	-1	S	1	0	*	59	46	0.04	
	Brest ...	20.02	54	NW	3	b	20.02	0.00	54	51	0	NW	2	0	3	59	48	-	
	Lorient ...	20.02	54	S	4	C	20.02	+0.09	51	49	-2	W	1	0	3	59	50	0.08	
FRANCE AND NETHERLANDS.	Rochefort ...	20.07	57	SW	3	b	20.08	-0.01	49	48	-1	WSE	3	0	2	57	45	0.20	
	Belfort ...	20.07	48	NW	1	C	20.05	-0.11	46	43	+7	NW	1	0	*	55	37	0.34	
	Lyons ...	20.00	55	S	2	0	20.05	-0.15	50	50	+4	N	1	0	*	65	37	0.32	
	Nice ...	20.00	56	NE	5	C	20.05	-0.19	60	52	+9	ENE	5	0	4	61	37	0.04	
	Perpignan ...	20.01	62	WSE	2	C	20.07	-0.20	58	52	+5	NW	1	0	*	70	37	-	
	Biarritz ...	20.01	56	WSE	3	T	20.04	-0.06	53	51	-4	WSE	3	0	4	64	50	0.20	
	Corunna ...	20.02	57	NW	2	C	20.05	-0.10	57	55	0	WNW	4	0	3	66	53	-	
	Lisbon ...	20.02	57	NW	2	C	20.05	-0.10	57	55	0	WNW	4	0	3	66	53	-	
	Genoa ...	20.02	57	NW	2	C	20.05	-0.10	57	55	0	WNW	4	0	3	66	53	-	
	Trieste ...	20.02	57	NW	2	C	20.05	-0.10	57	55	0	WNW	4	0	3	66	53	-	

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, 5th October,

1889.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP

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

Changes since previous morning are stated in words.

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

their barbs and feathers refer to force thus—

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

→ = forces 5 to 7; → = forces 1 to 4.

⊙ = dead calm.

SEA DISTURBANCE—Where considerable, is shown thus:

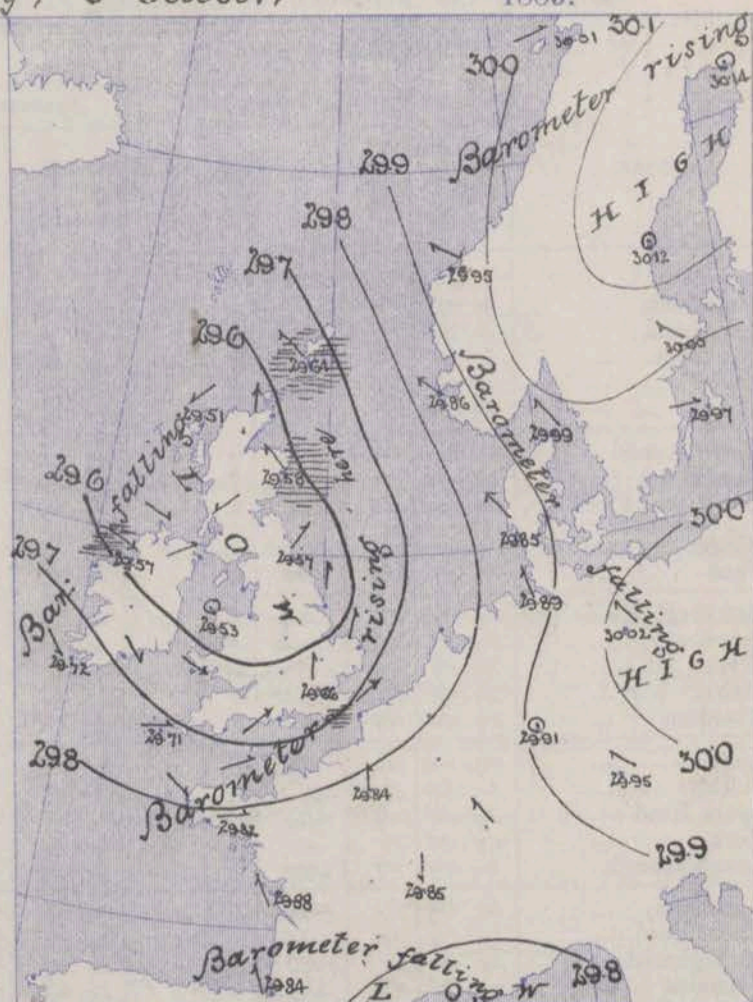
— Rough. — High.

MEAN HEIGHT OF THE BAROMETER

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

During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS.
Sumburgh Head	29.708
Stornoway	29.735
Wick	29.745
Nairn	29.761
Aberdeen	29.774
Leith	29.804
Shields	29.835
York	29.872
Loughborough	29.891
Ardrossan	29.813
Donaghadee	29.832
Holyhead	29.853
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LONDON	29.911
Oxford	29.910
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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.

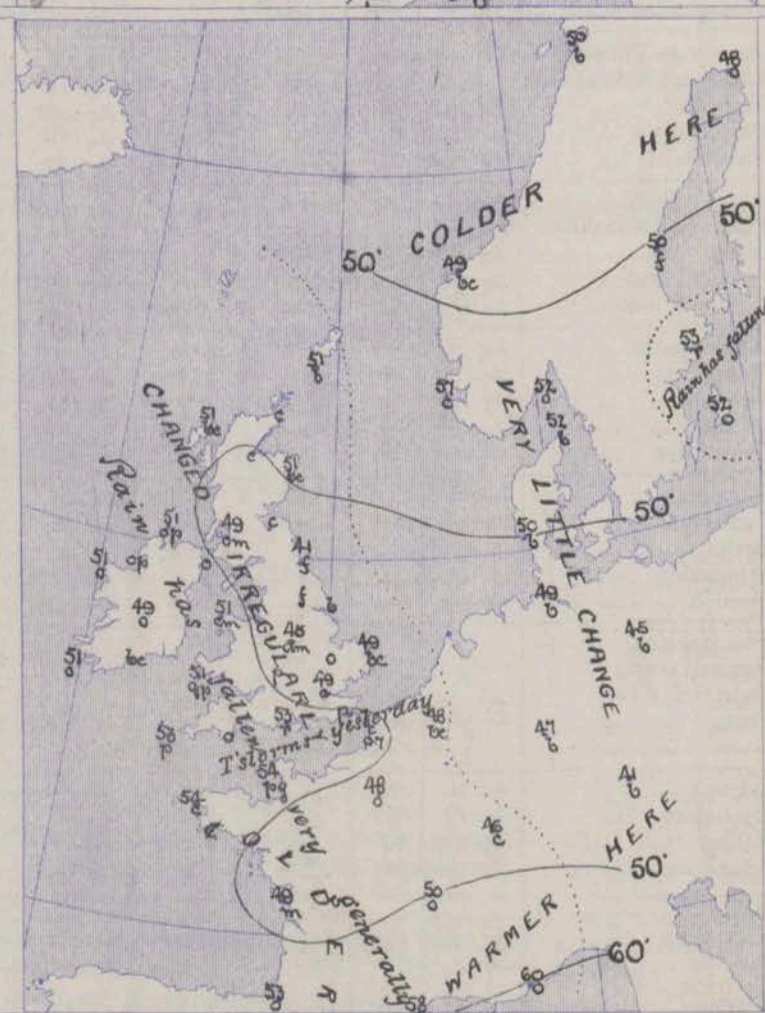
RAINFALL—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of October.)

STATIONS.	TEMPERATURE.				RAINFALL (Inches.)
	Daily Max.	Daily Min.	at 8 a.m. Dry.	Wet.	
Sumburgh Head	49.7	41.6	46.0	44.3	4.33
Stornoway	50.5	39.5	45.3	44.1	4.94
Wick	51.6	40.1	46.1	44.3	2.94
Nairn	51.6	40.6	44.5	42.5	2.38
Aberdeen	52.3	41.0	45.5	43.5	2.88
Leith	54.7	41.5	46.5	44.7	1.94
Shields	53.0	42.8	47.1	45.4	2.46
York	54.8	41.0	45.9	44.5	2.64
Loughborough	55.3	41.4	46.4	45.0	2.98
Ardrossan	53.5	43.6	47.6	45.6	4.31
Donaghadee	53.2	43.3	47.7	46.5	3.35
Holyhead	54.5	47.0	50.2	48.2	4.53
Liverpool	53.6	44.6	47.8	45.8	3.62
Parsonstown	54.7	41.1	46.4	44.7	3.27
Valencia	56.6	46.5	51.3	49.1	6.09
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Pembroke	51.8	48.0	51.2	49.1	4.13
Scilly	56.6	50.3	53.8	51.7	3.84
Jersey	58.1	49.2	53.6	51.1	4.34
Hurst Castle	57.1	46.0	51.4	49.6	3.24
Dover	55.8	47.0	50.7	48.7	3.28
LONDON	56.6	43.2	48.0	46.4	2.74
Oxford	55.3	42.5	46.7	45.3	2.72
Cambridge	56.4	41.2	46.4	45.4	2.36
Yarmouth	54.3	44.8	49.2	47.9	2.97

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



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30.1 in: and upwards, over the north of Sweden; 30.0 in: and upwards over Eastern Germany; 29.9 in: and upwards, over Portugal.
 Lowest, 29.6 in: and less, in a large depression lying over the greater part of the United Kingdom; the area encloses several ill-defined minima.
 Gradient slight and irregular. Barometer rising in the eastern parts of Great Britain, but falling in most other localities.

TEMPERATURE

Highest, 60° at Nice, 58° at Perpignan, 57° at Rhodanese and Liéon, 55° at Bingen, and 54° at Jerez.
 Lowest, 41° at Shields, York and Munich, 42° at Ratis, 45° at Loughborough and Berlin, and 46° at Belfast.

WIND

Moderate or fresh from the NWnd or Wnd over Ireland and the southwest of England, and from SE over the eastern part of the Channel.
 SE^{ly} over Denmark, Norway, Germany and the north and east of Scotland; calm in the north of Sweden.
 Variable in the east and south of France; light SE^{ly} in the south and west of that country.

WEATHER

Fine in the north and east of Great Britain, as well as in Norway, Denmark and Germany.
 Cloudy or overcast elsewhere, with showers in the east and south of our Islands and fog in the north of England.
 Rain fell yesterday in nearly all parts of Western Europe and thunder and lightning occurred at some of the Channel stations.

SEA

Rather rough in the Straits of Dover, and also off the north and east of Scotland, but moderate to smooth elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The large area of low readings over our Islands is inclined to move slowly eastwards, but there are indications of the formation of new depressions over the Bay of Biscay and the Azores. The improvement in the weather which has set in over our eastern districts is in all probability merely temporary.

FORECASTS

For the 24 hours ending at NOON on 6th OCT^r 1889.

DISTRICTS.

FORECASTS.

0	SCOTLAND NORTH	S ^{ly} and SE ^{ly} winds, light or moderate; fair generally, but local showers.
1	SCOTLAND EAST	
2	ENGLAND N.E.	
3	ENGLAND EAST	S ^{ly} winds, moderate or fresh; changeable, some showers.
4	MIDLAND COUNTIES	
5	ENGLAND SOUTH	

DISTRICTS.

FORECASTS

6	SCOTLAND WEST	SE ^{ly} winds, light; changeable, some showers.
7	ENGLAND N.W.	
8	ENGLAND S.W.	NW ^{ly} and W ^{ly} winds, moderate; changeable, some showers.
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 ...	29.82	56	50	ESE	6	0	4	Holyhead ...	29.58	52	48	NNW	2	fg	2
Sumburgh Head ...	29.59	52	50	NNE	1	7	3	Valencia ...	29.79	55	52	NNW	4	bcq	4
Stornoway ...	29.59	51	51	NE	6	7	5	Scilly ...	29.65	53	51	NNW	6	og	6
Aberdeen ...	29.45	53	50	N	4	og	4	Jersey ...	29.62	52	51	SW	5	ogm	4
Shields ...	29.52	51	49	E	2	0	2	Dungeness ...	29.61	56	50	SW	7	bc	5
Ardrossan ...	29.51	53	54	NNW	1	7m	1	London ...	29.58	51	48	SE	2	og	*
Malin Head ...	29.59	51	51	NNW	5	0	3	Yarmouth ...	29.58	53	49	SW	5	c	5
Mullaghmore ...	29.67	52	51	NW	6	og	4	Rocheport ...	29.88	56	53	S	0	0	2
Belmullet ...	29.77	54	50	N	5	0	*								

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

The report for yesterday morning showed that pressure was highest, 30.5 ins. and upwards, in an anticyclone lying over Central Russia, but high 30.1 ins. and upwards, in a separate area lying over the whole of Austria, Turkey, and Italy. The lowest readings, 29.5 ins. and less, were found in two small depressions, one of which lay off the east of Scotland, while the other was situated over the south and southeast of England. Another depression, with readings below 29.9 ins., was however, reported over the southwest of Russia. The wind was fresh from the Nth or NWth in the west of our Islands, but strong from the SWth or Sth over the eastern part of the Channel, with a gale in the Straits of Dover, and moderate from the same quarters in Denmark, the Netherlands, and the greater part of France. Over Russia and Scandinavia, however, it was moderate from the SEth or Eth, while over Southern Europe variable breezes were reported. The weather was dull and unsettled in nearly all the more western countries, with rain in many parts of Great Britain and France, and fog in the north of England. Over northern, eastern, central and southern Europe, however, the sky was clear or nearly

clear. Temperature had risen somewhat in Scotland and the west of Norway, as well as at some of the Spanish and Algerian ^{stations}, but fallen in most other localities; readings ranged from 70° and upwards over Russia and the extreme south of Italy, and a little above 65° over Algeria to a little below 40° in some parts of Central Europe, and to very little above 32° in some parts of Central England. The highest individual readings were 75° at Malta, 74° at Calcutta, 70° at Khairi, 68° at Oran and Algiers, 67° at Nemours, and 66° at Annaba and Constantinople; the lowest were 35° at Loughboro, 38° at Vienna, 35° at Munich and Delft, 41° at Prague, 43° at York and Oxford, and 44° at Berlin, Breslau, and Casan.

In the course of the day the depression off the east of Scotland moved slowly westwards, while the disturbance over the southeast of England partially filled up. The barometer therefore rose over the eastern part of Great Britain, but no decided change was observed in the weather or winds.

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 6th OCT^r 1889
 Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.

STATIONS.	YESTERDAY EVENING.						8 A.M. TO DAY.										PAST 24 HOURS.		
	Barometer at 32° F. and Sea Level.	Temp. in Shade.	WIND.		Weather.	Barometer. Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	SHADE TEMP.			WIND.		Weather.	Sea. (0 to 3.)	SHADE TEMP.				
			Dir.	Force. (0 to 12.)				Dry.	Wet.	Difference from 8 a.m. yesterday.	Dir.	Force. (0 to 12.)			Max.	Min.	Amount of Rainfall.		
SCANDINAVIA.	Haparanda ...	29.98	45	S	2	0	30.10	- .04	41	40	- 7	E	2	0	*	52	?	-	
	Hernösand ...	30.08	49	NE	2	0	30.03	- .09	50	50	- 0	Z	0	0	*	55	48	0.04	
	Stockholm ...	30.02	53	SE	2	0	30.01	+ .01	50	49	- 3	Z	0	0	*	61	48	0.04	
	Wisby ...	30.05	48	SW	4	f	30.02	+ .06	44	43	- 8	SSW	2	0	*	54	46	-	
	Bodö ...	30.08	55	ENE	2	bc	29.88	- .13	55	51	+ 5	E	3	r	*	55	48	-	
	Christiansund	29.82	49	W	1	b	29.94	- .21	50	46	+ 1	E	3	c	*	55	48	-	
	Skudesnaes ...	29.82	53	SE	6	bc	29.97	- .09	52	49	- 5	SE	8	c	*	58	?	0.16	
	Christiania Fjord (Færder)	29.99	54	ESE	3	bc	29.89	- .15	52	50	0	SE	4	0	3	58	52	-	
	Skagen (The Scaw)	29.93	54	S	3	bc	29.88	- .11	53	51	+ 1	S	3	0	3	55	52	-	
	Fanö ...	29.97	51	S	2	c	29.84	- .01	50	50	0	S	2	0	*	57	48	0.04	
BRITISH ISLANDS.	Sumburgh Head	29.59	50	SE	2	0	29.50	- .14	50	49	- 1	SSE	2	0	4	54	47	0.01	
	Stornoway ...	29.50	52	SW	2	c	29.40	- .11	48	48	- 3	W	4	0	3	55	45	0.08	
	Wick ...	29.52	52	S	2	0	29.44	- .13	50	49	- 1	SW	2	r	2	55	48	0.03	
	Nairn ...	29.52	52	Z	0	m	29.46	- .07	47	46	+ 5	Z	0	0	0	56	45	0.07	
	Aberdeen ...	29.58	47	WSW	1	cm	29.52	- .06	48	47	- 3	SSW	2	0	3	54	43	0.08	
	Leith ...	29.57	49	SSE	1	c	29.56	+ .02	51	48	+ 4	W	4	0	*	54	45	0.04	
	Shields ...	29.60	50	SSW	2	f	29.60	+ .09	50	48	+ 9	SSW	2	0	2	55	40	0.01	
	Spurn Head ...	29.64	52	SSW	2	r	29.76	+ .17	51	50	+ 4	SSW	3	0	3	53	46	0.13	
	York ...	29.63	50	SE	1	0	29.94	+ .15	51	48	+ 10	SW	1	0	*	51	40	-	
	Loughborough	29.66	50	SE	1	0	29.81	+ .22	50	48	+ 5	SW	2	0	*	55	44	0.13	
GERMANY.	Ardrossan ...	29.58	53	SSW	2	r	29.58	+ .06	52	50	+ 3	WSW	3	0	2	55	49	0.14	
	Malin Head ...	29.58	57	NW	4	0	29.59	+ .07	50	49	- 1	WNW	4	0	2	55	48	0.09	
	Mullaghmore ...	29.66	50	W	5	c	29.66	+ .11	52	49	0	WSW	5	0	4	53	48	0.11	
	Belmullet ...	29.69	52	W	3	0	29.69	+ .06	52	50	+ 1	W	2	0	*	53	50	0.09	
	Donaghadee ...	29.62	52	W	1	0	29.68	+ .15	50	50	0	W	2	c	1	54	48	0.06	
	Barrow-in-Furness	29.58	53	WSW	1	c	29.67	+ .17	53	50	+ 5	SW	3	0	*	54	47	0.06	
	Liverpool (Bidston)	29.64	52	W	2	0	29.78	+ .24	49	47	+ 1	SW	2	0	3	56	46	0.10	
	Holyhead ...	29.66	53	WNW	3	0	29.74	+ .21	51	50	0	WSW	5	0	4	58	49	0.12	
	Parsonstown ...	29.71	50	Z	0	0	29.76	+ .12	50	48	+ 1	SW	1	0	*	53	45	0.01	
	Valencia ...	29.76	52	WSW	1	bc	29.86	+ .14	53	52	+ 2	WSW	1	0	1	58	46	0.04	
FRANCE AND NETHERLANDS.	Roche's Point...	29.73	51	WNW	3	0	29.82	+ .13	52	50	+ 2	WNW	2	0	3	54	46	-	
	Pembroke (St. Ann's Hd.)	29.73	54	WSW	4	c	29.82	+ .21	55	53	+ 4	WSW	4	0	4	55	51	-	
	Scilly ...	29.80	54	WSW	4	0	29.86	+ .15	55	55	+ 2	NNW	4	0	4	56	50	0.10	
	Prawle Point ...	29.79	50	WNW	4	c	29.90	+ .21	53	52	+ 1	SSW	5	0	4	56	49	0.04	
	Jersey (St. Aubin's)	29.82	54	W	3	bc	29.97	+ .23	59	55	+ 5	SW	4	0	3	59	50	0.22	
	Hurst Castle ...	29.76	56	W	5	p	29.91	+ .25	56	54	+ 3	WSW	3	0	3	58	52	0.05	
	Dungeness ...	29.73	56	SW	6	cp	29.89	+ .21	52	50	- 3	SW	4	0	3	57	48	0.14	
	London ...	29.74	51	SW	3	bc	29.88	+ .22	50	48	+ 1	SW	2	0	*	58	44	0.24	
	Oxford ...	29.76	51	SW	2	c	29.87	+ .25	49	47	+ 2	SW	1	0	*	58	47	-	
	Cambridge ...	29.72	53	S	1	c	29.80	+ .22	51	50	+ 3	S	1	0	*	58	43	0.02	
PENINSULA.	Yarmouth ...	29.70	52	WSW	4	bc	29.82	+ .16	50	49	+ 1	WSW	3	0	3	56	45	0.01	
	Cuxhaven ...	29.86	50	W	1	b	29.88	- .01	51	50	+ 2	SW	1	0	*	56	50	0.18	
	Berlin ...	29.95	53	ESE	3	b	29.92	- .10	48	47	+ 3	SE	1	0	*	59	45	-	
	Wiesbaden ...	*	*	*	*	*	29.97	+ .06	54	50	+ 4	Z	0	0	*	61	50	-	
	Munich ...	29.85	47	NE	2	c	29.99	+ .04	49	49	+ 8	SW	1	0	*	61	41	0.08	
	The Helder ...	29.82	49	SSE	1	c	29.83	+ .07	48	47	- 2	S	1	0	2	55	46	-	
	Brussels (9 a.m.)	?	53	WSW	4	r	29.95	+ .13	49	48	+ 1	SSW	3	0	*	57	46	-	
	Cape Gris Nez	?	53	WSW	4	r	?	?	54	51	+ 2	W	4	0	3	57	48	0.39	
	Paris ...	29.90	49	SSW	1	bc	30.02	+ .18	40	40	- 8	S	1	0	*	54	38	-	
	Brest ...	?	56	NN	2	0	?	?	58	53	+ 4	SW	4	0	3	61	50	-	
PENINSULA.	Lorient ...	29.90	55	WNW	8	bc	29.95	+ .13	55	52	+ 4	SW	3	0	2	59	50	-	
	Rochefort ...	29.98	60	W	3	b	30.10	+ .22	51	50	+ 2	SE	3	0	2	66	48	-	
	Belfort ...	29.83	52	SSW	1	c	29.99	+ .14	47	41	+ 1	SSW	1	0	*	59	45	-	
	Lyons ...	30.28	52	NN	2	0	30.00	+ .15	50	47	0	NNW	6	0	*	57	49	0.35	
	Nice ...	29.84	54	NE	4	r	29.85	- .00	56	54	- 4	ENE	4	0	3	61	52	1.22	
	Perpignan ...	29.84	58	NN	3	0	29.96	+ .09	57	50	- 1	NN	4	0	*	66	55	-	
	Biarritz ...	29.93	60	NNW	2	c	30.03	+ .19	54	52	+ 1	SW	3	0	3	64	52	0.08	
	Corunna ...	30.08	56	NN	4	b	30.10	+ .14	57	56	+ 4	SSE	1	0	4	63	50	0.04	
	Lisbon ...	30.08	56	NN	4	b	30.13	+ .18	58	55	+ 1	WSW	3	0	?	63	55	-	

For Explanation of Columns, see bottom of p 4.

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

WEATHER CHARTS

for 8 a.m. on

Sunday, 6th October,

1889.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP

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

Changes since previous morning are stated in words.

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

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

→ = forces 5 to 7; → = forces 1 to 4.

⊙ = dead calm.

SEA DISTURBANCE—Where considerable, is shown thus:

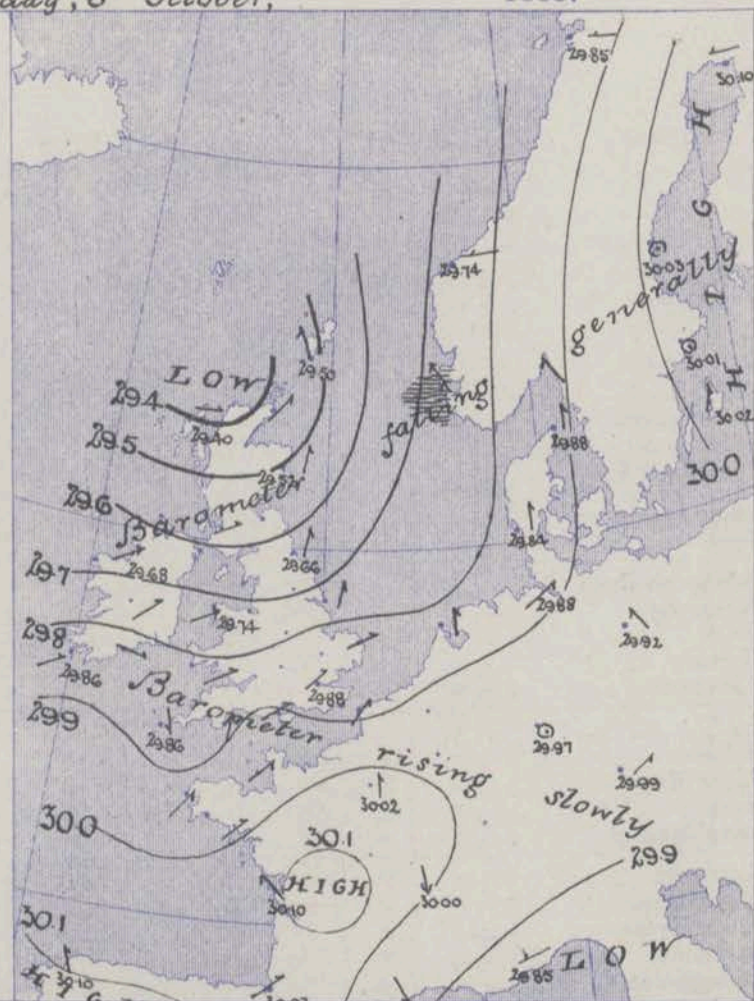
☼ = Rough. ☼ = High.

MEAN HEIGHT OF THE BAROMETER

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

During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS.
Sumburgh Head	29.708
Stornoway	29.735
Wick	29.745
Nairn	29.761
Aberdeen	29.774
Leith	29.804
Shields	29.835
York	29.872
Loughborough	29.891
Ardrossan	29.813
Donaghadee	29.832
Holyhead	29.853
Liverpool	29.864
Parsonstown	29.881
Valencia	29.873
Roche's Point	29.870
Pembroke	29.868
Scilly	29.894
Jersey	29.904
Hurst Castle	29.907
Dover	29.909
LONDON	29.911
Oxford	29.910
Cambridge	29.900
Yarmouth	29.886



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.

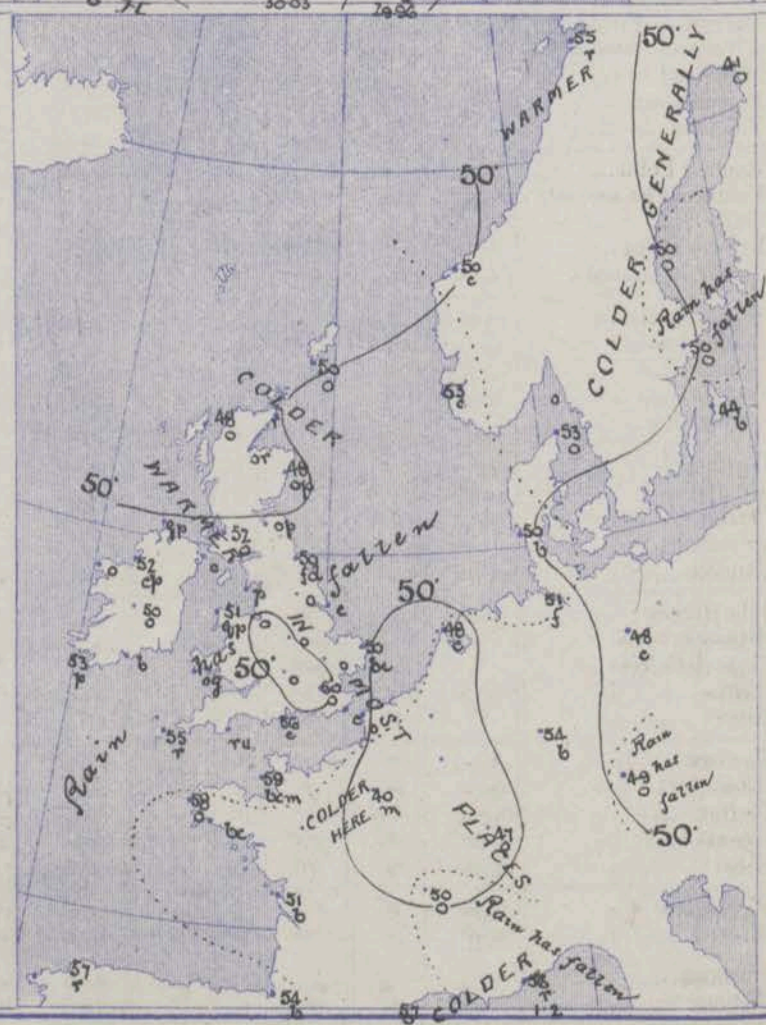
RAINFALL—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of October.)

STATIONS.	TEMPERATURE.				RAINFALL (Inches.)
	Daily Max.	Daily Min.	at 8 a.m.		
			Dry.	Wet.	
Sumburgh Head.....	49.7	41.6	46.0	44.3	4.33
Stornoway.....	50.5	39.5	45.3	44.1	4.94
Wick.....	51.6	40.1	46.1	44.3	2.94
Nairn.....	51.6	40.6	44.5	42.5	2.38
Aberdeen.....	52.3	41.0	45.5	43.5	2.88
Leith.....	54.7	41.5	46.5	44.7	1.94
Shields.....	53.0	42.8	47.1	45.4	2.46
York.....	54.8	41.0	45.9	44.5	2.64
Loughborough.....	55.3	41.4	46.4	45.0	2.98
Ardrossan.....	53.5	43.6	47.6	45.6	4.31
Donaghadee.....	53.2	43.3	47.7	46.5	3.35
Holyhead.....	54.5	47.0	50.2	48.2	4.53
Liverpool.....	53.6	44.6	47.8	45.8	3.62
Parsonstown.....	54.7	41.1	46.4	44.7	3.27
Valencia.....	56.6	46.5	51.3	49.1	6.09
Roche's Point.....	55.8	45.9	50.2	48.4	4.17
Pembroke.....	54.8	48.0	51.2	49.1	4.13
Scilly.....	56.6	50.3	53.8	51.7	3.84
Jersey.....	58.1	49.2	53.6	51.1	4.34
Hurst Castle.....	57.1	46.0	51.4	49.6	3.24
Dover.....	55.8	47.0	50.7	48.7	3.28
LONDON.....	56.6	43.2	48.0	46.4	2.74
Oxford.....	55.3	42.5	46.7	45.3	2.72
Cambridge.....	56.4	41.2	46.4	45.4	2.36
Yarmouth.....	54.3	44.8	49.2	47.9	2.97

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



GENERAL SITUATION AT 8 A.M.

PRESSURE	<p>Highest, 30.1 ins. and upwards, over Lapland, as well as in Portugal, and the central parts of Western France.</p> <p>Lowest, 29.4 ins. and less, in a small depression lying to the northward of the Hebrides.</p> <p>Gradient slight. Barometer falling in Scotland, Scandinavia, Denmark, and North Germany, but rising elsewhere.</p>
TEMPERATURE	<p>Highest, 53° at Jersey, 58° at Bristol and Lisbon, 57° at Copenhagen and Genoa, and 56° at Hunt Castle and Kiev.</p> <p>Lowest, 40° at Paris, 41° at Haparanda, 44° at Nisby, 47° at Kains and Belfort, and 48° at Tromsø, Aberdeen, Helder and Berlin.</p> <p>The maxima registered yesterday were below 60° in all parts of Northwestern Europe.</p>
WIND	<p>Light or moderate from the W. or N.W. in the west of our Islands, and from the S.W. or S. over our east and southeast coast, the Netherlands, and the north of France.</p> <p>S.E. in Norway, with a gale at Skudenæs, calm or light and variable in Sweden.</p> <p>Variable in Germany and the south of France.</p>
WEATHER	<p>Fair in Germany, the extreme southeast of England, and the west of France.</p> <p>Bell in most other localities, with rain in Scotland and the west of England.</p> <p>Rain fell yesterday in most parts of Western Europe.</p>
SEA	<p>Rather rough at Skudenæs, but moderate to smooth elsewhere.</p>

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

FORECASTS

For the 24 hours ending at NOON on OCTOBER 7TH 1889.

DISTRICTS.

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

FORECASTS.

NONE ISSUED

DISTRICTS.

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

WARNINGS

FORECASTS

NONE ISSUED

NONE ISSUED

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

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

YESTERDAY'S 2 P.M. REPORTS.

	Bar:	Ther:		Wind		Wea:	Sea		Bar:	Ther:		Wind		Wea:	Sea.
		D	W	D	F					D	W	D	F		
Skudesnaes ...	29.82	58	52	ESE	6	o	4	Holyhead ...	29.60	57	54	WNW	3	bcp	2
Sumburgh Head ...	29.64	52	51	SE	2	o	5	Valencia ...	29.73	56	57	WNW	2	ov	3
Stornoway ...	29.50	55	54	NE	2	b	2	Scilly ...	29.75	55	50	N	4	bcp	5
Aberdeen ...	29.57	52	49	SE	2	c	4	Jersey ...	29.79	58	55	WNW	4	bc	3
Shields ...	29.57	53	50	SSW	3	c	2	Dungeness ...	29.72	55	53	SW	6	opq	5
Ardrossan ...	29.55	51	50	SE	2	o	0	London ...	29.69	57	53	SSW	3	o	4
Malin Head ...	29.56	55	52	WNW	3	c	2	Yarmouth ...	29.69	56	52	SSW	4	c	4
Mullaghmore ...	29.61	52	51	WNW	5	omp	4	Rochefort ...	29.93	65	59	S	1	bc	2
Belmullet ...	29.67	52	48	WNW	3	o	2								

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

The reports for yesterday morning showed that pressure was highest, 30.4 in. and upwards, over Central Russia, but high 30.0 in. and upwards, in a small anticyclone lying off the northwest of Spain. The lowest readings 29.6 in. and less, were found in a large depression lying over the greater part of the United Kingdom, but a smaller disturbance with readings below 29.7 in. was reported over Central Spain, while a still smaller system with ^{similar} readings existed near Tunis. The wind was moderate or fresh from the NWth in the west and southwest of our island and from the SWth in the eastern part of the Channel. Over the greater part of Northern, Eastern and Central Europe, however, the wind was SE^{ly} or E^{ly} and on the eastern shores of the North Sea it blew strongly. Over Spain, Italy, and Algeria, however, cyclonic circulations were shown round the two small depressions mentioned above. The weather was changeable and showery over the greater part of Western and Southern Europe, and foggy over the north of England. In Norway, Denmark, Germany and Russia, however, the sky was clear or nearly so. Temperature had risen a few degrees over Italy and the southern parts of our islands and France, but changed irregularly elsewhere; readings ranged from 70° and upwards over the Central and Southern parts of the Mediterranean to 45° over Central Europe, Northern Russia and the central parts of Scotland. The highest individual readings were 75° at Palermo, Sfax and Malta, 73° at La Balle and Tunis, 70° at Algiers, 68° at Khindini, and 66° at Langouan and Rome; the lowest were 36° at Moscow, 39° at Chagay, 40° at Breslau and Bernau, 41° at Liebov, Shields, York, and Munich, 42° at Naim, and 44° at Kaspis and Kaspikowsk.

In the course of the day the low-pressure area over our islands moved northwards, but the winds did not alter materially, and the weather remained showery in most parts of Western Europe.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

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

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

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

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

DAILY WEATHER REPORT.

for *Monday, 7th October,* 1889.
Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.

STATIONS.	YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
	Barometer at 3 rd P. and Sea Level.	Temp. in Shade.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Weather.	Sea. (0 to 2.)	SHADE TEMP.			
			Dir.	Force. (0 to 12.)		Reading at 3 rd P. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Dir.	Force. (0 to 12.)			Max.	Min.	Amount of Rainfall.	
SCANDINAVIA.	Haparanda ...	30.02	41	X	0	bc	29.94	-13	49	48	+8	S	2	0	*	52	?	
	Hernösand ...	29.97	50	E	2	r	29.89	-14	49	48	-1	S	2	0	*	52	37	0.12
	Stockholm ...	30.03	49	Z	0	0	29.88	-13	51	50	+1	SE	2	0	*	61	46	
	Wisby ...	30.00	50	SEW	4	c	29.87	-15	52	51	+8	SESE	2	0	*	52	43	
	Bodö ...	29.80	54	E	2	b	29.70	-18	53	48	-2	E	2	0	1	59	48	
	Christiansund	29.63	54	SE	5	c	29.48	-26	54	49	+4	SE	3	0	2	57	?	
	Skudesnaes ...	29.64	54	SESE	8	r	29.43	-14	54	49	+2	SE	3	0	5	54	42	
	Christiania Fjord (Færder)	29.82	54	SESE	5	0	29.67	-22	53	52	+1	SE	5	r	4	54	52	0.59
	Skagen (The Scaw)	29.80	53	S	5	0	29.67	-21	53	51	0	SW	3	bc	2	54	52	
	Fanö ...	29.80	51	S	4	c	29.63	-21	50	50	0	SESE	5	c	*	57	50	0.08
BRITISH ISLANDS.	Sumburgh Head	29.40	49	SW	1	0	29.13	-37	50	47	0	SE	3	r	4	53	43	0.04
	Stornoway ...	29.42	48	W	2	op	28.92	-48	49	49	+1	NE	5	0	4	53	46	0.14
	Wick ...	29.44	47	S	1	bc	28.90	-54	51	50	+1	SE	7	r	6	53	45	0.25
	Nairn ...	29.46	48	W	1	bc	28.81	-65	49	48	+2	NE	2	0	3	57	45	0.04
	Aberdeen ...	29.54	49	W	1	bc	28.79	-73	52	51	+4	SE	6	opu	5	53	45	0.52
	Leith ...	29.57	52	W	5	b	28.66	-90	51	49	0	E	4	r	*	59	47	0.11
	Shields ...	29.65	55	SSW	2	of	28.73	-92	52	50	+2	S	4	p	3	59	48	0.20
	Spurn Head ...	29.73	52	SSW	3	c	28.99	-77	55	52	+4	SSW	6	bcq	6	55	50	0.24
	York ...	29.73	53	SW	1	c	28.87	-87	52	49	+1	SSW	5	0	*	55	44	0.24
	Loughborough	29.78	53	SW	2	0	29.09	-72	54	49	+4	SW	7	opu	*	56	50	0.17
BRITISH ISLANDS.	Ardrossan ...	29.56	54	SW	3	0	28.63	-95	50	49	-2	N	4	om	3	56	49	0.42
	Malin Head ...	29.47	51	SESE	4	op	28.84	-75	48	48	-2	NW	9	OT	5	54	46	0.65
	Mullaghmore ...	29.47	52	SESE	5	op	29.11	-57	49	48	-3	NW	9	rq	7	55	42	0.86
	Belmullet ...	29.63	54	NW	4	0	28.70	-86	51	50	+1	NW	7	r	5	56	49	0.42
	Donaghadee ...	29.60	53	SW	2	c	28.70	-92	51	50	+1	NW	7	r	5	56	49	0.42
	Barrow-in-Furness	29.65	53	SW	3	c	28.63	-104	53	51	0	SW	10	OT	*	55	45	0.27
	Liverpool (Bidston)	29.71	52	SW	1	0	28.82	-96	49	48	0	WSW	9	r	6	56	49	0.15
	Holyhead ...	29.70	54	SW	4	op	28.90	-84	52	49	+1	W	10	opm	8	56	50	0.55
	Parsonstown ...	29.60	52	S	1	0	29.26	-50	49	46	-1	SW	3	0	*	56	47	0.45
	Valencia ...	29.54	54	S	7	r	29.65	-21	50	48	-3	NW	6	cqp	5	59	48	0.63
GERMANY.	Roche's Point...	29.70	55	SW	4	r	29.43	-39	52	48	0	NW	7	b	5	56	50	0.45
	Pembroke (St. Ann's Hd.)	29.76	54	SEW	5	0	29.30	-52	53	51	-2	WSW	9	c	8	57	52	0.30
	Scilly ...	29.84	56	NW	4	c	29.61	-23	55	52	0	NW	8	cq	6	59	52	0.14
	Prawle Point ...	29.84	53	WSW	3	r	29.51	-39	54	50	+1	W	7	cqp	6	56	48	0.25
	Jersey (St. Aubin's)	29.92	61	SSW	2	cqm	29.62	-35	59	55	0	W	7	cmpu	5	63	55	0.07
	Hurst Castle ...	29.85	56	SW	6	c	29.43	-43	57	55	+1	W	9	bagpd	6	58	55	0.15
	Dungeness ...	29.87	57	NW	5	c	29.37	-52	57	56	+5	WSW	9	p	6	59	52	0.13
	London ...	29.84	54	SW	3	0	29.36	-52	55	50	+5	W	5	bq	*	57	50	0.11
	Oxford ...	29.77	54	SW	2	0	29.28	-59	54	50	+5	SW	6	cq	*	59	49	0.18
	Cambridge ...	29.77	55	W	1	0	29.22	-64	55	51	+4	SW	5	b	*	57	49	0.13
FRANCE AND NETHERLANDS.	Yarmouth ...	29.83	53	SW	2	c	29.25	-57	54	53	+4	SSW	6	rq	5	55	48	0.14
	Cuxhaven ...	29.98	53	Z	0	b	29.88	-104	48	47	0	SESE	2	c	*	57	45	
	Berlin ...	?	*	*	*	*	29.87	-10	40	39	-14	Z	0	b	*	63	37	
	Wiesbaden ...	?	*	*	*	*	29.87	-12	48	48	-1	Z	0	b	*	59	46	0.04
	Munich ...	30.01	51	Z	0	c	29.87	-12	48	48	-1	Z	0	b	*	59	46	0.04
	The Helder ...	29.86	54	SSW	2	c	29.47	-36	50	49	+2	S	4	c	3	57	48	
	Brussels (9 a.m.)	?	*	*	*	*	29.60	-35	53	50	+4	S	5	0	*	57	49	
	Cape Gris Nez	?	57	SW	4	0	?	?	55	54	+1	SW	7	r	6	59	54	0.12
	Paris ...	30.02	51	SSW	1	bc	29.76	-26	52	50	+12	S	4	0	*	63	?	
	Brest ...	?	56	SW	4	m	?	?	59	55	+1	NW	5	0	5	63	50	0.04
FRANCE AND NETHERLANDS.	Lorient ...	29.93	59	SW	4	0	29.75	-20	59	57	+4	WSW	6	b	5	63	55	0.12
	Rochefort ...	30.06	60	SW	4	0	29.96	-14	60	59	+9	W	5	0	2	68	?	0.04
	Belfort ...	29.93	49	NW	1	c	29.87	-12	51	47	+4	NW	1	c	*	56	47	
	Lyons ...	30.01	55	NW	1	c	29.97	-03	59	45	0	NW	1	b	*	60	46	
	Nice ...	29.80	57	E	4	r	29.73	-12	57	56	+1	E	1	c	1	63	50	0.43
	Perpignan ...	29.99	61	W	3	c	29.97	+01	58	49	+1	W	2	b	*	68	54	
	Biarritz ...	30.10	63	NW	3	b	30.05	+02	60	58	+6	W	6	r	3	64	54	0.24
	Corunna ...	?	*	*	*	*	?	?	?	?	?	?	?	?	?	?	?	
	Lisbon ...	30.20	61	N	4	b	30.24	+11	60	55	+2	NNE	4	0	3	70	?	

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, 7th October

1889.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP

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

Changes since previous morning are stated in words.

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

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

SEA DISTURBANCE—Where considerable, is shown thus:

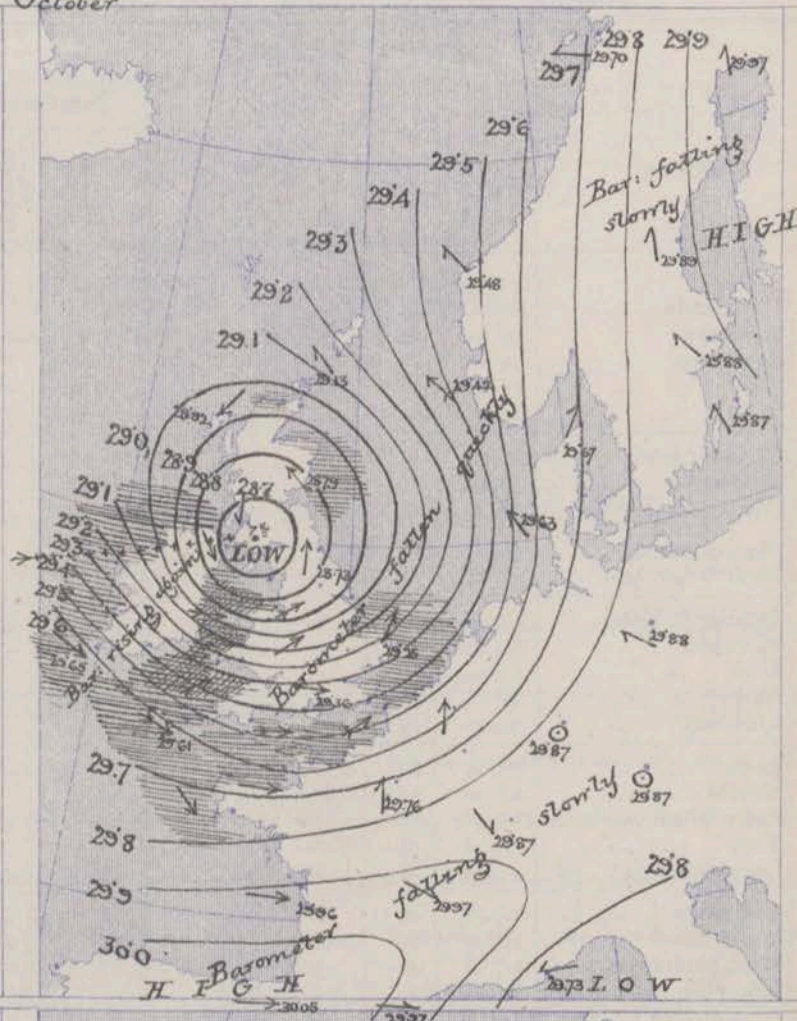
■ = Rough. ■ = High.

MEAN HEIGHT OF THE BAROMETER

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

During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS.
Sumbagh Head	29.708
Stornoway	29.735
Wick	29.745
Nairn	29.761
Aberdeen	29.774
Leith	29.804
Shields	29.835
York	29.872
Loughborough	29.801
Ardrossan	29.813
Donaghadee	29.832
Holyhead	29.853
Liverpool	29.861
Parsonstown	29.881
Valencia	29.873
Roche's Point	29.870
Pembroke	29.868
Scilly	29.894
Jersey	29.904
Hurst Castle	29.907
Dover	29.909
LONDON	29.911
Oxford	29.910
Cambridge	29.900
Yarmouth	29.880



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.

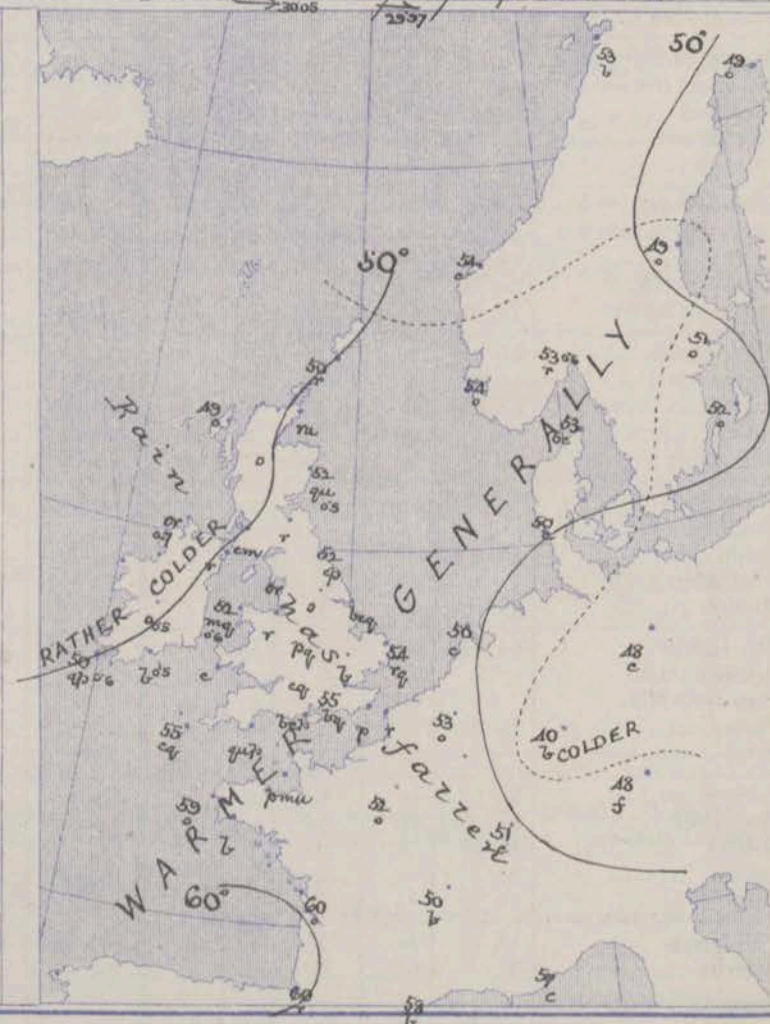
RAINFALL—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of October.)

STATIONS.	TEMPERATURE.				RAINFALL (Inches.)
	Daily Max.	Daily Min.	At 8 a.m. Dry.	Wet.	
Sumbagh Head	49.7	41.6	46.0	44.3	4.33
Stornoway	50.5	39.5	45.3	44.1	4.94
Wick	51.6	40.1	46.1	44.3	2.94
Nairn	51.6	40.6	44.5	42.5	2.38
Aberdeen	52.3	41.0	45.5	43.5	2.88
Leith	54.7	41.5	46.5	44.7	1.94
Shields	53.0	42.8	47.1	45.4	2.46
York	54.8	41.0	45.9	44.5	2.64
Loughborough	55.3	41.4	46.4	45.0	2.98
Ardrossan	53.5	43.6	47.6	45.6	4.31
Donaghadee	53.2	43.3	47.7	46.5	3.35
Holyhead	54.5	47.0	50.2	48.2	4.53
Liverpool	53.6	44.6	47.8	45.8	3.62
Parsonstown	54.7	41.1	46.4	44.7	3.27
Valencia	56.6	46.5	51.3	49.1	6.09
Roche's Point	55.8	45.9	50.2	48.4	4.17
Pembroke	54.8	48.0	51.2	49.1	4.13
Scilly	56.6	50.3	53.8	51.7	3.84
Jersey	58.1	49.2	53.6	51.1	4.34
Hurst Castle	57.1	46.0	51.4	49.6	3.24
Dover	55.8	47.0	50.7	48.7	3.28
LONDON	56.6	43.2	48.0	46.4	2.74
Oxford	55.3	42.5	46.7	45.3	2.72
Cambridge	56.4	41.2	46.4	45.4	2.36
Yarmouth	54.3	44.8	49.2	47.9	2.97

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



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30.2 in: and upwards in Portugal; 29.9 in: and upwards over Northern Europe.
 Lowest, 28.7 in: and less, in a depression; the centre of which lies over the south of Scotland, the extreme north of England, and the northern parts of the Irish Sea.
 Gradient steep over the whole of Northwestern Europe, especially in the west and northwest of our islands.
 Barometer rising quickly in Ireland, but falling there, — rapidly, on our north and east coasts.

TEMPERATURE

Highest, 60° at Rochefort, Biarritz, and Lisbon; 59° at Jersey, Brest, and Boulogne; 58° at Perpignan, and 57° at Harast Castle, Bruges, and Maastricht.
 Lowest, 40° at Usteraden; 48° at Malin H., Berlin and Bremen; and 49° at Haparanda, Harstad, Stomowoy, Aker, Liverpool and Portsmouth.

WIND

Strong to a gale over our islands and their neighbourhood, from NW in Ireland, from N. in the east and south of England, from S. in the east of England, and from SE over the east of Scotland and the northern part of the North Sea.

WEATHER

Rainy over the northern part of our islands; squally and showery in the east and south.
 Fair in Denmark and the west of Norway, as well as at some of the German and southern French stations.
 The largest amount of rain measured this morning was 0.7 in: at Malin H., and 0.6 in: at Fander, Holyhead and Talneva.

SEA

Very high at Pembroke and Holyhead, and rough or rather so on nearly all part of our coasts.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

An area of high pressure is apparently situated over Northern Europe, and the depression over our islands will probably travel in a northeasterly direction towards the west of Norway. A further increase of wind from the E. or N.E. is probable on the Scotch coast, but over England and Ireland the gale is likely to subside gradually.

FORECASTS

For the 24 hours ending at NOON on 8th OCTOBER 1889.

DISTRICTS.	FORECASTS.	DISTRICTS.	FORECASTS.
0 SCOTLAND NORTH	SE ² gales, backing to the NE ² or N ² , and moderating gradually; squally, rain at times.	6 SCOTLAND WEST	N ² and NW ² winds, increasing in force; squally, showery.
1 SCOTLAND EAST		7 ENGLAND N.W.	W ² to NW ² gales, moderating gradually; showery, squally.
2 ENGLAND N.E.	S ² to W ² strong winds and gales, squally, showery.	8 ENGLAND S.W.	NW ² winds, strong; squally, showery.
3 ENGLAND EAST		9 IRELAND NORTH	
4 MIDLAND COUNTIES	W ² strong winds and gales, moderating later, squally and showery to fair.	10 IRELAND SOUTH	
5 ENGLAND SOUTH			
		WARNINGS	The SOUTH CONE was hoisted last evening on all coasts.

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

YESTERDAY'S 2 P.M. REPORTS.

	Bar:	Ther:		Wind		Wea:	Sea		Bar:	Ther:		Wind		Wea:	Sea
		D	W	D	F					D	W	D	F		
Skudesnaes ...	29.70	52	51	SE 2	8	0	8	Holyhead ...	29.75	58	52	W 2 W	4	c	4
Sumburgh Head								Valencia ...							
Stornoway ...	29.45	52	51	W	4	60	4	Scilly ...							
Aberdeen ...								Jersey ...	29.96	63	58	SSW	3	bc	3
Shields ...								Dungeness ...	29.89	56	54	WSW	6	0	4
Ardrossan ...								London ...							
Malin Head ...	29.60	53	52	EEW	4	c	2	Yarmouth ...							
Mullaghmore ...								Rochefort ...	30.11	65	61	SE	3	c	2
Belmullet ...	29.68	54	52	WSW	4	0	4								

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

The reports for yesterday morning showed that pressure was highest, 30.3 ins. and upwards, in a large anticyclone lying over Russia, but high, 30.1 ins. and upwards, in a smaller area lying over Spain and Morocco. The lowest readings, 29.4 ins. and less, were found in a small depression lying off the north of Scotland, but two other disturbances with readings below 29.7 ins. were found respectively off the coast of Sardinia and Tunis. Light to moderate breezes from the Wnd were reported in the west of our Islands, and from the SWnd or Snd on our eastern, southeastern and the French coasts. Over the greater part of northern and central Europe, however, the wind was SE^{ly}, and at Skudesnaes it blew with the force of a gale, while at the Mediterranean stations a cyclonic circulation was shown round the two depressions existing in that neighbourhood. The weather was fine at most of the Russian stations, as well as in the Netherlands and west of France, but overcast in most other localities with passing showers in many parts of the United Kingdom, rain in the North of Italy and south of France, and a thunderstorm at Rome. Temperature had fallen a little in the north of Scotland, as well as in Russia, and had decreased several degrees in Algeria, but risen in most other countries; readings ranged from 78° and upwards, in Sicily and Tunis, and from 65° and upwards, at several of the Mediterranean stations to 45° or less, over eastern Austria and the south and west of India, and to 40° or less, in Lapland, Finland and central Spain. The highest individual readings were 78° at Palermo and Spain, 70° at Brindisi, 67° at Rome and Cagliari, and 66° at Constantinople; the lowest were 38° at Madrid, 39° at Uleaborg and Kiepik, 40° at Cracow & Paris, 41° at Haparanda and Warsaw, and 43° at Kungälv.

Later in the day the barometer began to fall quickly in the west of Ireland, while the wind there increased from the S^{ly}, with rain; and in the course of the ensuing night a deep depression advanced over our west coast from the Atlantic.

SUMMARY OF CHANGES IN THE WEATHER OVER THE BRITISH ISLANDS AND THEIR NEIGHBOURHOOD FROM THE 29TH SEPTEMBER TO THE 5TH OCTOBER 1889

The weather of the past week was cool, unsettled and showery, especially towards the close of the time, when the amount of rainfall over England was in some cases very large. Thunder and lightning were observed during the latter part of the week in the East and south of England. The barometer has been usually high to the west of our Islands, but towards the middle of the week an area of still higher readings appeared over Russia, so that the distribution of pressure became very irregular. In the course of the period four well marked but not deep depressions have appeared over the United Kingdom or its immediate neighbourhood.

The first was shown on the morning of the 29th September over Denmark, but in the course of the ensuing 48 hours the disturbance travelled in a SSE^{ly} direction to south Germany, where it eventually dispersed. During the interval N^{ly} winds were reported over the greater part of the United Kingdom, with fair weather in the western and northern districts, but with frequent showers in the East and South.

The second system travelled on the night of the 1st from the southern part of the Baltic to central Denmark, and afterwards dispersed over the North Sea. Its movements were accompanied by heavy falls of rain at some of the Danish and German stations, but by no means large of wind or weather over the United Kingdom.

The third advanced from the Atlantic to our extreme northwest coast on the night of the 2nd, and afterwards travelled SE^{ly} to the south and southeast of England, where it rapidly filled up on the 4th. During the progress of the system heavy rain fell in many parts of England, and a considerable increase of wind from the W and SW took place over the Channel, with a gale in the Straits of Dover.

The fourth disturbance advanced from Poland to Denmark on the 3rd and afterwards travelled in a WNW^{ly} direction across the North Sea to Scotland; on the 5th it appears to have filled up over the western Highlands. Its progress was attended by heavy rains at many of our Nth stations, and in its rear the wind with E of Scotland blew strongly from the SE^{ly}. At the close of the week there were some indications of the advance of yet another disturbance from the eastwards.

Temperature has been continuously low for the time of year the maximum readings of the thermometer over our Islands being usually below 60°. On the night of the 3rd the sheltered thermometer at Loughborough fell to 32° but the frost was very local.

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, 8th October* 1889.
 Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.

STATIONS.	YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
	Barometer at 32° F. and Sea Level.	Temp. in Shade.	WIND.			Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	SHADE TEMP.			WIND.			Sea. (0 to 2.)	SHADE TEMP.		Amount of Rainfall.	
			Dir.	Force. (0 to 12.)	Weather.			Dry.	Wet.	Difference from 8 a.m. yesterday.	Dir.	Force. (0 to 12.)	Weather.		Max.	Min.		
SCANDINAVIA.	Haparanda ...	29.97	SE	2	0	29.86	-11	48	48	-1	SE	2	0	•	50	39	0.01	
	Hernösand ...	29.68	S	2	0	29.65	-12	51	49	+2	SSE	4	0	•	54	45	0.01	
	Stockholm ...	29.70	SE	2	0	29.55	-33	51	51	+1	SE	2	0	•	55	46	0.12	
	Wisby ...	29.71	SE	2	0	29.52	-35	54	53	+2	S	2	0	•	57	46	0.24	
	Bodö ...	29.66	E	2	0	29.54	-16	53	50	0	E	4	0	2	54	48	0.01	
	Christiansund	29.25	SE	8	0	28.99	-49	56	48	+2	ESA	7	0	3	59	54	0.01	
	Skudesnaes ...	28.47	SSE	8	0	29.04	-39	50	49	-4	SSE	8	0	6	55	50	0.28	
	Christiania Fjord (Fæder)	29.41	ESA	6	0	29.27	-40	53	50	0	S	6	0	5	54	52	0.16	
	Skagen (The Scaw)	29.31	SSW	8	0	29.29	-38	52	49	-1	SSW	7	0	4	55	50	0.16	
	Fanö ...	29.26	SSE	6	0	29.33	-30	49	47	-1	NSW	6	0	•	54	48	0.55	
BRITISH ISLANDS.	Sumburgh Head	28.73	SE	4	0	28.61	-52	49	46	-1	NSW	5	0	6	52	47	1.50	
	Stornoway ...	28.82	NW	5	0	28.85	-07	46	45	-3	W	4	0	4	50	43	0.60	
	Wick ...	28.66	W	0	0	28.89	-01	46	43	-5	W	5	0	2	55	43	0.25	
	Nairn ...	28.73	WNW	4	0	28.93	+12	44	42	-5	W	2	0	2	52	41	0.63	
	Aberdeen ...	28.69	W	6	0	29.02	+23	45	41	-7	SSW	2	0	3	58	43	0.21	
	Leith ...	28.86	W	5	0	29.12	+46	43	42	-6	NSW	5	0	•	53	42	0.73	
	Shields ...	28.95	NSW	7	0	29.23	+50	46	43	-6	SW	3	0	3	54	44	0.08	
	Spurn Head ...	29.15	NSW	8	0	29.40	+41	47	45	-8	SSW	4	0	4	55	45	0.05	
	York ...	29.13	W	7	0	29.36	+49	46	44	-6	SW	2	0	•	56	43	0.13	
	Loughborough	29.31	NSW	5	0	29.47	+38	45	43	-9	SSW	2	0	•	55	43	0.11	
GERMANY.	Ardrossan ...	28.49	WNW	8	0	29.13	+50	48	45	-2	W	6	0	5	56	45	0.36	
	Malin Head ...	29.08	WNW	7	0	29.15	+31	45	44	-3	SSW	5	0	4	51	44	0.08	
	Mullaghmore ...	29.29	WNW	8	0	29.19	+08	45	43	-4	SW	6	0	5	53	44	0.30	
	Belmullet ...	29.37	W	7	0	29.19	-09	47	45	-4	NSW	8	0	•	53	44	0.13	
	Donaghadee ...	29.16	WNW	4	0	29.27	+57	43	42	-5	SW	3	0	2	53	42	0.00	
	Barrow-in-Furness	29.11	SW	10	0	29.27	+64	49	45	-4	SW	6	0	•	53	44	0.29	
	Liverpool (Bidston)	29.21	W	7	0	29.38	+56	47	43	-2	NSW	4	0	4	53	45	0.10	
	Holyhead ...	29.30	W	7	0	29.38	+48	49	45	-3	NSW	6	0	6	54	47	0.11	
	Parsonstown ...	29.43	SW	1	0	29.34	+08	43	42	-6	W	0	0	•	54	40	0.08	
	Valencia ...	29.62	WNW	5	0	29.39	-06	46	44	-4	NSW	6	0	6	56	44	0.28	
FRANCE AND NETHERLANDS.	Roche's Point...	29.57	W	5	0	29.47	+04	43	46	-4	W	2	0	4	56	44	0.01	
	Pembroke (St. Ann's Hd.)	29.47	W	7	0	29.48	+18	52	50	-1	SW	6	0	6	55	50	0.03	
	Silly ...	29.68	W	8	0	29.59	+02	53	50	-2	SW	6	0	6	57	50	0.10	
	Prawle Point ...	29.62	WNW	6	0	29.61	+10	52	49	-2	SW	7	0	5	57	47	0.18	
	Jersey (St. Aubin's)	29.73	WNW	6	0	29.73	+11	54	52	-5	SW	6	0	5	61	50	0.13	
	Hurst Castle ...	29.65	W	9	0	29.61	+18	55	53	-2	W	7	0	6	58	48	0.03	
	Dungeness ...	29.48	W	8	0	29.60	+23	52	48	-5	W	6	0	5	60	48	0.09	
	London ...	29.49	W	6	0	29.39	+23	47	43	-5	W	3	0	•	58	43	0.01	
	Oxford ...	29.47	NSW	5	0	29.55	+27	47	44	-7	SW	3	0	•	56	44	0.01	
	Cambridge ...	29.35	SW	4	0	29.54	+22	48	45	-7	SW	2	0	•	57	42	0.01	
P. IN. G. I. A.	Yarmouth ...	29.31	W	6	0	29.51	+26	46	44	-5	NSW	4	0	3	56	42	0.02	
	Cuxhaven ...	29.45	S	5	0	29.48	+18	48	47	-1	SW	5	0	•	58	47	0.12	
	Berlin ...	29.61	S	3	0	29.69	+19	51	49	+3	SW	3	0	•	61	48	0.01	
	Wiesbaden ...	?	•	•	•	29.81	+06	48	45	+3	SW	3	0	•	59	40	0.01	
	Munich ...	29.81	W	3	0	29.97	+10	49	46	+1	SW	2	0	•	52	46	0.35	
	The Helder ...	29.37	SW	5	0	29.50	+03	51	47	+1	NSW	4	0	4	57	50	0.08	
	Brussels (a.m.)	?	•	•	•	29.71	+11	48	47	-1	NSW	3	0	•	59	46	0.12	
	Cape Gris Nez	?	WNW	7	0	?	?	53	47	-2	WNW	6	0	5	59	50	0.12	
	Paris ...	29.74	NSW	2	0	29.84	+08	47	46	-5	SW	2	0	•	62	43	0.08	
	Brest ...	?	WNW	6	0	?	?	56	52	-3	W	4	0	4	61	50	0.08	
P. IN. G. I. A.	Lorient ...	29.86	W	5	0	29.82	+07	55	52	-4	W	4	0	5	59	34	0.08	
	Rocheport ...	29.97	WNW	5	0	29.99	+03	58	55	-2	WNW	4	0	2	63	52	0.01	
	Belfort ...	29.76	NW	1	0	29.94	+07	47	41	-4	NW	2	0	•	59	44	0.20	
	Lyons ...	29.89	S	1	0	30.05	+08	47	45	-1	SSW	1	0	•	63	46	0.01	
	Nice ...	29.77	SSE	3	0	29.89	+16	54	53	-3	E	3	0	2	68	52	0.01	
	Perpignan ...	29.97	W	3	0	30.05	+08	56	53	-2	W	2	0	•	72	?	0.01	
	Biarritz ...	30.02	NSW	6	0	30.02	-03	60	57	0	NSW	3	0	5	63	57	0.12	
	Corunna ...	?	•	•	•	?	?	?	?	?	?	?	?	?	?	?	?	
	Lisbon ...	30.20	NNE	3	0	30.18	-06	60	58	0	WNW	3	0	5	68	59	0.01	

For Explanation of Columns, see bottom of p 4. † Received too late for insertion in Charts on p. 2.
 Erratum, - The Barometer Reading at Valencia for 8 a.m. yesterday was incorrectly reported to us; it should read "29.45" and not "29.65".

WEATHER CHARTS

for 8 a.m. on Tuesday, 8th October

1889.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP

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

Changes since previous morning are stated in words.

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

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

→ = forces 5 to 7; → = forces 1 to 4.

⊙ = dead calm.

SEA DISTURBANCE—Where considerable, is shown thus:

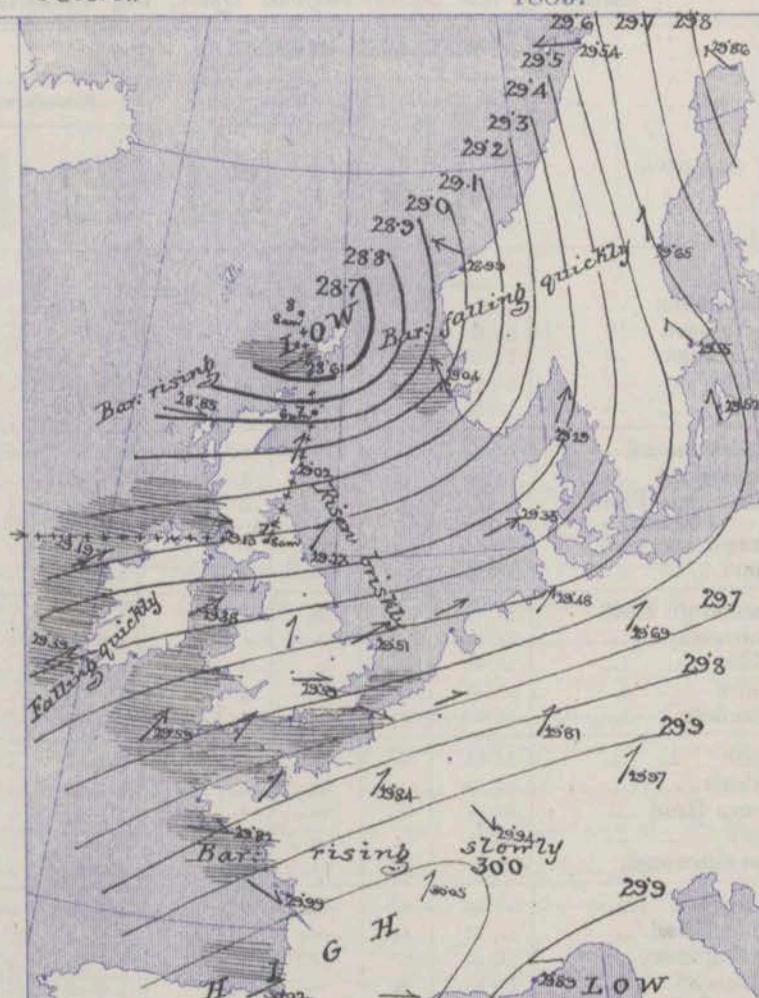
⊞ = Rough. ⊞ = High.

MEAN HEIGHT OF THE BAROMETER

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

During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS.
Sumburgh Head	29.708
Stornoway	29.735
Wick	29.745
Nairn	29.761
Aberdeen	29.774
Leith	29.804
Shields	29.835
York	29.872
Loughborough	29.891
Ardrossan	29.813
Donaghadee	29.832
Holyhead	29.853
Liverpool	29.864
Parsonstown	29.881
Valencia	29.873
Roche's Point	29.870
Pembroke	29.868
Seilly	29.804
Jersey	29.904
Hurst Castle	29.907
Dover	29.909
LONDON	29.911
Oxford	29.910
Cambridge	29.900
Yarmouth	29.886



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30.1 ins. and upwards in Portugal; somewhat high, 29.8 ins. and upwards, in the north of Sweden.
Lowest, 28.7 ins. and less, in a depression the centre of which lies to the northward of the Shetlands.
Gradients rather steep in most parts of Northwestern Europe, but slight in Spain and the south of France.
Barometer still falling in the extreme north, but rising in the east. A fresh fall is reported in the east and south-west.

TEMPERATURE

Highest, 60° at Biarritz and Gabon, 58° at Rochefort, 56° at Christiansund, Rost and Riga, and 55° at Hunt Castle and Sorient.
Lowest, 43° at Donaghadee and Barrington, 44° at Kairi, 45° at Aberdeen, Leth, Loughboro, Malin H. and Mullaghmore.

WIND

Chiefly SW^{ly} or W^{ly}; moderate in force in the east of our Islands, but strong in the east and south, as well as in Denmark.
 SE^{ly} in Scandinavia, with a gale at Hudeerness, variable in the south of France.

WEATHER

Fine over the eastern parts of our Islands, as well as in the north of Scandinavia and the south of France.
 Showery on our west and south-east coasts, rainy at some of the Danish and Scandinavian stations.
 A lunar halo was seen last night at Shild, and a solar halo is now visible at Jersey.

SEA

Rough on all our western, southern and extreme northern coasts, but slight in the east.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

Fresh disturbances are evidently approaching our Islands from the westward, but the size and depth of these systems are at present unknown. An early renewal of rough unsettled weather is, however, likely in the western and southern parts of the Kingdom, and possibly in the north also. The warning signals are therefore allowed to remain up for the present.

FORECASTS

For the 24 hours ending at NOON on 9th OCTOBER 1889.

DISTRICTS.

FORECASTS.

† 0	SCOTLAND NORTH	W ^{ly} to SW ^{ly} winds, fresh or strong; changeable, some rain.
† 1	SCOTLAND EAST	
† 2	ENGLAND N.E.	
† 3	ENGLAND EAST	
4	MIDLAND COUNTIES	SW ^{ly} winds, freshening; fine to unsettled and showery.
† 5	ENGLAND SOUTH	
		W ^{ly} to SW ^{ly} winds, strong, perhaps a gale; fine to squally and showery.

DISTRICTS.

FORECASTS

† 6	SCOTLAND WEST	Same as No 0.
† 7	ENGLAND N.W.	
† 8	ENGLAND S.W.	
† 9	IRELAND NORTH	
† 6	IRELAND SOUTH	SW ^{ly} winds, strong, a gale in places; squally, showery.
	WARNINGS	SOUTH CONE still flying on all coasts.

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

YESTERDAY'S 2 P.M. REPORTS.

	Bar:	Ther:		Wind		Wea:	Sea		Bar.		Ther:		Wind		Wea:	Sea.
		D	W	D	F						D	W	D	F		
Skudesnaes ...	29.22	55	51	SE	5	c	5		Holyhead ...	29.25	53	49	WNW	8	c q	7
Sumburgh Head ...	28.82	52	51	SE	5	r	6		Valencia ...	29.60	55	50	W	6	c q p	2
Stornoway ...	28.85	50	50	N	4	r	4		Scilly ...	29.68	56	50	WNW	8	c m	7
Aberdeen ...	28.69	50	49	SE	1	o p	5		Jersey ...	29.71	60	53	W	7	bc	5
Shields ...	28.74	53	50	W	7	c q p	3		Dungeness ...	29.43	59	52	WNW	9	c q	6
Ardrossan ...	28.89	51	49	WNW	8	p q	6		London ...	29.41	58	52	W	7	c q	5
Malin Head ...	29.04	50	48	NW	7	o	5		Yarmouth ...	29.23	55	52	WNW	7	c m q p	5
Mullaghmore ...	29.26	49	48	WNW	8	c q p	6		Rochefort ...	29.92	62	61	WNW	5	r	2
Belmullet ...	29.35	51	48	WNW	6	c	5									

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

The reports for yesterday morning showed that pressure was highest, 30.2 ins and upwards, in a large anticyclone covering nearly the whole of Russia, and also in a smaller system lying to the southward of the Iberian Peninsula. The lowest readings, 28.7 ins. and less, were found in a depression, the centre of which had advanced quietly from the westward to the south of Scotland, but a shallower disturbance with readings below 29.7 ins. was lying over the Gulf of Genoa. Gales or strong winds were reported over the whole of Northwestern Europe, from NW in Ireland, from W. in the west and south of England and the north of France, from S. in the east of England, and from SE in the north and east of Scotland and on the eastern shores of the North Sea. Over Italy and the south of France a distinct cyclonic circulation was shown round the depression which existed over the Gulf of Genoa, but in Russia and Austria the wind was light from the SE^{ad}, while in Spain it was very variable. The weather was in a decidedly unsettled state generally, with rain over the northern parts of the United Kingdom, as well as in isolated parts of Northern and Central Europe, passing showers in the south of our Islands, and fog at several of the German stations. A thunderstorm was reported at Rome. Temperatures had fallen a little in the west of our Islands, but risen in most other localities; readings ranged from a little above 70° in the neighbourhood of the south of Italy, to a little below 45° in the south of Russia. The highest individual readings were 72° at Pondichy, 71° at Malta and Sfax, 65° at Naples, and 64° at Trieste, Langunaris, Barcelona, Algiers, and Constantinople; the lowest were 40° at Mirbaden, 44° at Moscow, 46° at Grestau, Munster and Madrid, 47° at Kaspikowarsk, and 48° at Posenmunde, Munich, and Malin Ht.

Later in the day the deep depression over the south of Scotland travelled in a north-northeasterly direction to the north-eastward of that country. W² gales continued to blow over the greater part of Ireland and England, with heavy squalls and showers, and a gale from the same quarter also sprang up over the south 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 9th OCTOBER, 1889
 Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.

STATIONS.	YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
	Barometer at 3 rd P. and Sea Level.	Temp. in Shade.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Sea: (0 to 2.)	SHADE TEMP.				
			Dir.	Force (0 to 12.)		Reading at 3 rd P. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Dir.	Force (0 to 12.)		Weather.	Max.	Min.	Amount of Rainfall.	
SCANDINAVIA.	Haparanda ...	29.76	49	ESE	2	0	29.59	- .24	47	47	- 1	E	2	r	•	52	45	—
	Hernösand ...	29.46	50	FNE	4	r	29.54	- .31	46	45	- 5	SW	2	b	•	52	48	0.67
	Stockholm ...	29.53	50	SSW	2	bc	29.70	+ .15	46	44	- 6	SSW	2	b	•	52	45	0.16
	Wisby ...	29.59	50	SW	4	b	29.73	+ .21	47	45	- 7	S	4	b	•	53	47	0.04
	Bodö ...	29.51	55	E	6	0	29.47	- .07	33	48	0	E	4	0	2	55	48	—
	Christiansund ...	29.24	50	W	1	b	29.32	+ .33	48	46	- 8	E	3	c	2	59	45	0.04
	Skudesnaes ...	29.31	51	SSW	7	c	29.18	+ .14	53	46	+ 3	ESE	8	0	6	56	50	0.63
	Christiania Fjord (Fierder)	29.44	52	SW	5	c	29.47	+ .20	50	48	- 3	ESE	5	bc	5	54	48	0.16
	Skagen (The Scaw)	29.49	49	W	4	b	29.38	+ .09	51	48	- 1	SSE	7	0	5	54	48	—
	Fanö ...	29.49	50	S	5	b	29.09	- .24	47	47	- 2	SE	7	r	•	52	45	0.47
BRITISH ISLANDS.	Sumburgh Head ...	28.99	47	SSW	3	b	28.92	+ .31	46	46	- 3	SSE	2	r	6	51	41	0.15
	Stornoway ...	28.85	46	SW	5	c	28.78	- .07	47	46	+ 1	SE	5	c	4	51	42	0.04
	Wick ...	28.95	46	SW	4	c	28.82	- .07	47	45	+ 1	SW	2	bc	1	51	42	—
	Nairn ...	28.93	44	WSW	1	c	28.82	- .11	37	35	- 7	Z	0	b	1	51	30	—
	Aberdeen ...	29.04	47	S	3	0	28.86	- .36	36	35	- 9	W	1	bm	4	51	34	0.19
	Leith ...	29.03	44	SW	4	c	28.85	- .27	43	40	- 2	S	1	cm	•	52	37	0.01
	Shields ...	29.12	47	SW	4	0	28.94	- .29	41	40	- 5	SSW	4	b	3	55	46	0.03
	Spurn Head ...	29.10	52	S	4	0	29.08	- .32	45	43	- 2	SSW	5	b	4	55	41	—
	York ...	29.21	47	S	2	c	29.04	- .32	41	?	- 5	S	2	c	•	56	43	?
	Loughborough ...	29.23	49	SE	1	0	29.13	- .34	44	42	- 1	SSW	3	cm	•	57	40	0.01
GERMANY.	Ardrossan ...	28.98	49	SSW	3	0	28.76	- .37	45	43	- 3	SE	5	r	3	50	44	0.28
	Malin Head ...	28.92	43	SSW	5	0	28.58	- .57	49	49	+ 4	WNW	6	or	4	49	40	0.73
	Mullaghmore ...	28.95	44	SW	5	b	28.78	- .41	51	50	+ 6	W	7	cpq	6	51	41	0.45
	Belmullet ...	28.98	45	W	6	b	28.86	- .33	51	49	+ 4	W	6	bc	•	51	42	0.94
	Donaghadee ...	29.02	42	SW	2	b	28.47	- .50	44	44	+ 1	SW	6	r	3	49	42	0.13
	Barrow-in-Furness ...	29.05	48	S	4	0	28.91	- .36	48	45	- 1	S	6	rw	•	53	43	0.44
	Liverpool (Bidston) ...	29.14	44	SSW	2	0	29.03	- .35	45	42	- 2	SSW	3	bc	3	54	41	0.20
	Holyhead ...	29.07	50	WSW	4	cq	28.99	- .39	50	46	+ 1	SW	7	cq	6	55	45	?
	Parsonstown ...	29.06	44	SW	2	r	28.98	- .36	47	44	+ 4	SW	2	0	•	51	38	0.19
	Valencia ...	29.15	48	NNW	5	bcq	29.10	- .29	50	47	+ 4	W	3	cpq	3	53	44	0.16
FRANCE AND NETHERLANDS.	Roche's Point ...	29.15	48	W	4	bc	29.12	- .35	48	46	0	W	3	bc	4	53	41	0.02
	Pembroke (St. Ann's Hd.) ...	29.15	51	SW	6	c	29.13	- .35	52	49	0	WSW	6	bc	6	54	48	0.07
	Scilly ...	29.30	51	W	6	c	29.29	- .20	51	48	- 2	WSW	5	cq	6	55	46	0.49
	Prawle Point ...	29.28	49	W	5	bc	29.24	- .34	51	47	- 1	W	5	bcu	4	53	45	0.45
	Jersey (St. Aubin's) ...	29.36	54	SW	5	ogr	29.35	- .38	55	50	+ 1	WSW	7	bcq	5	58	49	1.21
	Hurst Castle ...	29.30	52	W	6	cpq	29.24	- .34	51	50	- 4	WSW	7	bcq	6	57	47	0.61
	Dungeness ...	29.38	55	SW	7	or	29.28	- .32	48	47	- 4	W	6	r	5	58	47	0.98
	London ...	29.30	49	SW	4	or	29.24	- .35	48	45	+ 1	SSW	2	bc	•	59	43	0.20
	Oxford ...	29.20	46	SSW	3	c	29.21	- .34	44	42	- 3	SSW	2	b	•	56	42	0.04
	Cambridge ...	29.28	50	S	2	r	29.21	- .33	46	44	- 2	SW	2	b	•	60	39	0.06
PENINSULA.	Yarmouth ...	29.35	51	SSW	4	bc	29.20	- .31	45	44	- 1	SW	4	b	4	57	41	0.26
	Cuxhaven ...	29.61	54	SSW	3	c	29.28	- .20	50	49	+ 2	SSW	5	r	•	52	48	0.24
	Berlin ...	29.80	49	SE	3	c	29.59	- .10	50	48	- 1	SE	2	r	•	59	46	0.04
	Wiesbaden ...	*	*	*	*	*	29.56	- .25	51	50	+ 3	SW	1	0	•	57	48	0.20
	Munich ...	29.94	50	W	2	r	29.78	- .19	46	45	- 3	SW	2	c	•	55	43	0.04
	The Helder ...	29.44	48	SSE	2	c	29.25	- .25	51	47	0	SW	4	c	4	55	45	0.32
	Brussels (8 a.m.) ...	?	*	*	*	*	29.47	- .29	49	47	+ 1	WSW	2	b	•	54	47	0.32
	Cape Gris Nez ...	53	53	SW	6	r	?	?	50	47	- 3	W	6	r	4	59	48	0.91
	Paris ...	29.60	52	SSE	3	r	29.57	- .32	48	47	+ 1	SW	2	bc	•	?	46	0.29
	Brest ...	?	54	SW	7	0	?	?	55	51	- 1	NNW	6	c	7	61	50	0.16
PENINSULA.	Lorient ...	29.49	52	NNW	6	0	29.45	- .37	33	49	- 2	WSW	5	bc	5	59	50	0.63
	Rochefort ...	29.71	61	SW	5	r	29.65	- .34	56	55	- 2	W	4	0	2	63	50	0.51
	Belfort ...	29.82	49	NNW	1	c	29.69	- .25	47	43	0	E	1	r	•	57	45	0.32
	Lyons ...	29.86	55	ESE	1	0	29.66	- .39	39	54	+ 10	SW	4	0	•	63	?	?
	Nice ...	29.91	58	E	3	0	29.89	- .00	52	53	0	ENE	4	c	3	68	32	—
	Perpignan ...	29.91	60	S	1	0	29.70	- .35	53	52	- 3	Z	0	0	•	70	52	—
PENINSULA.	Biarritz ...	29.77	60	E	2	0	29.70	- .32	59	58	- 1	NNW	4	r	5	66	57	0.24
	Corunna ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
PENINSULA.	Lisbon ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

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

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

WEATHER CHARTS

for 8 a.m. on Wednesday, 9th OCTOBER.

1889.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP.

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

Changes since previous morning are stated in words.

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

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

⊙ = dead calm.

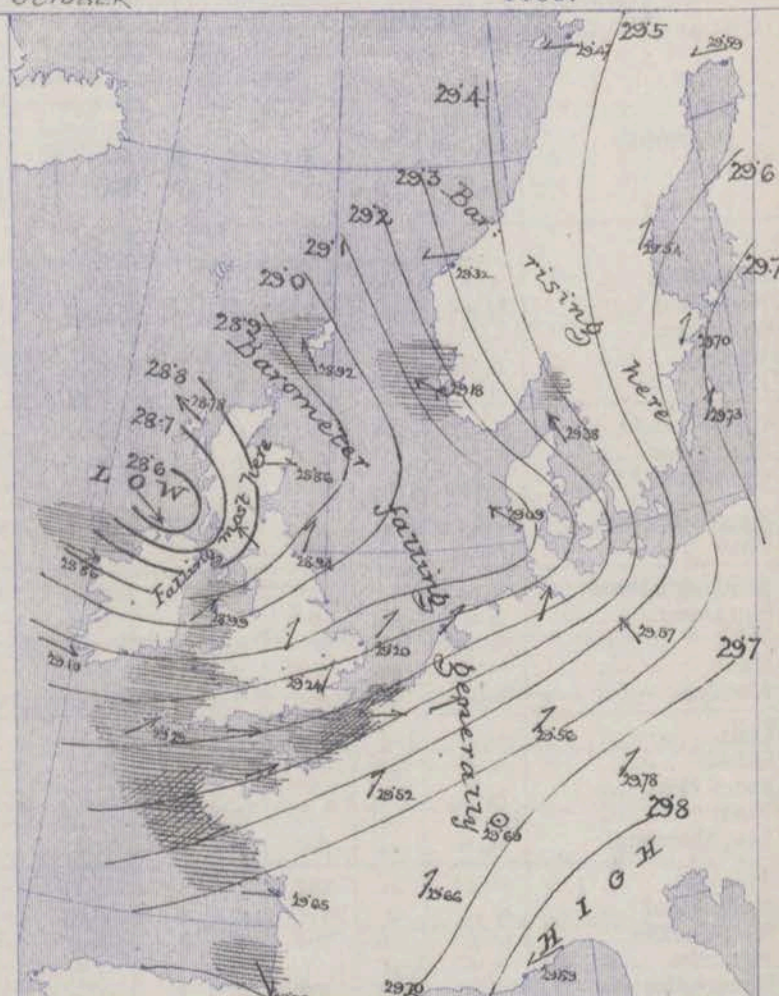
SEA DISTURBANCE—Where considerable, is shown thus:

⊞ = Rough. ⊞ = High.

MEAN HEIGHT OF THE BAROMETER

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

STATIONS.	MEAN READINGS.
Sumburgh Head	29.708
Stornoway	29.735
Wick	29.745
Nairn	29.761
Aberdeen	29.774
Leith	29.804
Shields	29.835
York	29.872
Loughborough	29.891
Ardrossan	29.813
Donaghadee	29.832
Holyhead	29.853
Liverpool	29.861
Parsonstown	29.881
Valencia	29.873
Roche's Point	29.879
Pembroke	29.868
Scilly	29.891
Jersey	29.901
Hurst Castle	29.907
Dover	29.909
LONDON	29.911
Oxford	29.910
Cambridge	29.900
Yarmouth	29.886



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.

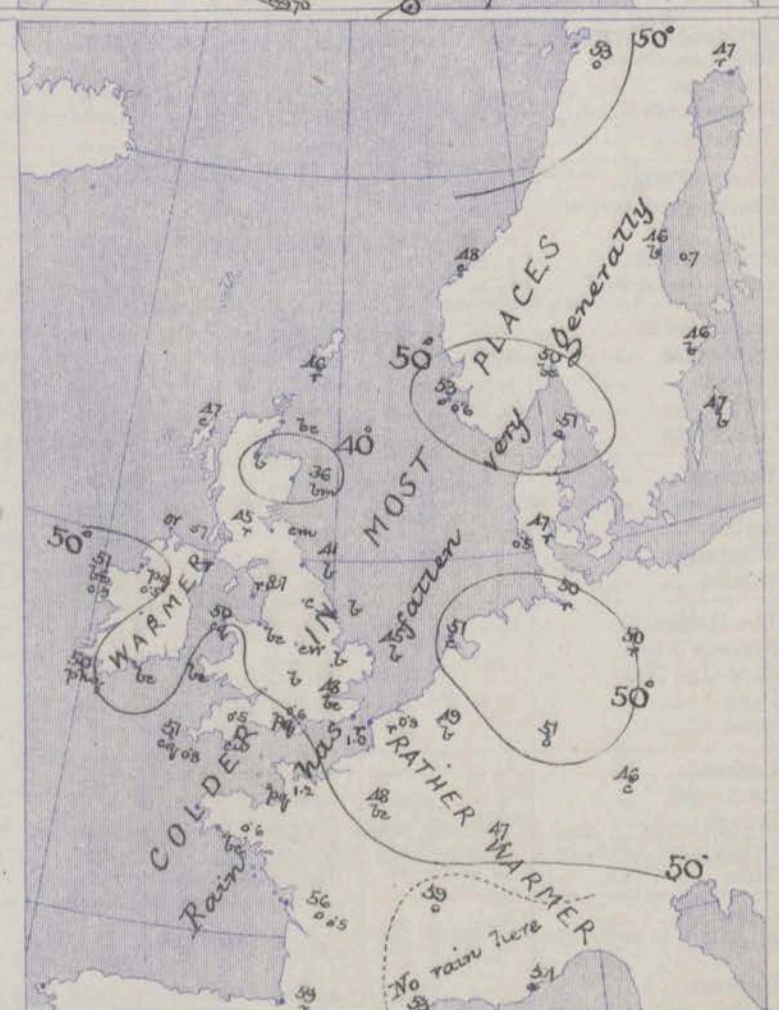
RAINFALL—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of October.)

STATIONS.	TEMPERATURE.				RAINFALL (Inches.)
	Daily Max.	Daily Min.	at 8 a.m. Dry.	Wet.	
Sumburgh Head	49.7	41.6	46.0	44.3	4.33
Stornoway	50.5	39.5	45.3	44.1	4.94
Wick	51.6	40.1	46.1	44.3	2.94
Nairn	51.0	40.6	44.5	42.5	2.38
Aberdeen	52.3	41.0	45.5	43.5	2.88
Leith	54.7	41.5	46.5	44.7	1.91
Shields	53.0	42.8	47.1	45.4	2.46
York	54.8	41.0	45.9	44.5	2.64
Loughborough	55.3	41.4	46.4	45.0	2.98
Ardrossan	53.5	43.6	47.6	45.6	4.31
Donaghadee	53.2	43.3	47.7	46.5	3.35
Holyhead	54.5	47.0	50.2	48.2	4.53
Liverpool	53.6	44.6	47.8	45.8	3.62
Parsonstown	54.7	41.1	46.4	44.7	3.27
Valencia	56.6	46.5	51.3	49.1	6.09
Roche's Point	55.8	45.9	50.2	48.4	4.17
Pembroke	54.8	48.0	51.2	49.1	4.13
Scilly	56.6	50.3	53.8	51.7	3.84
Jersey	58.1	49.2	53.6	51.1	4.34
Hurst Castle	57.1	46.0	51.4	49.6	3.24
Dover	55.8	47.0	50.7	48.7	3.28
LONDON	56.6	43.2	48.0	46.4	2.74
Oxford	55.3	42.5	46.7	45.3	2.72
Cambridge	56.4	41.2	46.4	45.4	2.36
Yarmouth	54.3	44.8	49.2	47.0	2.97

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



GENERAL SITUATION AT 8 A.M.

PRESSURE	<p>Highest 29.8 ins. and upwards, in the extreme south of France, 29.7 ins. and upwards, in the south of Sweden.</p> <p>Lowest 28.6 ins. and less, in a deep depression, the centre of which lies off the north of Ireland.</p> <p>Gradients rather steep in most parts of northwestern Europe, but slight over the North Sea and the east of Scotland.</p> <p>Barometer rising at some of the Scandinavian stations, but falling elsewhere, — quickly on our northwest coasts.</p>
TEMPERATURE	<p>Highest 57° at Lyons and Biarritz, 56° at Rochefort, 55° at Jersey & Brest, 54° at Nice, & 53° at Bordeaux, Shetland, & Parguana.</p> <p>Lowest 36° at Aberdeen, 34° at Kairn, 31° at Shields and York, & 30° at Leith, and 29° at Donaghadee, Loughborough, and Belfast.</p> <p>Frost was experienced last night over the central parts of Scotland.</p>
WIND	<p>Strong from the W² on our west and south coasts, but moderate from the SW² over the Netherlands and the eastern parts of England and France.</p> <p>Strong to a gale from the SE² on the eastern shores of the North Sea; fresh from the same quarter in the west of Scotland, E² in the north of Scandinavia, variable in the south of France.</p>
WEATHER	<p>Fine in the eastern parts of Great Britain and also in Sweden.</p> <p>Showery in the west and south of our islands; raining on our NW coasts, as well as in Denmark and north Germany.</p> <p>Heavy rain has fallen at many of our western and southern stations, thunderstorms have occurred at York and Braile Point, lightning has been seen at Aberdeen.</p>
SEA	<p>Moderate on the east coasts of Great Britain, but rough in nearly all other localities, & high at Cape Gris-Nez & Brest.</p>

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The depression off the north of Ireland will probably move at first in an easterly direction, but as the barometer is still somewhat high in Scandinavia its progress is likely to be very gradual. A further increase of wind is probable on our western and southern coasts. The subsequent movements of the disturbance are at present very doubtful.

FORECASTS

For the 24 hours ending at NOON on 10TH OCTOBER 1889.

DISTRICTS.

FORECASTS.

0	SCOTLAND NORTH	SE ² winds, freshening; unsettled, some rain.
1	SCOTLAND EAST	
2	ENGLAND N.E.	S ² and SW ² winds, increasing in force; fine to squally and some rain.
3	ENGLAND EAST	
4	MIDLAND COUNTIES	
5	ENGLAND SOUTH	SW ² winds, increasing in force, a gale in places, squally, showery.

DISTRICTS.

FORECASTS

6	SCOTLAND WEST	SE ² winds, shifting to W or NW, squally, rain at times.
7	ENGLAND N.W.	
8	ENGLAND S.W.	W ² to NW ² winds, increasing in force; squally, showery.
9	IRELAND NORTH	
10	IRELAND SOUTH	

WARNINGS

The N. Cone was hoisted last evening in districts 6, 7, 8, 9, and 10, and the S. Cone was rehoisted in districts 3, 4, 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		Wea:	Sea		Bar:	Ther:		Wind		Wea:	Sea
		D	W	D	F					D	W	D	F		
Skudesnaes ...	29.20	52	45	S	7	r	6	Holyhead ...	29.19	53	49	SSW	5	cg	5
Sumburgh Head ...	28.90	48	45	WST	4	c	6	Valencia ...	29.22	49	46	WST	5	bempg	6
Stornoway ...	28.86	51	49	SW	5	c	5	Scilly ...	29.39	53	49	SW	4	bc	5
Aberdeen ...	29.08	49	44	SSW	4	bcg	4	Jersey ...	29.26	57	53	SSW	5	r	5
Shields ...	29.20	53	49	SW	5	bc	3	Dungeness ...	29.50	55	52	SW	4	r	5
Ardrossan ...	29.05	50	46	SSW	7	c	6	London ...	29.46	57	51	S	4	o	2
Malin Head ...	28.99	45	44	SW	5	c	4	Yarmouth ...	29.46	55	54	SW	4	bc	3
Mullaghmore ...	29.03	49	46	SSW	6	bc	4	Rochefort ...	29.88	61	57	SW	4	o	2
Belmullet ...	29.04	44	43	W	5	ofg	3								

GENERAL REMARKS ON THE WEATHER OVER EUROPE

DURING THE PAST 24 HOURS.

The reports for yesterday morning showed that pressure was highest, 30.1 in. and upwards, in two large areas, - one lying over Russia and the other over Algeria and the greater part of the Iberian peninsula. The lowest readings, 28.7 in. and less, were found in a deep cyclonic system the centre of which lay a little to the northward of the Shetlands, but a very shallow depression, with readings below 29.9 in. existed over the Riviera. Fresh or strong winds from the SW. or W. were reported in the west and south of our islands as well as in Denmark and North Germany, and moderate breezes from SW. or S. on the east coast of Great Britain. Over Scandinavia, Prussia and Austria, however, the wind was S.W. or S.E. and on the Norwegian coast it blew with the force of a gale, while over Southern Europe and the Mediterranean variable breezes were reported. The weather was fine in the eastern parts of Great Britain and the west of Norway as well as over the greater part of Southern Europe, but cloudy or overcast elsewhere, with showers in the west and southwest of our islands and steady rain in the southern parts of Sweden and Norway as well as at some of the German stations. Temperature had fallen in nearly all parts of Western Europe as well as in Italy, but risen elsewhere; readings ranged from between 60° and 70° over Italy, the Adriatic & the Mediterranean to 45° or less in the northern parts of the United Kingdom and the extreme north of Russia. The highest individual readings were 71° at Malta, 70° at Brindisi, 69° at Palermo and Genoa, 68° at Algiers, 66° at Barcelona and 64° at Hermannstadt, Languedoc, Oran and La Cella; the lowest were 41° at Archangel, 43° at Donaghadee and Parsonstown, 44° at Naom, 45° at Aberdeen, Leith, Loughborough, Malin H., Mullaghmore and 46° at Stornoway, Wick, Shields, York, Valencia and Yarmouth.

In the course of the day the depression over the Shetlands entirely disappeared from our area, but the barometer fell generally and a small disturbance was formed over the south of England. The latter system occasioned a strong S.W. gale in the Straits of Dover and heavy rain at many of our southern stations. Thunder and lightning occurred in some parts of Great Britain.

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 10th OCTOBER. 1889.
Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.

STATIONS.		YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
		Barometer at 32° F. and Sea Level.	Temp. in Shade.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Sea. (0 to 9.)	SHADE TEMP.		Amount of Rainfall.		
				Dir.	Force (0 to 12.)		Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Dir.	Force (0 to 12.)		Weather.	Max.		Min.	
SCANDINAVIA.	Haparanda ...	29.69	47	SW	4	bc	29.71	+ 12	45	45	- 2	S	2	r	•	50	45	0.32	
	Hernösand ...	29.66	49	SW	2	o	29.66	+ 12	47	45	+ 1	Z	0	b	•	55	45	0.32	
	Stockholm ...	29.61	51	SE	2	r	29.75	+ 05	48	47	+ 2	SSE	2	f	•	61	43	0.20	
	Wisby ...	29.65	52	SW	4	bc	29.71	- 02	52	51	+ 5	SSE	4	o	•	54	46	0.12	
	Bodö ...	29.46	45	Z	0	o	29.51	+ 04	44	40	- 9	E	2	b	1	54	39	—	
	Christiansund	29.24	51	SE	6	bc	29.39	+ 07	49	45	+ 1	ESE	2	c	1	52	45	—	
	Skudesnaes ...	29.21	50	SE	8	r	29.39	+ 21	53	50	0	SSE	7	c	6	53	48	0.63	
	Christiania Fjord (Fierder)	29.37	53	SSW	6	o	29.57	+ 10	52	51	+ 2	SSE	5	c	4	53	50	—	
	Skagen (The Scaw)	29.46	50	SW	3	o	29.54	+ 16	52	51	+ 1	S	2	b	2	54	45	0.32	
	Fanö ...	29.43	49	S	5	b	29.45	+ 36	45	44	- 2	SSE	4	b	•	55	45	0.32	
BRITISH ISLANDS.	Sumburgh Head	28.86	45	SSE	3	o	29.02	+ 10	49	46	+ 3	SSE	3	o	6	50	42	0.97	
	Stornoway ...	28.81	44	NE	2	b	29.02	+ 24	38	38	- 9	H	2	c	2	49	33	—	
	Wick ...	28.83	45	SW	2	r	29.11	+ 29	44	43	- 3	SSW	2	bc	2	53	38	0.85	
	Nairn ...	28.78	42	Z	0	r	29.07	+ 25	37	36	0	Z	0	c	0	49	32	0.24	
	Aberdeen ...	28.74	46	H	2	ow	29.14	+ 28	42	41	+ 6	SW	1	opm	4	49	33	0.06	
	Leith ...	28.85	43	W	1	c	29.11	+ 26	48	45	+ 5	S	1	cm	•	52	40	0.11	
	Shields ...	28.95	50	SSW	5	bc	29.16	+ 22	46	45	+ 5	SW	2	c	2	52	40	0.05	
	Spurn Head ...	29.14	52	S	3	bc	29.26	+ 18	44	44	- 1	S	4	bc	4	55	41	—	
	York ...	29.09	52	SW	3	bc	29.23	+ 19	44	43	+ 3	SSE	1	c	•	53	39	—	
	Loughborough	29.17	50	SSW	3	c	29.27	+ 14	41	40	- 3	SE	2	bc	•	57	38	—	
GERMANY.	Ardrossan ...	28.87	48	H	2	o	29.10	+ 34	51	48	+ 6	SSW	4	bc	3	55	43	0.36	
	Malin Head ...	28.90	47	NW	1	op	29.05	+ 47	47	47	- 2	SW	3	op	3	51	46	0.29	
	Mullaghmore ...	28.96	51	H	6	cp	29.11	+ 33	48	47	- 3	SW	5	op	4	54	47	0.70	
	Belmullet ...	29.01	50	NW	4	op	29.12	+ 26	50	48	- 1	H	3	c	•	53	48	0.25	
	Donaghadee ...	28.95	50	H	3	o	29.14	+ 37	44	44	0	WSW	3	bc	1	55	43	0.10	
	Barrow-in-Furness	28.98	52	SSE	7	o	29.13	+ 22	47	47	- 1	SE	5	hp	•	53	47	0.94	
	Liverpool (Bidston)	29.09	51	SW	3	o	29.21	+ 18	47	45	+ 2	S	2	bc	2	53	43	—	
	Holyhead ...	29.05	53	WSW	6	cp	29.19	+ 20	51	49	+ 1	WSW	3	c	3	54	49	0.02	
	Parsonstown ...	29.07	49	Z	0	c	29.19	+ 21	43	42	- 4	Z	0	bc	•	53	41	0.10	
	Valencia ...	29.18	51	W	3	cpm	29.25	+ 15	49	47	- 1	WNW	2	bc	3	56	46	0.28	
FRANCE AND NETHERLANDS.	Roche's Point...	29.16	58	H	3	bc	29.24	+ 12	45	43	- 3	W	2	b	3	54	40	—	
	Pembroke (St. Ann's Hd.)	29.17	53	WSW	5	bc	29.24	+ 11	51	50	- 1	WSW	4	bc	4	55	50	0.05	
	Scilly ...	29.25	53	W	5	bc	29.29	+ 00	51	49	0	SW	3	op	6	56	47	0.18	
	Prawle Point ...	29.26	52	H	6	c	29.31	+ 07	49	47	- 2	SSW	3	p	3	54	46	0.09	
	Jersey (St. Aubin's)	29.34	53	SW	5	cpm	29.37	+ 02	54	51	- 1	WSW	5	cpm	4	59	48	0.21	
	Hurst Castle ...	29.27	50	WSW	6	cp	29.32	+ 08	50	48	- 1	SSW	2	cp	4	55	45	0.48	
	Dungeness ...	29.31	53	SW	6	cp	29.32	+ 04	50	48	+ 2	WSW	2	c	2	56	46	0.52	
	London ...	29.28	49	SW	4	bc	29.32	+ 08	48	46	0	W	2	bc	•	58	40	0.02	
	Oxford ...	29.26	45	SSW	3	b	29.30	+ 09	42	42	- 2	S	1	bc	•	57	39	—	
	Cambridge ...	29.25	49	S	1	b	29.31	+ 10	44	44	- 2	S	1	b	•	59	35	—	
PENIN. SULA.	Yarmouth ...	29.24	50	SSW	4	bc	29.29	+ 09	46	45	+ 1	SW	1	bc	3	55	43	—	
	Cuxhaven ...	29.45	48	SSW	2	b	29.46	+ 21	47	46	- 3	S	2	c	•	56	47	—	
	Berlin ...	29.67	55	SW	3	o	29.56	- 03	53	52	+ 3	SE	3	o	•	59	50	0.20	
	Wiesbaden ...	*	*	*	*	*	29.49	- 07	51	50	0	SE	1	o	•	55	48	0.28	
	Munich ...	29.73	50	SW	2	o	29.53	- 25	46	45	0	Z	0	f	•	59	41	—	
	The Helder ...	29.39	47	S	1	b	29.34	+ 09	48	48	- 3	SSE	1	r	1	54	46	0.08	
	Brussels (9 a.m.)	*	*	*	*	*	*	*	48	46	- 2	W	3	r	2	55	45	1.30	
	Cape Gris Nez	?	52	W	6	c	?	?	48	47	0	S	2	bc	•	?	48	0.63	
	Paris ...	29.47	50	SE	2	bc	29.45	- 07	48	47	0	S	2	bc	•	61	48	0.12	
	Brest ...	?	53	WNW	5	o	?	?	53	48	- 2	H	2	o	6	61	48	0.12	
FRANCE AND NETHERLANDS.	Lorient ...	29.39	54	W	5	c	29.39	- 06	54	48	+ 1	W	3	c	4	59	52	—	
	Rochefort ...	29.53	56	SW	5	r	29.58	- 07	54	51	- 2	WSW	5	r	3	63	48	0.28	
	Belfort ...	29.68	51	NW	1	r	29.60	- 09	46	41	- 1	NW	1	r	•	57	39	2.60	
	Lyons ...	29.63	51	ENE	1	o	29.62	- 04	49	46	- 10	WSW	1	r	•	64	?	0.63	
	Nice ...	29.82	62	S	6	f	29.70	- 19	62	62	+ 8	SSW	7	f	7	63	54	0.35	
	Perpignan ...	29.60	60	Z	0	o	29.70	- 00	56	49	+ 3	NW	2	o	•	72	52	—	
	Biarritz ...	29.57	61	SW	4	o	29.63	- 07	53	48	- 6	SW	3	b	7	63	48	0.63	
	Corunna ...	*	*	*	*	*	*	*	58	55	- 4	SW	4	c	4	66	55	0.08	
	Lisbon ...	29.93	59	WNW	3	bc	29.95	- 02	58	55	- 4	SW	4	c	4	66	55	0.08	

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

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

1889.



EXPLANATION OF MAP

Changes since previous morning are stated in words.

$\longrightarrow =$ forces above 10; $\longrightarrow =$ forces 8 to 10;

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

SEA DISTURBANCE—Where considerable, is shown thus:

 = *Rough*,  = *High*.

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

During the 15 Years: 1871—1885.

1. 10. 1951

29.5 29.51 29.6 29.7

29.4

29.3

29.2

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29.0

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

WEATHER is shown by Letters of the Beaufort Scale.

RAINFALL—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0·5 in. or more, are quoted in figures.

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

A hand-drawn map of Europe and the North Atlantic, showing isotherms and temperature data. The map includes latitude and longitude lines. Isotherms for 40°, 50°, and 60° are drawn. Various temperature readings are noted at different locations, often with letters indicating specific conditions or stations. Handwritten labels include "COLDER" in the north, "WILDER" on the right, "RATHER" in the south, and "WARMER HERE" at the bottom. A note "most places" is also present near the 60° isotherm.

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

GENERAL SITUATION AT 8 A.M.

PRESSURE	<p>Highest 29.9 ins. and upwards, in the south of Portugal; 29.7 ins. and upwards, in Sweden.</p> <p>Lowest 29.1 ins. and less, in a large area lying over and to the north-westward of Scotland. A shallow depression exists over South Germany.</p> <p>Gradients slight. Barometer rising at all but the German stations.</p>
TEMPERATURE	<p>Highest 62° at Nice, 56° at Perpignan, 54° at Jersey, Lorient and Rochefort, 53° at Skudsmoes, Berlin, Brest and Biarritz.</p> <p>Lowest 37° at Nairn, 38° at Horta, 41° at Loughborough, 42° at Aberdeen and Oxford, 44.3° at Personstown and Ushak.</p>
WIND	<p>Light from the Wnd in the west and south of Ireland, and from the SWnd over France and the south of England.</p>
WEATHER	<p>S^{ly} on our north and east coasts, SE^{ly} in Scandinavia, Denmark and North Germany, with a moderate gale at Skudsmoes.</p> <p>Fine over the greater part of our Islands, Scandinavia and Denmark, but showery at some of our W. and N. stations.</p> <p>Dull in Germany, raining over Central France, as well as at the Helig.</p> <p>Heavy rain has fallen at the French and some of our own northern stations, the largest amounts being 2.6 ins. at Belfort, and 1.3 inches at Cape Gris Nez.</p>
SEA	<p>High at Biarritz and Nice, and rough at Loughborough and Lally, but moderate to smooth elsewhere.</p>

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The barometer is at present rising in the west, but the change appears to be slackening, and the wind there is inclined to back to the SWnd again. It is therefore not improbable that further depressions will shortly appear off our west coasts.

FORECASTS

For the 24 hours ending at NOON on 11th October 1889.

DISTRICTS.

FORECASTS.

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

S^{ly} winds, light to fresh; fair to showery.

SW^{ly} winds, light to fresh; changeable, some showers.

DISTRICTS.

FORECASTS

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

S^{ly} and SE^{ly} winds, freshening; fair to unsettled and some rain.

SW^{ly} to S^{ly} winds, freshening; fair to unsettled and some rain.

WARNINGS

The Warning Signals have been lowered on all coasts.

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

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

YESTERDAY'S 2 P.M. REPORTS.

	Bar:		Ther:		Wind		Wea:	Sea		Bar:		Ther:		Wind		Wea:	Sea
	D	W	D	F	D	F				D	W	D	F	D	F		
Skudesnaes ...	29.10	49	47	SE	8	r	b		Holyhead ...	29.02	54	49	WSW	8	b, pg	b	
Sumburgh Head ...	28.79	47	46	ESE	7	r	7		Valencia ...	29.14	55	51	W	4	b, cm	5	
Stornoway ...	28.75	48	47	NE	3	c	4		Scilly ...	29.22	54	50	WSW	5	b, c	6	
Aberdeen ...	28.78	45	43	SSE	4	of g	4		Jersey ...	29.34	54	50	SW	6	c	5	
Shields ...	28.88	49	47	SSW	6	of g	3		Dungeness ...	29.27	55	50	WSW	7	c	5	
Ardrossan ...	28.70	51	49	WSW	5	c	5		London ...	29.24	56	51	SW	5	cp	4	
Malin Head ...	28.76	49	47	NW	6	o	4		Yarmouth ...	29.23	55	54	SSW	4	b, c	4	
Mullaghmore ...	28.89	50	49	W	7	p	6		Rocheport ...	29.61	57	54	W	5	r	2	
Belmullet ...	28.95	53	50	W	6	b, c	4										

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

The reports for yesterday morning showed that pressure was highest in two large areas lying respectively over the South of Russia and to the south of Italy, and lowest, 28.6 ins. and less, in a new and well marked depression which had appeared off the North of Ireland. A secondary disturbance with readings below 29.1 ins. was lying off the west coast of Denmark. The wind was strong from the Wnd on the west and south coast of our Islands with moderate gales in exposed places, but moderate from the SWnd in the east of England, as well as in Spain, France and west Germany. Over northern and eastern Europe, however, as well as in Algeria the wind was chiefly SE^{ly}, and on the eastern shores of the North Sea it was strong to a gale. The weather was fine in the eastern parts of Great Britain, as well as in Sweden, Italy and Algeria. In the west and south of our Islands, however, showers were reported, while on our northwest coast and in north Germany steady rain was falling.

Temperature had fallen a little over England, France and the greater part of central Europe, but risen in most other localities; readings ranged from 65° and upwards, over the Adriatic and the central and southern parts of the Mediterranean to a little below 40° in Scotland and the extreme North of Russia. The highest individual readings were 73° at Algiers, 70° at Brindisi and Spax, 69° at Palermo, 66° at Lesina and Constantinople, 65° at Barcelona, and 64° at Sanjuansaire and Naples; the lowest were 36° at Aberdeen, 34° at Archangel and Nain, 41° at Shields and York, 43° at Leith, and 44° at Donaghadee, Loughborough & Oxford.

In the course of the day the depression off the north of Ireland travelled north-eastward to the northeast of Scotland, and the barometer rose at most of the English and Irish stations. The wind increased in force on some parts of the English coast, and heavy rain fell in the North of Scotland.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

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

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

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

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

DAILY WEATHER REPORT.

for Friday, 14th October, 1889.
Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.

STATIONS.	YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
	Barometer at 32° F. and Sea Level.	Temp. in Shade.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Sea. (0 to 9.)	SHADE TEMP.				
			Dir.	Force. (0 to 12.)		Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Dir.	Force. (0 to 12.)		Weather.	Max.	Min.	Amount of Rainfall.	
SCANDINAVIA.	Haparanda ...	29.84	46	SW	4	0	29.85	+1.14	44	43	-1	SSW	2	0	*	46	41	0.08
	Hernösand ...	29.82	45	SW	0	0	29.70	+0.04	47	47	0	NNE	2	7	*	?	?	0.16
	Stockholm ...	29.70	50	ESE	2	0	29.60	-1.15	53	53	+5	SSW	2	5	*	59	43	0.16
	Wisby ...	29.65	51	SSW	2	0	29.62	-0.09	54	55	+2	SSW	2	0	*	54	46	0.16
	Bodö ...	29.66	45	E	2	0	29.70	+1.19	44	41	0	E	2	0	1	60	39	-
	Christiansund	29.57	48	ESE	2	0	29.36	-0.03	49	48	0	ESE	6	0	2	57	46	0.04
	Skudesnaes ...	29.40	54	E	4	0	29.46	+0.09	51	48	-2	SSW	6	7	5	54	50	0.32
	Christiania Fjord (Færder)	29.55	52	E	5	0	29.56	-0.01	52	50	0	SSW	5	0	3	54	50	0.04
	Skagen (The Scaw)	29.46	53	S	5	0	29.60	+0.06	48	47	-4	WSW	3	0	2	54	48	0.32
	Fanö ...	29.47	50	SW	4	0	29.62	+1.17	48	47	+3	S	3	0	*	54	45	0.04
BRITISH ISLANDS.	Sumburgh Head	29.28	50	SSW	2	0	29.34	+0.32	47	47	-2	Z	0	0	4	51	45	0.19
	Stornoway ...	29.21	43	Z	0	0	29.37	+0.35	42	42	+4	NW	2	0	2	52	34	-
	Wick ...	29.24	43	SW	1	0	29.41	+0.30	47	45	+3	NW	1	0	1	53	38	0.01
	Nairn ...	29.22	47	SE	1	0	29.38	+0.31	47	45	+10	SE	1	0	1	56	36	0.02
	Aberdeen ...	29.27	49	SSW	1	0	29.44	+0.30	42	41	0	W	1	0	3	53	36	0.02
	Leith ...	29.26	50	W	1	0	29.45	+0.34	39	39	-9	NW	1	0	*	59	35	-
	Shields ...	29.29	51	SW	2	0	29.47	+0.31	42	41	-4	SW	1	0	2	53	39	-
	Spurn Head ...	29.34	53	SSW	3	0	29.49	+0.23	49	48	+5	S	2	0	2	57	43	-
	York ...	29.34	48	S	1	0	29.51	+0.28	37	37	-7	S	1	0	*	57	34	0.26
	Loughborough	29.37	51	Z	0	0	29.50	+0.23	33	33	-8	NW	1	0	*	59	31	-
GERMANY.	Ardrossan ...	29.29	45	Z	0	0	29.44	+0.34	44	43	-7	NE	1	0	1	53	42	0.43
	Malin Head ...	29.22	50	SW	2	0	29.43	+0.38	48	47	+1	N	2	0	2	55	45	0.12
	Mullaghmore ...	29.25	51	SSW	3	0	29.47	+0.36	49	47	+1	NW	3	0	3	56	44	0.12
	Belmullet ...	29.24	50	SW	4	0	29.53	+0.41	49	47	-1	NW	2	0	*	54	42	0.19
	Donaghadee ...	29.28	48	SW	2	0	29.47	+0.33	41	41	-3	NE	1	0	0	58	39	-
	Barrow-in-Furness	29.29	51	SW	3	0	29.45	+0.32	47	46	0	N	2	0	*	53	45	0.34
	Liverpool (Bidston)	29.31	51	W	1	0	29.48	+0.27	40	40	-7	SSW	1	0	2	56	38	-
	Holyhead ...	29.32	51	SW	1	0	29.47	+0.28	48	47	-3	Z	0	0	0	56	45	0.04
	Parsonstown ...	29.31	47	Z	0	0	29.51	+0.32	35	35	-8	Z	0	0	*	56	33	-
	Valencia ...	29.33	50	WSW	2	0	29.54	+0.29	51	50	+2	NW	2	0	2	58	44	0.16
FRANCE AND NETHERLANDS.	Roche's Point...	29.33	50	WSW	2	0	29.49	+0.25	43	42	-2	N	2	0	3	55	38	0.05
	Pembroke (St. Ann's Hd.)	29.36	53	SW	3	0	29.49	+0.25	46	46	-5	NE	2	0	3	56	45	0.02
	Scilly ...	29.36	52	WSW	1	0	29.48	+0.19	52	48	+1	NW	2	0	5	58	48	-
	Prawle Point...	29.37	51	SE	3	0	29.47	+0.16	53	49	+4	N	2	0	2	58	42	0.37
	Jersey (St. Aubin's)	29.38	54	SE	5	0	29.46	+0.09	47	46	-7	W	3	0	3	60	45	0.22
	Hurst Castle ...	29.41	54	SW	2	0	29.46	+0.14	48	48	-2	NE	3	0	3	58	47	0.11
	Dungeness ...	29.43	54	WSW	3	0	29.44	+0.12	51	50	+1	S	6	0	4	56	48	0.65
	London ...	29.42	49	SW	2	0	29.46	+0.14	48	47	0	SSW	1	0	*	60	45	0.01
	Oxford ...	29.45	47	SSW	2	0	29.48	+0.18	42	41	0	S	1	0	*	59	36	-
	Cambridge ...	29.41	47	S	1	0	29.49	+0.18	46	45	+2	S	1	0	*	60	39	-
PENINSULA.	Yarmouth ...	29.38	51	SSW	2	0	29.47	+0.18	51	50	+5	SSW	4	0	3	55	40	0.02
	Cuxhaven ...	29.49	46	SW	3	0	29.66	+0.17	44	43	-3	S	2	0	*	54	43	-
	Berlin ...	29.65	55	SW	3	0	29.80	+0.24	50	49	-3	SW	2	0	*	?	46	0.20
	Wiesbaden ...	*	*	*	*	*	29.73	+0.24	44	42	-7	Z	0	0	*	52	37	0.03
	Munich ...	29.80	46	W	3	0	29.78	+0.25	44	43	-2	E	5	0	*	57	39	0.20
	The Helder ...	29.49	47	S	1	0	29.60	+0.26	43	42	-5	SSW	1	0	1	52	43	0.43
	Brussels (9 a.m.)	*	*	*	*	*	29.57	?	48	46	0	SE	3	0	4	56	45	0.04
	Cape Gris Nez	?	53	SW	4	0	?	?	48	47	0	S	3	0	?	55	?	0.32
	Paris ...	29.55	49	S	2	0	29.54	+0.09	47	46	-1	SE	2	0	*	59	46	0.04
	Brest ...	?	54	W	1	0	?	?	52	50	-1	NW	1	0	3	64	45	-
FRANCE AND NETHERLANDS.	Lorient ...	29.39	52	W	3	0	29.51	+0.12	47	46	-7	ESE	1	0	5	56	45	0.63
	Roche fort ...	29.54	54	SW	5	0	29.60	+0.02	54	46	0	W	3	0	2	57	46	0.47
	Belfort ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Lyons ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Nice ...	29.71	48	W	4	0	29.80	+0.10	54	49	-8	W	4	0	3	63	50	0.04
PENINSULA.	Perpignan ...	29.65	53	SW	2	0	29.69	-0.01	51	47	-5	SW	2	0	*	71	45	-
	Biarritz ...	29.54	59	WSW	5	0	29.56	-0.07	52	48	-1	WSW	4	0	7	66	50	0.12
	Corunna ...	29.88	61	WSW	5	0	29.94	-0.01	55	51	-3	W	3	0	5	64	54	0.04

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

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

WEATHER CHARTS

for 8 a.m. on

Friday, 11th October.

1889.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP

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

Changes since previous morning are stated in words.

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

their barbs and feathers refer to force thus—

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

→ = forces 5 to 7; → = forces 1 to 4.

☉ = dead calm.

SEA DISTURBANCE—Where considerable, is shown thus:

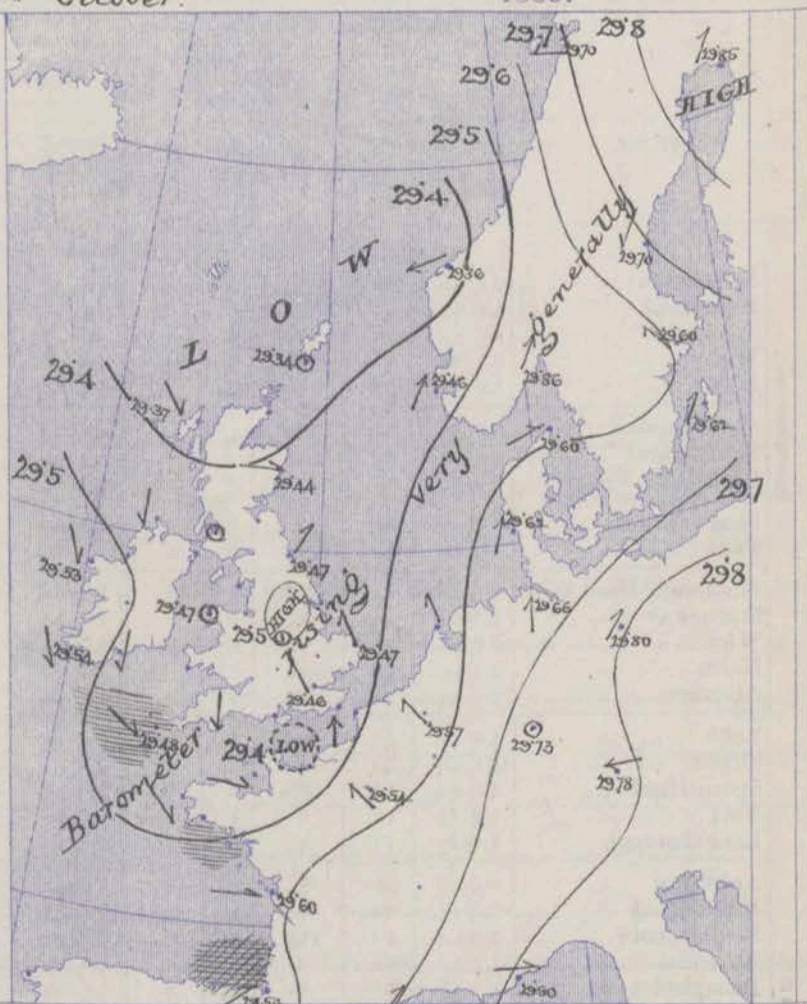
☼ = Rough. ☼ = High.

MEAN HEIGHT OF THE BAROMETER

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

During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS.
Sumburgh Head	29.708
Stornoway	29.735
Wick	29.745
Nairn	29.761
Aberdeen	29.774
Leith	29.804
Shields	29.835
York	29.872
Loughborough	29.891
Ardrossan	29.813
Donaghadee	29.832
Holyhead	29.853
Liverpool	29.864
Parsonstown	29.881
Valencia	29.873
Roche's Point	29.870
Pembroke	29.868
Scilly	29.894
Jersey	29.904
Hurst Castle	29.907
Dover	29.909
LONDON	29.911
Oxford	29.910
Cambridge	29.900
Yarmouth	29.886



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.

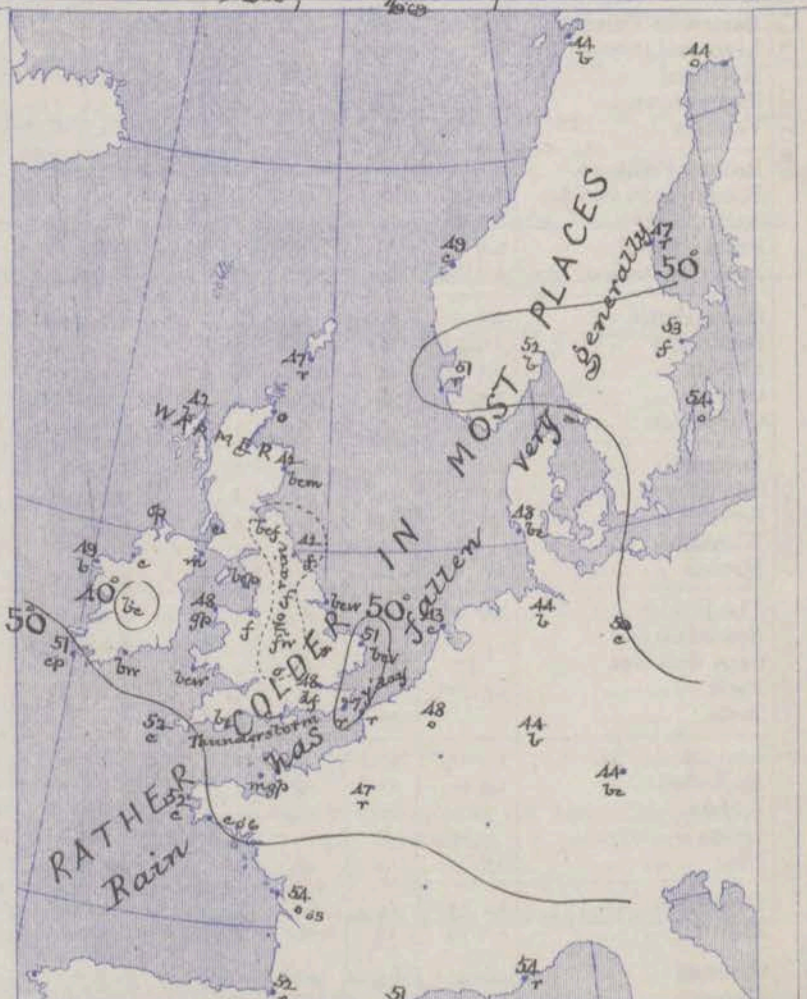
RAINFALL—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of October.)

STATIONS.	TEMPERATURE.				RAINFALL (Inches.)
	Daily Max.	Daily Min.	at 8 a.m.		
			Dry.	Wet.	
Sumburgh Head.....	49.7	41.6	46.0	44.3	4.33
Stornoway.....	50.5	39.5	45.3	44.1	4.94
Wick.....	51.6	40.1	46.1	44.3	2.94
Nairn.....	51.6	40.6	44.5	42.5	2.38
Aberdeen.....	52.3	41.0	45.5	43.5	2.88
Leith.....	54.7	41.5	46.5	44.7	1.94
Shields.....	53.0	42.8	47.1	45.4	2.46
York.....	54.8	41.0	45.9	44.5	2.64
Loughborough.....	55.3	41.4	46.4	45.0	2.08
Ardrossan.....	53.5	43.6	47.6	45.6	4.31
Donaghadee.....	53.2	43.3	47.7	46.5	3.35
Holyhead.....	54.5	47.0	50.2	48.2	4.53
Liverpool.....	53.6	44.6	47.8	45.8	3.62
Parsonstown.....	54.7	41.1	46.4	44.7	3.27
Valencia.....	56.6	46.5	51.3	49.1	6.09
Roche's Point.....	55.8	45.9	50.2	48.4	4.17
Pembroke.....	54.8	48.0	51.2	49.1	4.13
Scilly.....	56.6	50.3	53.8	51.7	3.84
Jersey.....	58.1	49.2	53.6	51.1	4.34
Hurst Castle.....	57.1	46.0	51.4	49.6	3.24
Dover.....	55.8	47.0	50.7	48.7	3.28
LONDON.....	56.6	43.2	48.0	46.4	2.74
Oxford.....	55.3	42.5	46.7	45.3	2.72
Cambridge.....	56.4	41.2	46.4	45.1	2.36
Yarmouth.....	54.3	44.8	49.2	47.0	2.97

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. and upwards, in Portugal; 29.8 in. and upwards over northern and central Europe.
 Lowest, 29.4 in. and less, in a large area lying to the northwards of our islands, and also (apparently) in a small depression lying over the eastern part of the Channel.
 Gradient slight and irregular. Barometer rising at all but the Swedish stations.

TEMPERATURE

Highest, 55° at Biarritz, 54° at Nîmes, Rochefort, and Marseilles, 53° at Stockholm and Havelburg, and 52° at London and Scilly.
 Lowest, 33° at Loughborough, 35° at Rouen, 37° at York, 39° at Leeds, 40° at Liverpool, and 41° at Donaghadee.
 Slight frost occurred last night over some of the Central parts of the United Kingdom.

WIND

Light from the NWrd or Nrd in Ireland and the south-west of England, and the extreme north of Scotland.
 Moderate from the Srd in the east and south-east of England, the Netherlands, and the eastern shores of the North Sea.
 E^{ly} in the north of Scandinavia, W^{ly} in the south of France, and also at Dublin.

WEATHER

Fine at several of our eastern and northern stations as well as in Denmark and Germany.
 Foggy in many parts of England; rainy over our southern counties, as well as over the central and southern part of France.
 Thunderstorms occurred yesterday in some parts of Kent, and lightning was seen at Havelburg and Jersey.

SEA

High at Biarritz and rather rough in the Bay of Biscay generally as well as at the mouth of the Channel.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The small depression over the eastern part of the Channel is travelling slowly northwards, and is at the same time filling up. Some slight improvement in the weather is therefore probable in the south-east of England, but with the present very irregular distribution of pressure conditions are not likely to become settled just yet. There are some indications of the formation of a new high pressure system to the westward of our islands.

FORECASTS

For the 24 hours ending at NOON on 12th OCT^r 1889.

DISTRICTS.

FORECASTS.

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

Light breezes, chiefly W^{ly}; fair generally.

S^{ly} to W^{ly} winds, light or moderate; cloudy at first with some mist and rain, but improving later.

DISTRICTS.

FORECASTS

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

Variable or NW^{ly} breezes; fair generally, but some showers.

NW^{ly} and W^{ly} winds, light or moderate; fair generally, but local showers.

WARNINGS

NONE ISSUED.

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

YESTERDAY'S 2 P.M. REPORTS.

	Bar:		Ther:		Wind		Wea:	Sea		Bar:		Ther:		Wind		Wea:	Sea
	D	W	D	F	D	F				D	W	D	F	D	F		
Skudesnaes ...	29.47	53	50	SSW	2	0	6		Holyhead ...	29.27	56	51	SW	2	bc	2	
Sumburgh Head ...	29.23	51	46	S	2	b	6		Valencia ...	29.30	58	53	SW	2	bcm	3	
Stornoway ...	29.14	51	50	SE	2	c	2		Scilly ...	29.32	53	49	WSW	4	c	5	
Aberdeen ...	29.22	53	49	SSW	4	bc	3		Jersey ...	29.40	58	53	SSW	4	c	3	
Shields ...	29.23	53	50	SW	2	c	2		Dungeness ...	29.38	54	51	WSW	4	c g/p	3	
Ardrossan ...	29.19	52	50	SSW	3	c	2		London ...	29.37	60	52	SW	3	bc	4	
Malin Head ...	29.15	53	50	SW	2	bc	3		Yarmouth ...	29.34	55	50	WSW	3	b	2	
Mullaghmore ...	29.19	56	52	SW	4	bc	4		Rochefort ...	29.59	52	52	S	4	r	3	
Belmullet ...	29.20	52	49	WSW	2	b	2										

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

The reports for yesterday morning, showed that pressure was still highest, 30.2 in: and upwards, in a large anticyclone lying over Central Russia, and high, 30.0 in: and upwards, in a smaller system lying off the south of Spain. The lowest readings 29.1 in: and less were found in a large shallow depression over and to the northward of Scotland, but small secondary disturbances were passing over England, France, and Central Europe. The wind was SW^{ly} over the greater part of our Islands, France, and Spain, but S^{ly} or SE^{ly} in nearly all the more northern eastern and central countries, as well as in Italy and Algeria. In the south of Norway and on the shores of the Gulf of Genoa strong breezes or moderate gales were reported. The weather was showery at some of our own western and northern stations, and dull and unsettled over Sweden, Finland, France, and the greater part of Central Europe, with rain in many places. Over the east and south of England, however, as well as in Eastern and Southern Europe the sky was clear or nearly so. Temperature had fallen a few degrees over the north of Scandinavia and Central Russia as well as in Spain and France, but changed irregularly elsewhere; readings ranged from 70° or a little above over the central and southern parts of the Mediterranean to a little below 45° over the central parts of England, Ireland and Spain and to a little below 40° over Central Scotland. The highest individual readings were 73° at Langunais, 71° at Oran, Algiers, and Malta, 70° at Khiridi, La Balland, Sfax, 69° at Palermo, and 68° at Fighorn; the lowest were 37° at Trinn, 38° at Stornoway, 41° at Loughborough, 42° at Aberdeen and Oxford, 43° at Uleaborg and Pannoutown, and 44° at Wick, York, Spennitham, Donaghadee, Cambridge, and Madrid.

In the course of the day the barometer rose a little in most parts of the United Kingdom and fair weather prevailed generally. In the evening, however, a small depression advanced northwards over the Bay of Biscay, and thunder and lightning occurred at some of our southern stations.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

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

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

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

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

DAILY WEATHER REPORT.

for *Saturday, 12th October, 1889.*
Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.

STATIONS.		YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
		Barometer at 32° F. and Sea Level.	Temp. in Shade.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Weather.	Sea. (0 to 4.)	SHADE TEMP.		Amount of Rainfall.	
				Dirac.	Force. (0 to 12.)		Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Dirac.	Force. (0 to 12.)			Max.	Min.		
SCANDINAVIA.	Haparanda ...	29.84	46	2	0	0	29.80	- .35	43	42	- 1	WSW	4	0	*	46	?	0.91	
	Hernösand ...	29.88	48	1	0	0	29.82	+ .12	46	44	- 1	SW	2	0	*	52	45	0.87	
	Stockholm ...	29.86	47	1	0	0	29.92	+ .32	46	45	- 1	SW	0	0	*	50	46	0.85	
	Wisby ...	29.89	48	1	0	0	29.88	+ .26	50	50	- 4	SSW	4	0	*	50	46	0.16	
	Bodö ...	29.52	48	1	0	0	29.60	- .10	44	42	0	E	2	0	1	48	39	0.04	
	Christiansund	29.44	50	1	0	0	29.63	+ .27	50	46	+ 1	SW	4	0	3	55	46	-	
	Skudesnaes ...	29.65	53	1	0	0	29.72	+ .26	50	48	- 1	ESE	2	0	1	55	50	0.12	
	Christiania Fjord (Færder)	29.73	53	1	0	0	29.84	+ .28	51	49	- 1	ESE	3	0	3	54	50	-	
	Skagen (The Scaw)	29.78	52	1	0	0	29.74	+ .14	51	49	+ 3	SE	3	0	2	54	46	-	
	Fanø ...	29.71	50	1	0	0	29.61	- .01	50	50	+ 2	SE	2	0	1	55	48	0.08	
BRITISH ISLANDS.	Sumburgh Head	29.49	43	2	0	0	29.66	+ .32	46	45	- 1	SW	0	0	3	55	42	0.01	
	Stornoway ...	29.48	45	2	0	0	29.65	+ .28	46	46	+ 4	N	2	0	3	54	36	0.02	
	Wick ...	29.50	50	1	0	0	29.66	+ .25	50	49	+ 3	SE	1	0	1	52	35	-	
	Nairn ...	29.48	47	2	0	0	29.63	+ .25	43	42	- 4	SW	1	0	1	56	38	0.01	
	Aberdeen ...	29.53	48	1	0	0	29.63	+ .19	43	42	+ 1	WNW	3	0	3	56	36	-	
	Leith ...	29.52	42	1	0	0	29.59	+ .14	44	44	+ 5	SW	1	0	1	52	37	0.06	
	Shields ...	29.51	50	1	0	0	29.52	+ .05	47	47	+ 3	NW	1	0	2	57	40	0.24	
	Spurn Head ...	29.46	49	1	0	0	29.50	+ .01	48	47	- 1	W	4	0	3	53	44	0.25	
	York ...	29.55	49	1	0	0	29.55	+ .04	46	45	+ 9	W	1	0	1	54	36	0.57	
	Loughborough	29.51	48	1	0	0	29.57	+ .07	43	43	+ 10	W	1	0	1	49	33	0.11	
GERMANY.	Ardrossan ...	29.50	51	1	0	0	29.61	+ .14	43	42	- 1	SW	0	0	0	54	41	0.04	
	Malin Head ...	29.50	49	1	0	0	29.59	+ .16	45	44	- 3	SE	1	0	1	53	43	-	
	Mullaghmore ...	29.55	50	1	0	0	29.56	+ .09	47	46	- 2	ESE	3	0	1	55	44	0.15	
	Belmullet ...	29.56	49	1	0	0	29.56	+ .03	51	47	+ 2	N	3	0	1	54	49	0.21	
	Donaghadee ...	29.54	49	1	0	0	29.59	+ .12	43	43	+ 2	NW	1	0	1	58	37	0.01	
	Barrow-in-Furness	29.50	51	1	0	0	29.54	+ .09	43	43	- 4	N	1	0	0	55	42	-	
	Liverpool (Bidston)	29.53	50	1	0	0	29.59	+ .11	46	45	+ 6	W	2	0	3	54	40	0.80	
	Holyhead ...	29.54	49	1	0	0	29.59	+ .12	49	47	+ 1	NW	1	0	2	57	46	0.20	
	Parsonstown ...	29.59	46	1	0	0	29.60	+ .09	43	42	+ 8	SW	0	0	1	54	34	0.03	
	Valencia ...	29.69	51	1	0	0	29.71	+ .17	52	50	+ 1	WNW	3	0	4	56	47	0.09	
FRANCE AND NETHERLANDS.	Roche's Point...	29.62	51	1	0	0	29.66	+ .17	48	46	+ 5	WNW	4	0	3	55	40	0.01	
	Pembroke (St. Ann's Hd.)	29.58	52	1	0	0	29.62	+ .15	53	52	+ 7	WNW	3	0	3	56	45	0.13	
	Scilly ...	29.61	53	1	0	0	29.69	+ .21	52	49	0	WNW	3	0	4	57	49	0.06	
	Prawle Point ...	29.60	46	1	0	0	29.67	+ .20	49	47	- 4	W	2	0	1	58	43	0.06	
	Jersey (St. Aubin's)	29.59	51	1	0	0	29.69	+ .23	49	48	+ 2	NW	3	0	3	57	44	0.09	
	Hurst Castle ...	29.57	50	1	0	0	29.66	+ .20	47	46	- 1	NW	1	0	2	52	41	0.03	
	Dungeness ...	29.51	53	1	0	0	29.63	+ .19	41	40	- 10	NW	3	0	2	54	37	0.02	
	London ...	29.52	46	1	0	0	29.63	+ .17	45	44	- 3	W	1	0	1	53	40	0.04	
	Oxford ...	29.56	46	1	0	0	29.63	+ .15	39	39	- 3	SW	1	0	1	48	38	0.39	
	Cambridge ...	29.49	49	1	0	0	29.61	+ .12	46	45	0	SW	1	0	1	53	43	0.26	
PENINSULA.	Yarmouth ...	29.49	50	1	0	0	29.56	+ .09	47	46	- 4	W	2	0	2	53	44	0.08	
	Cuxhaven ...	29.73	49	1	0	0	29.63	- .03	49	48	+ 5	SW	0	0	1	54	?	0.24	
	Berlin ...	29.80	50	1	0	0	29.71	- .06	54	53	+ 4	SE	3	0	1	59	?	0.24	
	Wiesbaden ...	*	*	*	*	*	29.73	.00	50	49	+ 6	SE	2	0	1	59	?	0.24	
	Munich ...	29.68	51	1	0	0	29.80	+ .02	45	44	+ 1	W	5	0	1	54	?	-	
	The Helder ...	29.60	49	1	0	0	29.60	.00	44	43	+ 1	SE	1	0	1	52	43	0.04	
	Brussels (9 a.m.)	*	*	*	*	*	29.68	+ .11	48	47	0	ESE	4	0	1	51	46	0.35	
	Cape Gris Nez	?	53	1	0	0	?	?	50	48	+ 2	WNW	3	0	2	55	48	0.04	
	Paris ...	29.65	48	1	0	0	29.72	+ .18	46	46	- 1	NE	1	0	1	55	42	0.28	
	Brest ...	?	54	1	0	0	?	?	53	50	+ 1	WNW	3	0	3	61	46	-	
FRANCE AND NETHERLANDS.	Lorient ...	29.63	53	1	0	0	29.75	+ .24	52	49	+ 5	WNW	2	0	5	57	36	-	
	Rocheport ...	29.71	51	1	0	0	29.81	+ .21	51	49	- 3	SE	1	0	2	54	?	0.43	
	Belfort ...	29.74	45	1	0	0	29.81	?	43	39	?	NW	1	0	1	54	?	0.79	
	Lyons ...	29.75	47	1	0	0	29.86	+ .21	42	41	- 1	S	2	0	1	54	34	0.95	
	Nice ...	29.73	59	1	0	0	29.78	- .02	52	49	- 2	ESE	4	0	1	61	46	0.35	
	Perpignan ...	29.77	46	1	0	0	29.88	+ .19	43	42	- 8	SW	2	0	1	57	38	0.04	
	Biarritz ...	29.70	59	1	0	0	29.74	+ .18	57	51	+ 5	WNW	7	0	7	64	48	0.35	
	Corunna ...	*	*	*	*	*	30.14	?	55	53	?	NW	3	0	1	64	54	0.04	
	Lisbon ...	30.04	50	1	0	0	30.14	?	55	53	?	NW	3	0	1	64	54	0.04	
	Lisbon ...	30.04	50	1	0	0	30.14	?	55	53	?	NW	3	0	1	64	54	0.04	

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

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

WEATHER CHARTS

for 8 a.m. on Saturday, 12th October

1889.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP.

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

Changes since previous morning are stated in words.

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

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

→ = forces 5 to 7; → = forces 1 to 4.

⊙ = dead calm.

SEA DISTURBANCE—Where considerable, is shown thus:

☐ = Rough. ☐ = High.

MEAN HEIGHT OF THE BAROMETER

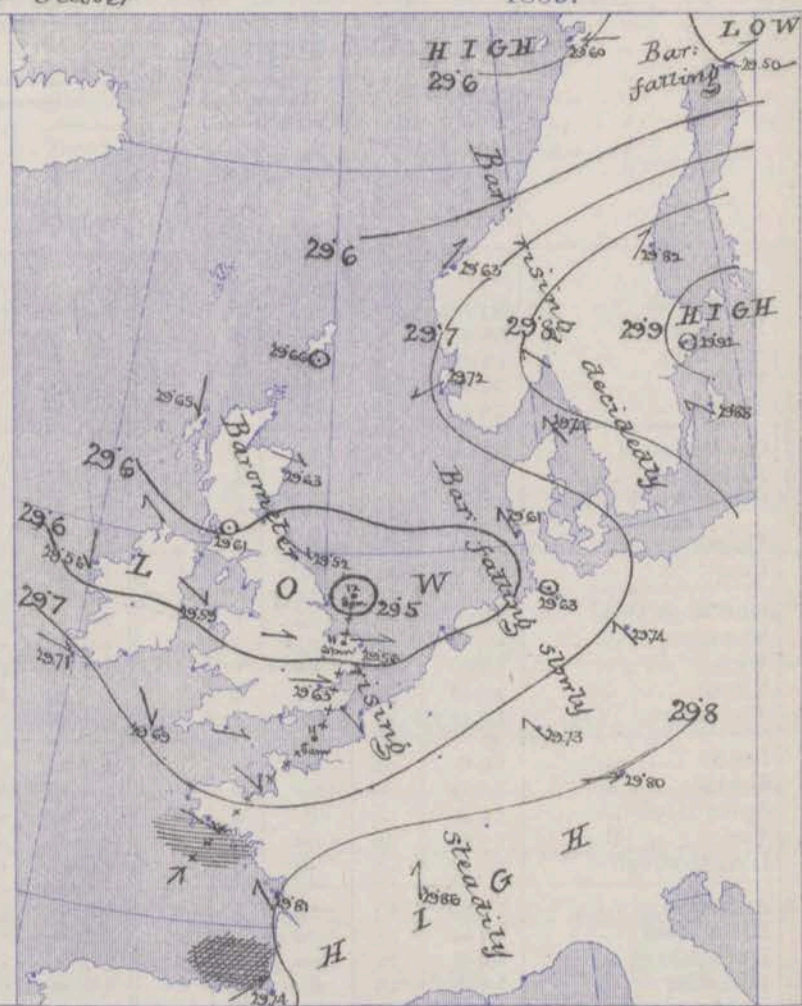
at 8.0 a.m. for the month of October.

During the 15 Years: 1871—1885.

STATIONS.

MEAN READINGS.

STATIONS.	MEAN READINGS.
Sumburgh Head	29.708
Stornoway	29.735
Wick	29.715
Nairn	29.761
Aberdeen	29.774
Leith	29.804
Shields	29.835
York	29.872
Loughborough	29.891
Ardrossan	29.813
Donaghadee	29.832
Holyhead	29.853
Liverpool	29.864
Parsonstown	29.881
Valencia	29.873
Roche's Point	29.870
Pembroke	29.868
Scilly	29.894
Jersey	29.904
Hurst Castle	29.907
Dover	29.909
LONDON	29.911
Oxford	29.910
Cambridge	29.900
Yarmouth	29.886



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.

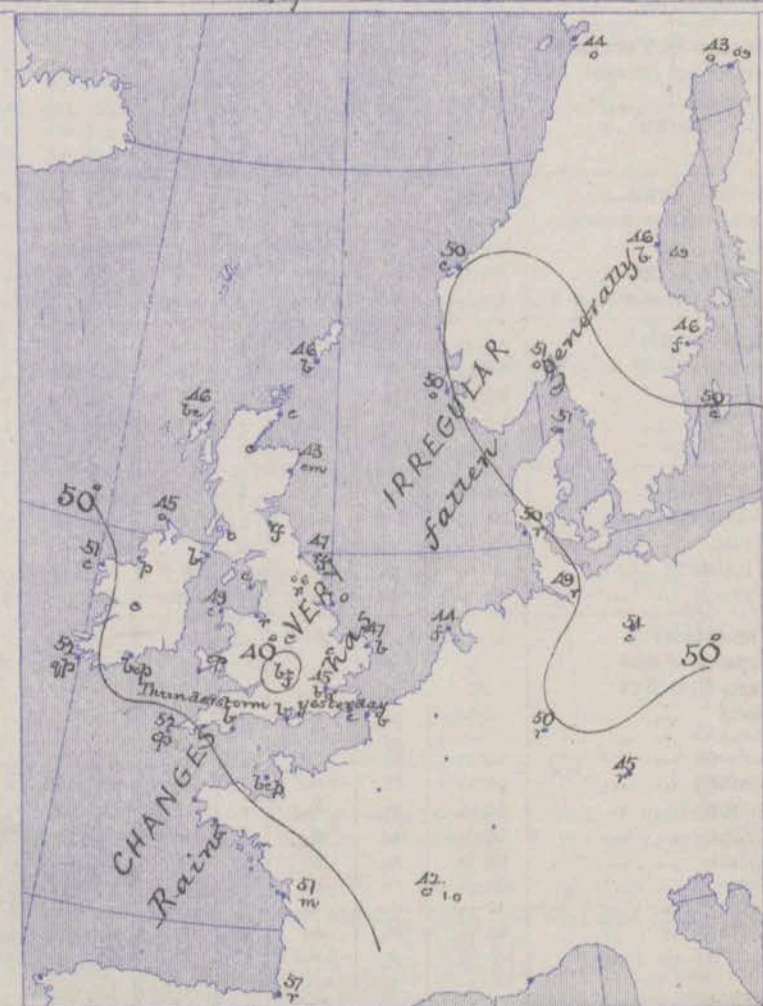
RAINFALL—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of October.)

STATIONS.	TEMPERATURE.				RAINFALL. (Inches.)
	Daily Max.	Daily Min.	at 8 a.m.		
			Dry.	Wet.	
Sumburgh Head.....	49.7	41.6	46.0	44.3	4.33
Stornoway	50.5	39.5	45.3	44.1	4.94
Wick.....	51.0	40.1	46.1	44.3	2.94
Nairn.....	51.6	40.6	44.5	42.5	2.38
Aberdeen.....	52.3	41.0	45.5	43.5	2.88
Leith.....	54.7	41.5	46.5	44.7	1.94
Shields.....	53.0	42.8	47.1	45.4	2.46
York.....	54.8	41.0	45.9	44.5	2.64
Loughborough.....	55.3	41.4	46.4	45.0	2.98
Ardrossan.....	53.5	43.6	47.6	45.6	4.31
Donaghadee.....	53.2	43.3	47.7	46.5	3.35
Holyhead.....	54.5	47.0	50.2	48.2	4.53
Liverpool.....	53.6	44.6	47.8	45.8	3.62
Parsonstown	54.7	41.1	46.4	44.7	3.27
Valencia.....	56.6	46.5	51.3	49.1	6.09
Roche's Point.....	55.8	45.9	50.2	48.4	4.17
Pembroke.....	54.8	48.0	51.2	49.1	4.13
Scilly.....	56.6	50.3	53.8	51.7	3.84
Jersey.....	58.1	49.2	53.6	51.1	4.34
Hurst Castle	57.1	46.0	51.4	49.6	3.24
Dover.....	55.8	47.0	50.7	48.7	3.28
LONDON.....	56.6	43.2	48.0	46.4	2.74
Oxford.....	55.3	42.5	46.7	45.3	2.72
Cambridge.....	56.4	41.2	46.4	45.4	2.36
Yarmouth.....	54.3	44.8	49.2	47.9	2.97

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



GENERAL SITUATION AT 8 A.M.

PRESSURE	<p>Highest, 29.9 in: and upwards in the south of Sweden; 29.8 in: and upwards in the south of France.</p> <p>Lowest, 29.5 in: and less, in a small shallow depression lying off the northeast of England, and also in a larger disturbance lying over Lapland; 29.6 in: and less, in a long trough extending from the north of Ireland to the southern parts of the North Sea.</p> <p>Gradient slight. Barometer falling in the north of Sweden and also in Denmark and North Germany, but rising elsewhere.</p>
TEMPERATURE	<p>Highest, 57° at Biarritz, 54° at Berlin, 53° at Penzance, 52° at Palermo, Sicily, and Genoa, and 51° at Tunis, Rangoon, and Melbourne.</p> <p>Lowest, 39° at Oxford, 41° at Dungeness, and 43° at Hapavanda, Naini, Aberdeen, Anderson, Donaghadee, Buncrana, Larne, and Loughborough.</p>
WIND	<p>Light from the Wnd or NWnd in the south and east of our Islands and the north of France, S^{ly} or SW^{ly} in the south of France.</p> <p>Variable in the northern parts of the United Kingdom. Light SE^{ly} or E^{ly} over Denmark, Germany, the Netherlands and the south of Norway.</p> <p>Generally moderate from the SWnd in the north of Scandinavia, but light from E. at Rode.</p>
WEATHER	<p>Rainy or foggy in the north of England and southeast of Scotland, rising in Denmark, Germany, and the southwest of France.</p> <p>Fine in most other localities, but foggy at Stockholm and the Helles.</p> <p>Lightning was seen in the south of England last night, and a thunderstorm occurred at Bowle Point.</p>
SEA	<p>High at Biarritz, and rather rough at Genoa, but moderate to smooth elsewhere.</p>

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The general distribution of pressure remains very irregular, and although there are no indications of the approach of any serious depression, the weather is likely to remain in a somewhat changeable condition in most districts. The trough of low pressure over our Islands is moving northwards, but a small disturbance is apparently advancing over the Bay of Biscay.

FORECASTS

For the 24 hours ending at NOON on 13TH OCT^R 1889.

DISTRICTS.	FORECASTS.	DISTRICTS.	FORECASTS
0 { SCOTLAND NORTH	Light Variable airs; fine at first, showery later.	6 { SCOTLAND WEST	Same as No 1.
1 { SCOTLAND EAST	Light Variable airs; cloudy, rain and mist locally.	7 { ENGLAND N.W.	
2 { ENGLAND N.E.	Light breezes, chiefly W ^{ly} ; some rain at first, but improving later.	8 { ENGLAND S.W.	W ^{ly} and NW ^{ly} winds, light, changeable, some showers.
3 { ENGLAND EAST	W ^{ly} winds, light; fair generally, but perhaps local showers.	9 { IRELAND NORTH	Light Variable breezes; changeable, some showers.
4 { MIDLAND COUNTIES		0 { IRELAND SOUTH	Same as No 8.
5 { ENGLAND SOUTH			
		WARNINGS	NONE ISSUED.

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

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

YESTERDAY'S 2 P.M. REPORTS.

	Bar:	Ther:		Wind		Wea:	Sea			Bar:	Ther:		Wind		Wea:	Sea:
		D	W	D	F						D	F	D	F		
Skudesnaes ...	29.57	55	57	SSW	6	c	6	Holyhead ...	29.52	56	51	NW	2	b	1	
Sumburgh Head ...	29.41	50	49	NW	1	c	4	Valencia ...	29.66	56	50	NW	3	b c f	3	
Stornoway ...	29.43	50	49	W	3	r	3	Scilly ...	29.55	56	50	NW	2	b	5	
Aberdeen ...	29.48	54	44	SSW	2	b	3	Jersey ...	29.53	57	52	NW	4	c	3	
Shields ...	29.49	55	52	E	1	b m	2	Dungeness ...	29.46	53	50	WSW	4	c	3	
Ardrossan ...	29.48	52	50	SW	1	c	1	London ...	29.48	53	51	NW	2	c m	3	
Malin Head ...	29.48	52	48	NW	2	b	2	Yarmouth ...	29.50	57	50	SE	4	r	4	
Mullaghmore ...	29.53	53	50	NW	4	b c	3	Rocheport ...	29.67	57	53	r	b	r	2	
Belmullet ...	29.48	53	49	NW	3	b c	3									

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

The reports for yesterday morning showed that pressure was highest, 30.3 in. and upwards, in a large anticyclone lying over Russia, and lowest, 29.4 in. and less, in a large shallow area lying to the northward of the British Islands. Small depressions were, however, lying respectively over the south of Sweden, the eastern part of the Channel and the southern part of the Bay of Biscay. S² (SE to SW) breezes were reported over by far the greater portion of the Continent, but in Spain and the west of France the wind was W¹, while in the southeast, west, and extreme north of our Islands it was chiefly NW¹ or N¹. Over the more central parts of the United Kingdom the wind was light and variable. The weather was fine at some of our own western and northern stations, as well as over Denmark, and the southern parts of Rumania, Italy and Spain. Elsewhere, however, the sky was cloudy or overcast with rain in the southeast of England and many parts of Northern and Central Europe, and fog over the north of England and the Gulf of Finland. Temperature had fallen over the greater part of our Islands and France, but changed irregularly elsewhere; readings ranged from 65° and upwards over Italy, Turkey and Algeria to 35° or less, in some of the central parts of Ireland and England. The highest individual readings were 71° at Oron, 70° at Boudine and Algiers, 65° at Paris, Rome, Cagliari, and La Halle, and 68° at Palermo; the lowest were 33° at Foughborough, 35° at Ransvaerskov, 37° at York, 35° at Lifford, 40° at Liverpool, 41° at Ulster and Donaghadee, and 42° at Aberdeen, Shields, and Oxford.

In the course of the day the small depression over the eastern part of the Channel moved slowly northward across the southeast of England. The wind at our southeastern stations consequently shifted to the West and the weather improved, but elsewhere no important change was observed.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

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

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

The evening observations are taken at 6 p.m. in France and our Islands with the exception of Oxford, where they are taken at 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 13th OCTOBER 1889.
Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.

STATIONS.	YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
	Barometer at 29° F. and Sea Level.	Temp. in Shade.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Sea. (0 to 9.)	SHADE TEMP.		Amount of Rainfall.		
			Dir.	Force. (0 to 12.)		Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Dir.	Force. (0 to 12.)		Weather.	Max.		Min.	
SCANDINAVIA.	Haparanda ...	29.46	41	2	0	b	29.66	+ .16	44	44	+ 1	NNE	4	r	*	50	39	0.04
	Hernösand ...	29.82	47	2	0	o	29.52	- .30	51	49	+ 5	SSH	4	c	*	55	43	0.12
	Stockholm ...	29.60	54	E	2	o	29.84	- .08	51	47	+ 5	SSH	4	b	*	54	43	—
	Wisby ...	29.65	55	SSH	6	b	30.02	+ .14	49	48	- 1	SW	4	b	*	56	41	—
	Bodö ...	29.69	50	E	2	o	29.50	- .10	45	43	+ 1	E	2	o	1	50	41	0.08
	Christiansund	29.69	48	SW	1	c	29.46	- .17	47	46	- 3	SSH	3	r	3	54	45	0.08
	Skudesnaes ...	29.58	50	2	0	r	29.68	- .04	50	48	0	2	o	3	55	48	0.28	
	Christiania Fjord (Færder)	29.44	47	NNE	4	r	29.62	- .22	51	49	0	SSH	4	c	6	52	46	1.93
	Skagen (The Scaw)	29.42	51	W	6	o	29.73	- .01	49	48	- 2	SW	4	b	4	52	48	1.30
	Fanö ...	29.62	51	WSW	4	c	29.78	+ .17	51	50	+ 1	SSH	4	b	*	52	50	0.85
BRITISH ISLANDS.	Sumburgh Head	29.69	49	NE	2	c	29.71	+ .05	45	44	- 1	NNW	1	bc	2	52	42	—
	Sornoway ...	29.71	48	NE	2	ba	29.78	+ .13	44	44	- 2	N	3	ba	3	53	39	—
	Wick ...	29.70	46	N	1	o	29.80	+ .14	46	45	- 4	NE	1	c	2	55	39	0.10
	Nairn ...	29.66	49	NE	1	c	29.76	+ .13	46	45	+ 3	NNW	2	c	2	55	43	—
	Aberdeen ...	29.62	48	N	4	ogr	29.76	+ .18	47	46	+ 4	NNW	2	ogr	3	52	43	0.53
	Leith ...	29.63	46	NE	1	o	29.76	+ .17	43	41	+ 1	NE	1	bm	*	52	40	0.17
	Shields ...	29.52	51	N	2	o	29.71	+ .19	47	47	0	NW	3	r	2	51	45	0.96
	Spurn Head ...	29.54	47	SW	4	r	29.74	+ .24	48	47	0	W	3	b	3	52	46	0.09
	York ...	29.57	49	W	1	r	29.75	+ .20	48	46	+ 2	NW	1	o	*	50	43	0.40
	Loughborough	29.63	48	W	1	c	29.77	+ .18	46	45	+ 3	W	1	omw	*	58	40	—
GERMANY.	Ardrossan ...	29.64	51	2	0	c	29.80	+ .19	40	38	- 3	E	1	bm	0	55	36	—
	Malin Head ...	29.69	50	N	3	b	29.78	+ .19	47	45	+ 2	NW	2	bp	1	52	45	0.01
	Mullaghmore ...	29.72	50	NNE	4	b	29.83	+ .27	45	46	+ 1	NNW	1	bcw	2	55	42	0.01
	Belmullet ...	29.76	48	NNW	1	b	29.86	+ .30	43	43	- 8	S	1	bcw	*	53	40	—
	Donaghadee ...	29.67	51	NNE	2	o	29.79	+ .20	43	43	0	WSW	2	b	1	54	41	—
	Barrow-in-Furness	29.60	49	NNW	2	r	29.76	+ .22	47	46	+ 4	NNW	2	b	*	50	41	0.09
	Liverpool (Bidston)	29.64	48	NW	2	o	29.78	+ .19	49	47	+ 3	NW	1	b	3	53	46	0.48
	Holyhead ...	29.65	47	NW	2	bc	29.78	+ .19	51	49	+ 2	NNW	1	bc	2	53	49	0.03
	Parsonstown ...	29.70	47	2	0	c	29.86	+ .26	36	36	- 7	2	o	c	*	54	32	0.10
	Valencia ...	29.76	52	NNW	3	bcw	29.90	+ .19	43	42	- 9	2	o	bc	1	55	40	0.09
FRANCE AND NETHERLANDS.	Roche's Point...	29.68	50	NNW	4	b	29.86	+ .20	45	43	- 3	NNW	3	b	3	56	41	0.25
	Pembroke (St. Ann's Hd.)	29.65	49	W	3	r	29.82	+ .18	50	49	- 3	NW	2	cp	3	53	44	0.08
	Scilly ...	29.70	53	NNW	5	bc	29.83	+ .14	53	49	+ 1	N	5	bc	4	55	49	0.07
	Prawle Point ...	29.70	48	NNW	3	bc	29.81	+ .14	51	47	+ 2	N	3	b	1	56	41	0.06
	Jersey (St. Aubin's)	29.73	53	W	3	cgm	29.80	+ .11	55	51	+ 6	NW	3	bm	3	57	41	0.15
	Hurst Castle ...	29.71	50	N	3	b	29.81	+ .15	41	40	- 6	ENE	1	mw	1	58	39	0.01
	Dungeness ...	29.65	53	W	4	bc	29.77	+ .14	38	37	- 3	NNW	3	bc	1	57	36	0.01
	London ...	29.67	48	WSW	2	bcw	29.79	+ .16	39	39	- 6	2	o	bcw	*	60	35	—
	Oxford ...	29.69	44	2	0	b	29.80	+ .17	34	34	- 5	2	o	bcw	*	59	33	—
	Cambridge ...	29.65	49	SW	1	b	29.79	+ .18	41	41	- 5	S	1	b	*	58	33	—
PENIN- SULA.	Yarmouth ...	29.61	50	SW	1	b	29.75	+ .19	44	43	- 3	WSW	2	bm	2	53	39	0.01
	Cuxhaven ...	29.79	47	SW	2	bc	29.82	+ .19	44	43	- 5	SSH	2	o	*	55	44	—
	Berlin ...	29.80	49	SW	2	bc	29.92	+ .18	46	45	- 8	SE	2	o	*	57	43	—
	Wiesbaden ...	*	*	*	*	*	29.86	+ .13	42	41	- 8	2	o	bc	*	54	37	0.12
	Munich ...	29.93	43	NE	2	c	29.81	+ .01	44	43	- 1	NW	1	w	*	52	41	0.08
	The Helder ...	29.68	47	S	1	t	29.78	+ .18	44	43	0	S	1	c	2	54	41	0.04
	Brussels (9 a.m.)	?	*	*	*	*	29.84	+ .16	45	42	- 3	S	2	b	*	54	42	0.04
	Cape Gris Nez	?	53	W	4	o	?	?	46	45	- 4	S	2	bc	2	55	45	0.12
	Paris ...	29.80	49	S	1	b	29.84	+ .12	38	38	- 8	S	1	bc	*	58	36	0.51
	Brest ...	?	54	W	3	b	?	?	53	50	0	N	5	a	3	61	48	—
GERMANY.	Lorient ...	29.78	53	NNW	2	bc	29.80	+ .05	52	50	0	NW	2	o	4	57	50	0.12
	Rochefort ...	29.89	55	W	4	o	29.87	+ .06	53	50	+ 2	ESE	3	c	2	61	45	0.35
	Belfort ...	29.83	50	W	1	r	29.79	- .02	45	41	+ 2	W	1	c	*	?	41	0.04
	Lyons ...	29.84	51	W	3	c	29.87	+ .01	46	44	+ 4	NNW	1	r	*	58	42	—
	Nice ...	29.83	55	SE	1	c	29.77	- .01	48	46	- 4	NE	4	r	3	63	46	0.24
	Perpignan ...	29.91	50	W	1	r	29.90	+ .02	46	45	+ 3	SW	2	o	*	61	42	0.32
PENIN- SULA.	Biarritz ...	29.96	53	NNW	5	r	29.90	+ .16	54	50	- 3	WSW	5	r	4	59	48	0.55
	Corunna ...	*	*	*	*	*	30.02	+ .01	50	53	+ 1	NW	3	c	4	63	50	—
Lisbon ...	30.14	52	W	3	b	30.06	- .08	62	61	+ 7	NW	4	c	4	64	55	0.08	

WEATHER CHARTS

for 8 a.m. on

Sunday, 13th October,

1889.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP

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

Changes since previous morning are stated in words.

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

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

→ = forces 5 to 7; → = forces 1 to 4.

☉ = dead calm.

SEA DISTURBANCE—Where considerable, is shown thus:

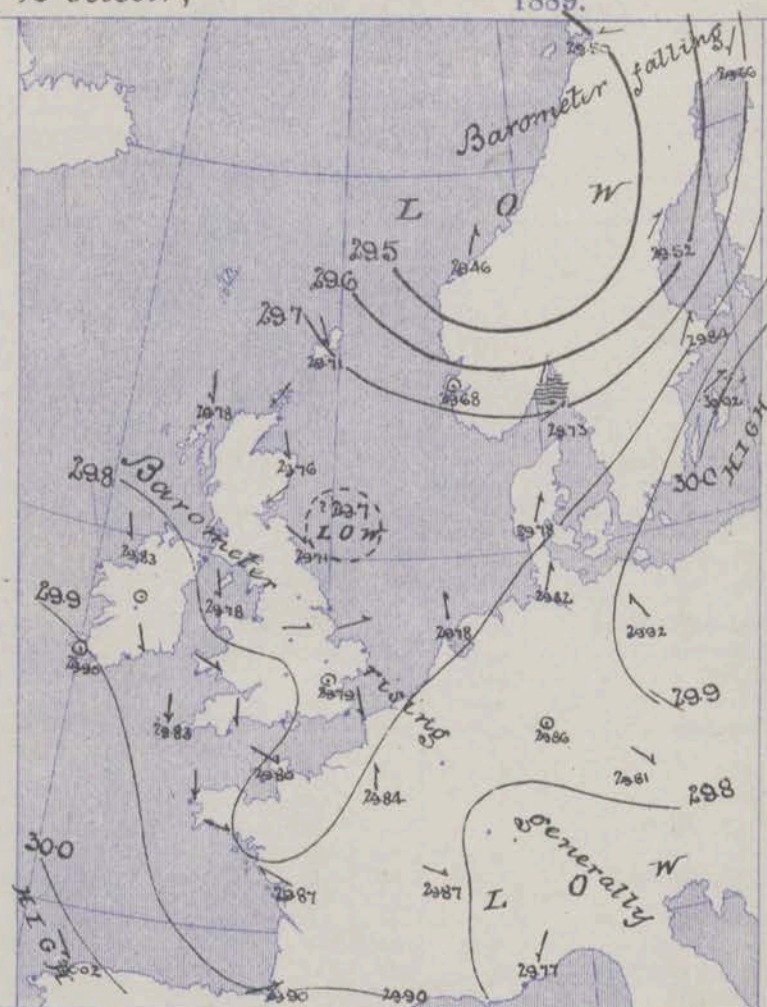
☼ = Rough. ☼ = High.

MEAN HEIGHT OF THE BAROMETER

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

During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS.
Sumburgh Head	29.708
Stornoway	29.735
Wick	29.745
Nairn	29.761
Aberdeen	29.774
Leith	29.804
Shields	29.835
York	29.872
Loughborough	29.891
Ardrossan	29.813
Donaghadee	29.832
Holyhead	29.853
Liverpool	29.864
Parsonstown	29.881
Valencia	29.873
Roche's Point	29.870
Pembroke	29.868
Scilly	29.894
Jersey	29.904
Hurst Castle	29.907
Dover	29.909
LONDON	29.911
Oxford	29.910
Cambridge	29.900
Yarmouth	29.886



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.

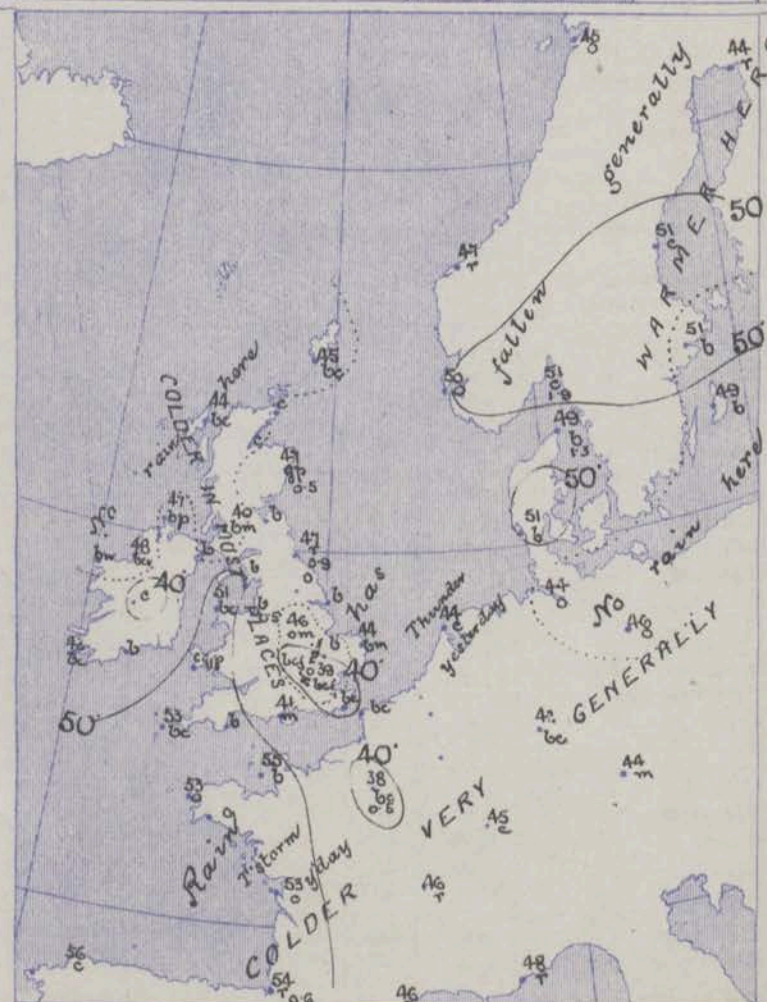
RAINFALL—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of October.)

STATIONS.	TEMPERATURE.				RAINFALL. (Inches.)
	Daily Max.	Daily Min.	at 8 a.m.		
			Dry.	Wet.	
Sumburgh Head.....	49.7	41.6	46.0	44.3	4.33
Stornoway	50.5	39.5	45.3	44.1	4.94
Wick.....	51.6	40.1	46.1	44.3	2.94
Nairn	51.6	40.6	44.5	42.5	2.38
Aberdeen	52.3	41.0	45.5	43.5	2.88
Leith.....	54.7	41.5	46.5	44.7	1.94
Shields	53.0	42.8	47.1	45.4	2.46
York	54.8	41.0	45.9	44.5	2.64
Loughborough	55.3	41.4	46.4	45.0	2.98
Ardrossan	53.5	43.6	47.6	45.6	4.31
Donaghadee.....	53.2	43.3	47.7	46.5	3.35
Holyhead.....	54.5	47.0	50.2	48.2	4.53
Liverpool	53.6	44.6	47.8	45.8	3.62
Parsonstown	54.7	41.1	46.4	44.7	3.27
Valencia	56.6	46.5	51.3	49.1	6.09
Roche's Point	55.8	45.9	50.2	48.4	4.17
Pembroke.....	54.8	48.0	51.2	49.1	4.13
Scilly	56.6	50.3	53.8	51.7	3.84
Jersey	58.1	49.2	53.6	51.1	4.34
Hurst Castle	57.1	46.0	51.4	49.6	3.24
Dover	55.8	47.0	50.7	48.7	3.28
LONDON	56.6	43.2	48.0	46.4	2.74
Oxford	55.3	42.5	46.7	45.3	2.72
Cambridge	56.4	41.2	46.4	45.4	2.36
Yarmouth	54.3	44.8	49.2	47.9	2.97

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



GENERAL SITUATION AT 8 A.M.

PRESSURE	<p>Highest, 30.0 in; and upwards, over the Baltic and also over Spain.</p> <p>Lowest, 29.5 in; and less, in a large depression lying over Scandinavia. A small and very shallow disturbance with readings below 29 in; is apparently lying off the N.E. of England.</p> <p>Gradients moderate over the south of Scandinavia, but slight elsewhere.</p> <p>Barometer falling in the north of Scandinavia as well as in Spain and the south of France, but rising elsewhere.</p>
TEMPERATURE	<p>Highest, 62° at Falmouth, 56° at Lannion, 55° at Jersey, 54° at Christiania, 53° at Seilly and Brest, and 52° at Havre.</p> <p>Lowest, 34° at Oxford, 36° at Bournemouth, 38° at (Dungeness and Paris, 39° in London, 41° at Cambridge and Hurst Castle, and 42° at Harbinder.</p>
WIND	<p>Light from the Nth or N.W.th over the greater part of our Islands as well as in Portugal.</p> <p>Variable in Germany and France; moderate from S. or S.W. in Sweden and Denmark.</p>
WEATHER	<p>Rain, in the north of Scandinavia and the south of France, as well as on our own northeast coast; showery at some of our western stations.</p> <p>Fine in most other localities, but foggy at Oxford and in London.</p> <p>Heavy rain has fallen at some of our northern stations, as well as in the south of Norway and north of Denmark.</p>
SEA	<p>Rough in the Christiania Fjord, but moderate to smooth elsewhere.</p>

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

FORECASTS

For the 24 hours ending at NOON on 14th OCT^r 1889.

DISTRICTS.	FORECASTS.	DISTRICTS.	FORECASTS
0 { SCOTLAND NORTH	NONE ISSUED	6 { SCOTLAND WEST	NONE ISSUED.
1 { SCOTLAND EAST		7 { ENGLAND N.W.	
2 { ENGLAND N.E.		8 { ENGLAND S.W.	
3 { ENGLAND EAST		9 { IRELAND NORTH	
4 { MIDLAND COUNTIES		0 { IRELAND SOUTH	
5 { ENGLAND SOUTH		WARNINGS	NONE ISSUED.

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

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

YESTERDAY'S 2 P.M. REPORTS.

	Bar:	Ther:		Wind		Wea:	Sea		Bar:	Ther:		Wind		Wea:	Sea:
		D	W	D	F					D	F				
Skudesnaes ...	29.66	55	50	ENE	2	o	3	Holyhead ...	29.61	52	48	NW	2	c	2
Sumburgh Head ...	29.67	50	47	NNE	2	bc	3	Valencia ...	29.7	53	51	NW	4	compq	4
Stornoway ...	29.70	53	53	N	3	bc	3	Scilly ...	29.70	52	49	WNW	4	bc	4
Aberdeen ...	29.63	48	47	N	3	oq	4	Jersey ...	29.71	55	50	W	3	c	3
Shields ...	29.58	49	48	NW	2	r	2	Dungeness ...	29.64	57	51	SW	3	bc	2
Ardrossan ...	29.62	52	49	WNW	3	c	2	London ...	29.63	57	51	SW	2	bc	*
Malin Head ...	29.66	51	47	N	2	b	1	Yarmouth ...	29.58	53	49	WSW	3	bc	2
Mullaghmore ...	29.66	54	50	ENE	2	cv	2	Rochefort ...	29.88	58	55	NNW	3	c	1
Belmullet ...	29.69	53	50	NW	3	b	*								

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

The reports for yesterday morning showed that pressure was highest, 30.4 in. and upwards, in an anticyclone lying over the southern part of Central Russia, but high 30.1 in. and upwards in another area lying over the southeast of the Iberian Peninsula. The lowest readings 29.5 in. and less, were found in a depression lying over Lapland, and also in a very small and shallow system lying off the northeast of England, but readings were low 29.6 in. and less, in another system lying over Germany, and also in a long trough which extended from the north of Ireland to the southern part of the North Sea. The wind was light from the West or NW^{ly} over England, the south of Ireland and the north of France, as well as at the Spanish stations, but light from the SE^{ly} over the greater part of Eastern and Central Europe, and light from S in Algeria. Over the northern parts of Scandinavia and Russia the wind was W^{ly} or SW^{ly} and at Ulleboeg it blew with the force of a gale, but in the north of our Islands variable airs were reported.

The weather was rainy in the north of England and southeast of Scotland, as well as in Denmark, Germany and the southwest of France, and showery on the west coasts of our Islands. Elsewhere conditions were mostly fair, but fog prevailed at some of the English stations, as well as at Stockholm and Helder, and a thunderstorm was reported at Rome. Temperature had changed very irregularly, but the general tendency was in a downward direction; reading ranged from 67° at upwards over the Adriatic and the more central parts of the Mediterranean to 45° or less in many parts of the United Kingdom and in the north of Scandinavia. The highest individual readings were 72° at Palermo, 71° at Malta, 70° at Brindisi, 68° at La Gelle, 67° at Rome, Rome, Venice, and Constantinople, and 65° at Trieste, Languisimo, and Palma; the lowest were 38° at Oxford, 41° at Dungeness, 42° at Le Mans and Lyons, and 43° at Haparanda, Nain, Aberdeen, Ardrossan, Donaghadee, Bann in Limerick, Carontown and Loughborough.

In the course of the day the depression over Germany travelled northwards to the neighbourhood of the Elbe River. The small disturbance off the northeast of England also moved slowly in a northerly direction. Heavy rain fell over Denmark and the south of 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).

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

DAILY WEATHER REPORT.

for *Monday, 17th October,* 1889.
 Issued by the Meteorological Office, 63, Victoria Street, London. *R. H. SCOTT, Secretary.*

Issued by the Meteorological Office, 55, Abchurch Lane, London, E.C. 4, at 5.00 P.M., daily.																			
STATIONS.		YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
		Barometer at 32° F. and Sea Level.	Temp. in Shade.	WIND.			BAROMETER.		SHADE TEMP.			WIND.			Sea. (0 to 2.)	SHADE TEMP.		Amount of Rainfall.	
				Dir.	Force (0 to 12.)	Weather.	Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Dir.	Force (0 to 12.)	Weather.		Max.	Min.		
SCANDINAVIA.																			
Haparanda ...		29.56	48	SSE	6	bc	29.58	+22	44	41	0	2	0	bc	*	48	86	0.08	
Hernösand ...		29.87	45	NW	2	b	30.01	+49	38	37	-13	2	0	c	*	57	?	-	
Stockholm ...		29.99	49	S	2	0	29.86	+02	50	48	-1	NW	4	0	*	57	48	0.12	
Wisby ...		29.94	50	SSE	4	0	29.72	-30	53	52	+4	2	4	bc	*	52	48	0.08	
Bodö ...		29.54	46	NW	4	0	29.83	+33	46	44	+1	NW	4	c	2	46	41	0.63	
Christiansund		29.82	46	SW	4	r	29.95	+49	46	44	-1	S	1	bc	2	48	45	0.35	
Skudesnaes ...		29.86	50	E	1	0	29.87	+19	47	45	-3	N	2	c	2	52	45	0.20	
Christiania Fjord (Færder)																			
Skagen (The Scaw)		29.89	50	S	1	b	29.80	+07	52	48	+3	E	3	0	2	54	48	-	
Fanö ...		29.86	45	SE	4	b	29.76	-02	44	44	-7	NW	4	0	*	55	43	-	
Sumburgh Head		29.86	46	2	0	0	29.91	+20	42	40	-3	2	0	b	0	49	36	-	
Stornoway ...		29.86	44	2	0	b	29.85	+07	42	42	-2	2	0	bc	3	52	33	-	
Wick ...		29.90	45	NE	1	bc	29.91	+11	44	42	-2	NW	1	c	1	52	34	0.02	
Nairn ...		29.87	45	2	0	c	29.91	+15	32	32	-14	2	0	b	1	55	29	-	
Aberdeen ...		29.89	46	N	2	bc	29.94	+18	38	34	-9	NW	1	bcnw	3	52	35	-	
Leith ...		29.89	45	W	1	r	29.93	+17	43	43	0	2	0	cm	*	52	36	0.17	
Shields ...		29.81	49	NW	2	p	29.92	+21	46	45	-1	NW	2	c	2	53	43	0.22	
Spurn Head ...		29.84	50	NW	1	r	29.88	+14	47	46	-1	NW	3	b	3	51	44	0.02	
York ...		29.85	51	NW	1	bc	29.93	+18	46	45	-2	NW	1	c	*	55	34	-	
Loughborough		29.87	46	2	0	c	29.97	+20	31	31	-15	2	0	fw	*	57	29	-	
Ardrossan ...		29.87	48	2	0	b	29.92	+12	44	42	+4	SSE	2	bcn	1	60	39	-	
Malin Head ...		29.86	50	NW	1	bc	29.86	+08	44	43	-5	SSE	3	cn	1	53	42	-	
Mullaghmore ...		29.90	46	NW	1	b	29.87	+04	46	44	-2	SSE	2	c	2	56	38	-	
Belmullet ...		29.90	50	NW	1	b	29.84	-02	46	44	+3	SE	1	0	*	55	41	-	
Donaghadee ...		29.89	48	W	1	bc	29.92	+13	38	38	-5	W	2	b	1	55	34	0.01	
Barrow-in-Furness		29.83	51	NW	1	b	29.93	+17	41	40	-6	N	1	b	*	54	39	-	
Liverpool (Bidston)		29.89	49	NW	1	b	29.95	+17	39	39	-10	SSE	1	f	3	54	38	-	
Holyhead ...		29.87	51	NW	2	bc	29.92	+14	44	44	-6	SE	1	bw	1	57	42	-	
Parsonstown ...		29.91	49	2	0	c	29.89	+03	38	37	+2	2	0	c	*	56	33	-	
Valencia ...		29.94	49	SE	1	b	29.83	-07	51	49	+8	2	4	rm	4	58	41	0.03	
Roche's Point...		29.94	50	W	2	b	29.89	+03	50	49	+5	S	3	c	3	57	40	-	
Pembroke (St. Ann's Hd.)		29.91	50	NW	2	b	29.93	+11	45	45	-5	E	2	fw	2	54	44	-	
Scilly ...		29.93	52	NW	3	b	29.92	+09	53	50	0	SSE	4	c	3	56	47	-	
Prawle Point ...		29.93	51	NW	2	c	29.97	+16	54	49	+3	2	0	b	1	62	43	-	
Jersey (St. Aubin's)		29.89	53	NW	2	bm	29.98	+19	44	43	-11	NW	1	bm	1	61	40	-	
Hurst Castle ...		29.90	53	NW	2	m	29.97	+16	43	42	+2	NE	1	mw	0	58	40	-	
Dungeness ...		29.83	42	NW	1	bc	29.91	+14	38	38	0	NW	1	f	1	56	36	-	
London ...		29.86	46	N	1	bm	29.96	+17	38	38	-1	2	0	c	*	57	37	-	
Oxford ...		29.92	44	NW	2	b	29.98	+18	32	32	-2	2	0	c	*	57	32	-	
Cambridge ...		29.88	49	S	1	bc	29.94	+15	39	38	-2	2	0	c	*	54	31	-	
Yarmouth ...		29.80	51	N	1	bm	29.89	+14	44	44	0	NW	2	f	2	54	38	-	
Cuxhaven ...		29.86	49	2	0	b	29.71	-11	50	50	+6	N	5	0	*	53	?	-	
Berlin ...		29.77	49	N	4	r	29.42	-50	51	50	+5	SSE	3	0	*	52	?	0.83	
Wiesbaden ...		*	*	*	*	*	29.83	-03	50	46	+8	NW	3	0	*	55	?	-	
Munich ...		29.72	44	W	4	r	29.86	+05	42	41	-2	W	5	0	*	48	41	0.04	
The Helder ...		29.86	48	SSW	1	b	29.83	+05	51	49	+7	NW	1	bc	1	54	?	-	
Brussels (9 a.m.)		*	*	*	*	*	?	?	50	47	+4	N	2	m	2	57	45	-	
Cape Gris Nez		?	52	W	1	b	?	?	50	47	+4	N	2	m	2	57	45	-	
Paris ...		29.89	48	NW	1	0	29.98	+14	34	34	-4	S	1	b	*	57	34	-	
Brest ...		?	53	N	1	0	?	?	51	49	-2	SE	1	b	2	59	46	-	
Lorient ...		29.92	55	N	2	b	29.98	+18	47	46	-5	E	1	b	2	59	46	-	
Rochefort ...		29.90	60	NW	3	c	30.09	+22	46	45	-7	N	2	b	2	61	41	-	
Belfort ...		29.81	49	NW	1	r	29.91	+12	43	38	-2	NW	1	0	*	58	40	0.55	
Lyons ...		29.89	46	NW	1	0	29.91	+04	44	42	-2	NW	1	0	*	63	40	0.04	
Nice ...		29.71	55	NW	4	b	29.75	-02	47	42	-1	E	4	bc	2	61	43	0.04	
Perpignan ...		29.91	55	NW	1	c	30.00	+10	54	48	+8	NE	2	c	*	64	?	-	
Biarritz ...		29.99	59	NW	5	0	30.02	+12	59	54	+5	NW	3	0	3	59	52	1.81	
PENINSULA.																			
Corunna ...		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
Lisbon ...		30.14	59	NW	1	b	30.16	+10	56	52	-6	NW	2	b	2	66	54	-	

For Explanation of Columns, see bottom of p 4.

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

WEATHER CHARTS

for 8 a.m. on Monday, 14th OCTOBER.

1889.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP

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

Changes since previous morning are stated in words.

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

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

→ = forces 5 to 7; → = forces 1 to 4.

○ = dead calm.

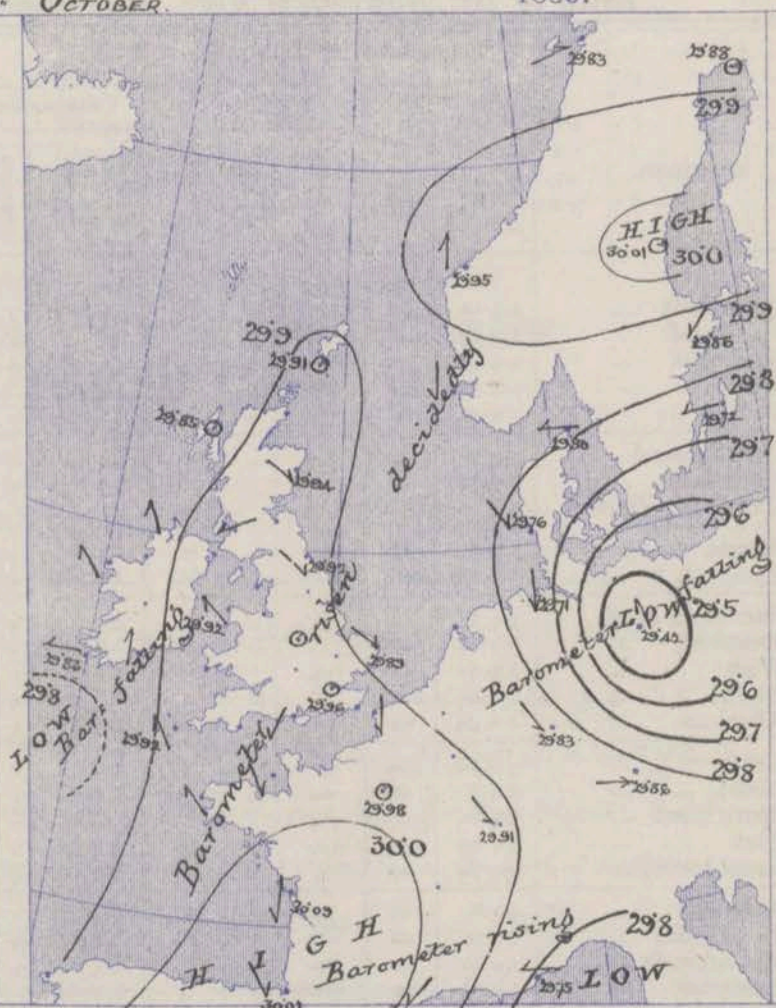
SEA DISTURBANCE—Where considerable, is shown thus:

☼ = Rough. ☼ = High.

MEAN HEIGHT OF THE BAROMETER

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

STATIONS.	MEAN READINGS.
	in.
Sumburgh Head	29.708
Stornoway	29.735
Wick	29.745
Nairn	29.761
Aberdeen	29.774
Leith	29.804
Shields	29.835
York	29.872
Loughborough	29.891
Ardrossan	29.813
Donaghadee	29.832
Holyhead	29.853
Liverpool	29.864
Parsonstown	29.881
Valencia	29.873
Roche's Point	29.870
Pembroke	29.868
Scilly	29.894
Jersey	29.904
Hurst Castle	29.907
Dover	29.909
LONDON	29.911
Oxford	29.910
Cambridge	29.900
Yarmouth	29.886



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.

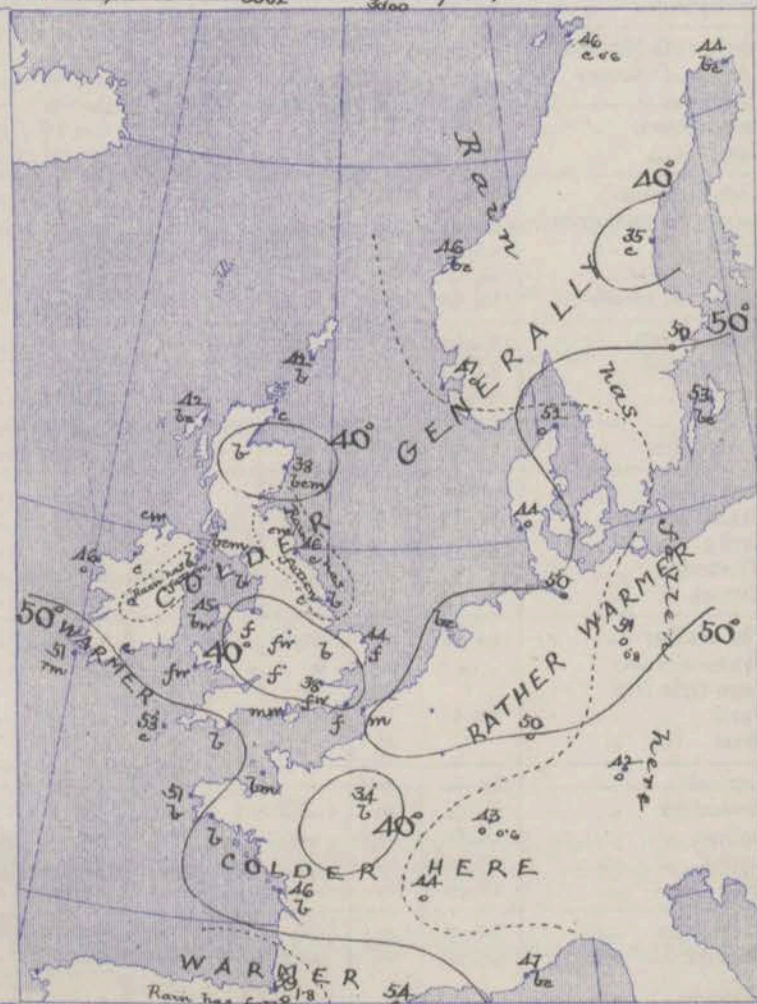
RAINFALL—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of October.)

STATIONS.	TEMPERATURE.				RAINFALL (Inches.)
	Daily Max.	Daily Min.	at 8 a.m.		
			Dry.	Wet.	
Sumburgh Head.....	49.7	41.6	46.0	44.3	4.33
Stornoway	50.5	39.5	45.3	44.1	4.94
Wick.....	51.6	40.1	46.1	44.3	2.94
Nairn	51.6	40.6	44.5	42.5	2.38
Aberdeen	52.3	41.0	45.5	43.5	2.88
Leith	54.7	41.5	46.5	44.7	1.94
Shields	53.0	42.8	47.1	45.4	2.46
York	54.8	41.0	45.9	44.5	2.04
Loughborough	55.3	41.4	46.4	45.0	2.98
Ardrossan	53.5	43.6	47.6	45.6	4.31
Donaghadee.....	53.2	43.3	47.7	46.5	3.35
Holyhead.....	54.5	47.0	50.2	48.2	4.53
Liverpool.....	53.6	44.6	47.8	45.8	3.62
Parsonstown	54.7	41.1	46.4	44.7	3.27
Valencia	56.6	46.5	51.3	49.1	6.09
Roche's Point	55.8	45.9	50.2	48.4	4.17
Pembroke.....	54.8	48.0	51.2	49.1	4.13
Scilly	50.6	50.3	53.8	51.7	3.84
Jersey	58.1	49.2	53.6	51.1	4.34
Hurst Castle	57.1	46.0	51.4	49.6	3.24
Dover	55.8	47.0	50.7	48.7	3.28
LONDON	56.6	45.2	48.0	46.4	2.74
Oxford	55.3	42.5	46.7	45.3	2.72
Cambridge	56.4	41.2	46.4	45.4	2.36
Yarmouth	54.3	44.8	49.2	47.9	2.97

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



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30.1 ins. and upwards, over the southern parts of the Iberian Peninsula, 30.0 ins. and upwards over Central Sweden.
 Lowest, 29.5 ins. and less, in a depression lying over North Germany, 29.8 ins. and less, in another lying off the southwest of Ireland.
 Gradients moderate over Germany, but slight elsewhere.
 Barometer falling in Ireland and also in Denmark, and the south of Sweden and North Germany, but rising elsewhere.

TEMPERATURE

Highest, 53° at Biarritz, 56° at Fribourg, 54° at Pauillac Point and Perpignan, 53° at Wiesbaden and Bielefeld, and 52° at Glasgow.
 Lowest, 31° at Loughborough, 32° at Mainz and Oxford, 34° at Paris, 38° at Helsingfors, Aberdeen, Carlskrona, Stockholm, and in London.
 Frost occurred last night over the inland parts of Great Britain; at Loughborough the sheltered thermometer fell to 25°.

WIND

Light or moderate from the SEth or Eth over the west of our Islands and the northwest of France.
 Light from the Nth or NWth over the North Sea, the Netherlands, western Germany and the eastern parts of Great Britain and France.
 Calm over the central parts of our Islands and also in the north of Sweden; Eth in the south of Sweden.

WEATHER

Fine generally, but dull over Denmark, Germany, the east of France and the west of Ireland, with rain at Valence.
 A good deal of fog and dew are reported over England and haze at some of the Scotch stations.
 Heavy rain has fallen in some parts of Scandinavia, Germany and France, and smaller quantities on the northeast coast of Great Britain.

SEA

Slight or smooth generally, but moderate at Valence.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The depression over Germany may possibly move in a northerly direction, and occasion showers at some of our eastern stations. The disturbance which is approaching our southern coast seems likely to move northwards, and rain is therefore probable

at some of our western stations. Over the central parts of our Islands no important change is indicated at present.

FORECASTS

For the 24 hours ending at NOON on 15th OCTOBER 1889.

DISTRICTS.

FORECASTS.

0	SCOTLAND NORTH	Variable or N th breezes, fair generally.
1	SCOTLAND EAST	
2	ENGLAND N.E.	NW th and N th winds, light or moderate; fair generally, but perhaps local showers.
3	ENGLAND EAST	
4	MIDLAND COUNTIES	Calms and light variable airs, fine generally, frosty and foggy at night.
5	ENGLAND SOUTH	

DISTRICTS.

FORECASTS

6	SCOTLAND WEST	SE th winds, light; fair generally.
7	ENGLAND N.W.	
8	ENGLAND S.W.	SE th winds, freshening; fair to cloudy and some rain.
9	IRELAND NORTH	
10	IRELAND SOUTH	

WARNINGS

NONE ISSUED.

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

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

YESTERDAY'S 2 P.M. REPORTS.

	Bar:	Ther:		Wind		Wea:	Sea		Bar:	Ther:		Wind		Wea:	Sea:	
		D	W	D	F					D	W	D	F			
Skudesnaes ...	29.79	53	50	2	2	0	3		Holyhead ...	29.81	51	51	17	2	bc	2
Sumburgh Head ...									Valencia ...							
Stornoway ...	29.82	52	51	2	3	c	3		Scilly ...							
Aberdeen ...									Jersey ...	29.84	57	51	17	2	bc	2
Shields ...									Dungeness ...	29.80	56	52	5	1	bc	1
Ardrossan ...									London ...							
Malin Head ...	29.82	53	49	17	2	bc	1		Yarmouth ...							
Mullaghmore ...									Rochefort ...	29.99	60	55	17	3	c	2
Beltmullet ...	29.89	55	50	17	2	b	7									

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

The reports for yesterday morning showed that pressure was highest 30.3 ins. and upwards, in a small anticyclone lying over the south of Russia, but high 30.1 ins. and upwards, in a larger system lying over Algeria and the extreme south of Spain. The lowest reading 29.5 ins. and less, were found in a large depression lying over Scandinavia, but another disturbance with readings below 29.8 ins. was situated over the south of France and the northern parts of Italy and the Adriatic. Light breezes from the north-westward or northward were reported over our Islands, as well as over the greater part of the Iberian Peninsula, but in Scandinavia, Denmark and the Netherlands the wind was SW⁴ or S⁴, while in the south of Russia it was SE⁴ or E⁴. Over Italy the wind was very variable while in Algeria it was chiefly W⁴. The weather varied greatly in different localities; in the north of Scandinavia the northeast of Great Britain, the south of France and northern Italy rain was falling, while over the southern parts of central England the weather was foggy. Elsewhere, however, conditions were mostly fine. Temperature had changed irregularly over western Europe, and risen somewhat over Sweden and the Baltic, but fallen elsewhere, readings ranged from 60° and upwards, over the central and southern parts of the Mediterranean to 40° or less, over the central part of England and Ireland. The highest individual readings were 75° at Malta, 70° at Brindisi, 64° at La Caille, 61° at Oran, 60° at Kango and Algiers, and 59° at Pesaro, Rome and Langenscheidt, the lowest were 34° at Oxford, 36° at Parsonstown, 38° at Dungeness and Paris, 39° in London, 40° at Ardrossan, 41° at Cambridge and Hurst Castle.

In the course of the day the depression over Scandinavia travelled away to the north-westward, and the barometer rose in all parts of western and northern Europe. Fine weather continued to prevail in most places.

SUMMARY OF CHANGES IN THE WEATHER OVER THE BRITISH ISLANDS AND THEIR NEIGHBOURHOOD FROM THE 6TH TO THE 12TH OCTOBER, 1889.

The weather of the past week has been changeable and unsettled. At the commencement of the time strong gales were experienced on many parts of our coasts, and later in the period thunder and lightning occurred at several of the English stations.

Barometrical pressure has been continuously highest over Russia, but a second area of relatively high readings has existed over or to the southwest of the Iberian Peninsula. At the beginning of the week a shallow depression was travelling away from our Islands in a northerly direction, but this system was followed by others which advanced directly over the Kingdom.

The first a large and very deep depression with minimum readings below 28.6 ins. advanced across the north of Ireland on the night of the 6th, travelled north-eastward to the northeast of Scotland on the 7th, and finally passed away to the northward of our Islands. During its progress heavy rain was experienced at many of our western and northern stations, and on the 7th gales or strong winds from varying directions were felt in nearly all parts of our coasts, over the northern parts of Ireland and Wales the W gale was unusually severe.

The second a much smaller system was developed over the south of England on the evening of the 8th, and subsequently travelled north-eastward to Denmark and the south of Norway. Its formation was attended by thunderstorms and heavy rain over our southern counties, and by a renewal of the gale in the eastern part of the Channel.

The third depression also large and deep, but not so serious as that of the 6th and 7th appeared off the north of Ireland on the night of the 8th, and afterwards travelled north-eastward to the northeast of Scotland, where it quickly dispersed. Heavy rain again fell in the northern parts of Ireland and Scotland, and a W⁴ gale was felt at some of our north-western stations.

The fourth a small and very shallow system advanced from the Bay of Biscay to the eastern part of the Channel on the night of the 10th, and then travelled slowly northwards across the southeast of England to our northeast coast. No serious increase of wind was reported, but rain and fog were experienced over our east and southeast coasts.

Temperature has not differed materially from the normal. Slight frost was experienced over central Scotland on the night of the 8th, and in some parts of central England on the night of the 10th.

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, 15th October,* 1889.
Issued by the Meteorological Office, 63, Victoria Street, London. *R. H. SCOTT, Secretary.*

STATIONS.	YESTERDAY EVENING.						8 A.M. TO DAY.										PAST 24 HOURS.		
	Barometer at 32° F. and Sea Level.	Temp. in Shade.	WIND.		Weather.	Barometer. Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	SHADE TEMP.		Difference from 8 a.m. yesterday.	WIND.		Sea. (0 to 2.)	SHADE TEMP.		Amount of Rainfall.			
			Dir.	Force. (0 to 12.)				Dry.	Wet.		Dir.	Force. (0 to 12.)		Max.	Min.				
SCANDINAVIA.	Haparanda ...	30.03	37	20	c	29.95	+0.07	37	36	-7	ENE	4	c	#	48	36	-		
	Hernösand ...	29.89	47	NE	2	0	29.88	-0.13	49	48	+11	S	4	0	#	49	36	0.28	
	Stockholm ...	29.68	53	ESE	2	0	29.66	-0.20	50	48	0	SSE	4	T	#	54	46	-	
	Wisby ...	29.68	53	SSE	4	b	29.74	+0.02	51	48	-2	SSW	6	0	#	67	48	-	
	Bodö ...	30.02	40	20	0	b	29.87	+0.04	42	38	-4	ESE	4	0	2	46	39	0.04	
	Christiansund	29.85	46	ENE	5	c	29.63	-0.32	46	44	0	ENE	3	T	3	48	45	0.04	
	Skudesnaes ...	29.75	49	NW	4	0	29.73	-0.14	49	46	+2	NW	4	bc	3	54	?	-	
	Christiania Fjord (Færder)	29.55	45	T	7	T	29.56	-0.20	45	44	+1	WNW	3	0	2	48	?	1.34	
	Skagen (The Seaw)	29.43	50	NE	3	T	29.63	-0.17	49	46	-3	NW	4	b	3	52	46	0.79	
	Fanö ...	29.69	48	T	4	c	29.86	+0.10	48	47	+4	WNW	4	c	#	50	?	0.08	
BRITISH ISLANDS.	Sumburgh Head	29.89	46	20	0	0	29.80	-0.11	44	42	+2	20	0	c	0	51	37	-	
	Stornoway ...	29.81	49	SW	4	0	29.61	-0.24	48	46	+6	S	5	T	5	52	37	0.02	
	Wick ...	29.86	47	S	2	b	29.71	-0.20	49	47	+5	S	4	b	3	55	40	-	
	Nairn ...	29.84	45	20	0	0	29.72	-0.19	44	40	+9	20	0	c	1	51	31	-	
	Aberdeen ...	29.90	44	SE	1	0	29.79	-0.15	45	44	+7	SW	1	cmw	2	51	37	-	
	Leith ...	29.88	47	S	1	c	29.78	-0.15	46	44	+3	SSE	1	cm	#	51	38	-	
	Shields ...	29.91	49	E	1	0	29.83	-0.09	42	42	-4	SSW	2	m	2	52	39	-	
	Spurn Head ...	29.91	48	E	1	bc	29.89	+0.01	46	45	-1	SSW	3	bcw	3	51	43	-	
	York ...	29.93	49	NE	1	bc	29.89	+0.04	37	37	-9	SSE	1	f	#	55	35	-	
	Loughborough	29.92	42	SE	1	b	29.90	-0.07	38	38	+7	ESE	2	cf	#	58	31	-	
GERMANY.	Ardrossan ...	29.88	48	20	0	0	29.72	-0.20	49	47	+5	ESE	4	om	3	55	43	0.04	
	Malin Head ...	29.79	49	SSE	3	0	29.55	-0.31	49	48	+5	SSE	4	og	1	58	44	-	
	Mullaghmore ...	29.79	52	SE	3	Og	29.57	-0.30	53	51	+7	S	4	Og	2	54	45	-	
	Belmullet ...	29.75	50	SSE	3	0	29.53	-0.31	52	52	+6	SW	5	0	#	52	45	0.08	
	Donaghadee ...	29.87	47	SSW	2	c	29.69	-0.23	52	52	+14	SSE	4	T	3	55	37	0.09	
	Barrow-in-Furness	29.88	47	E	1	bc	29.80	-0.13	44	43	+3	E	2	0	#	51	40	-	
	Liverpool (Bidston)	29.91	48	SE	1	bc	29.82	-0.13	43	42	+4	SSE	3	0	3	53	39	-	
	Holyhead ...	29.88	51	S	2	cg	29.75	-0.17	51	50	+6	S	4	omga	4	56	44	0.01	
	Parsonstown ...	29.80	50	20	0	c	29.65	-0.24	52	51	+14	20	0	c	#	55	37	0.01	
	Valencia ...	29.74	53	ESE	4	ev	29.65	-0.18	55	54	+4	SSW	5	om	4	55	50	0.32	
FRANCE AND NETHERLANDS.	Roche's Point...	29.82	52	SSE	4	rm	29.70	-0.19	52	52	+2	WSW	2	of	4	54	50	0.20	
	Pembroke (St. Ann's Hd.)	29.88	53	S	2	c	29.75	-0.18	55	55	+10	SSE	4	rgm	4	55	45	0.03	
	Scilly ...	29.81	53	SSE	5	ru	29.79	-0.13	55	54	+2	SSW	4	f	6	55	51	0.04	
	Prawle Point ...	29.93	51	S	3	c	29.86	-0.11	54	53	0	S	4	0	2	55	50	-	
	Jersey (St. Aubin's)	29.95	55	SSW	3	cg	29.92	-0.06	53	52	+9	SSE	5	Og m	4	61	43	-	
	Hurst Castle ...	29.96	44	SSE	2	c	29.91	-0.06	56	55	+13	S	4	b	1	59	41	-	
	Dungeness ...	29.93	52	W	3	0	29.95	+0.04	55	51	+17	SW	4	c	3	57	37	-	
	London ...	29.96	44	SW	1	bm	29.95	-0.01	48	47	+10	SSE	2	bw	#	58	37	-	
	Oxford ...	29.95	46	20	0	bc	29.92	-0.06	43	42	+11	S	2	bm	#	57	32	-	
	Cambridge ...	29.95	47	20	0	b	29.94	-0.00	45	45	+6	S	1	bw	#	57	36	-	
PENIN- SULA.	Yarmouth ...	29.91	51	20	0	bcf	29.94	+0.05	50	49	+6	20	0	bc	2	52	41	-	
	Cuxhaven ...	29.69	47	W	3	c	29.93	+0.22	47	46	-3	SW	2	b	#	51	47	0.02	
	Berlin ...	29.87	47	WNW	3	b	30.04	+0.62	47	46	-4	W	3	0	#	52	43	0.04	
	Wiesbaden ...	*	*	*	*	*	30.12	+0.29	39	38	-11	W	1	b	#	54	37	-	
	Munich ...	30.08	42	SW	4	0	30.15	+0.29	42	41	0	SW	2	c	#	45	39	0.04	
	The Helder ...	29.89	52	NW	2	T	29.99	+0.16	46	45	-5	S	1	b	1	54	46	0.04	
	Brussels (9 a.m.)	*	*	*	*	*	30.06	*	43	43	*	SSW	1	b	#	53	41	0.28	
	Cape Gris Nez	?	53	T	1	m	?	*	45	44	-5	S	2	b	1	45	45	-	
	Paris ...	30.03	48	S	1	bc	30.08	+0.10	35	35	+1	S	1	m	#	58	34	-	
	Brest ...	?	56	S	5	T	?	?	56	55	+5	S	1	m	3	59	45	-	
FRANCE AND NETHERLANDS.	Lorient ...	29.92	55	SSE	3	0	29.89	-0.09	56	55	+9	WSW	2	0	2	59	46	0.08	
	Rochefort ...	30.04	57	SSE	4	0	30.02	-0.07	54	53	+8	SSE	5	0	2	64	?	-	
	Belfort ...	29.94	47	NW	1	c	30.10	+0.19	39	36	-4	NW	1	b	#	57	36	-	
	Lyons ...	30.05	45	WNW	1	b	30.13	+0.22	38	37	-6	W	1	b	#	53	36	-	
	Nice ...	29.89	51	ENE	2	b	29.99	+0.24	51	42	+4	ENE	4	bc	1	63	45	0.08	
	Perpignan ...	30.04	55	N	3	b	30.06	+0.06	50	48	-4	20	0	0	#	63	44	-	
	Biarritz ...	30.05	57	SW	2	T	30.02	-0.00	61	60	+2	W	6	T	3	61	52	0.39	
	Corunna ...	30.13	60	NW	5	b	30.14	-0.02	59	57	+3	20	0	bc	2	68	?	-	
	Lisbon ...	30.13	60	NW	5	b	30.14	-0.02	59	57	+3	20	0	bc	2	68	?	-	

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

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

1889.

EXPLANATION OF MAP

Changes since previous morning are stated in words.

their *barba* and feathers refer to force thus—

$\Rightarrow \Rightarrow$ = forces above 10; $\Rightarrow \Rightarrow$ = forces 8 to 10;

→ = forces 5 to 7; → = forces 1 to 4.

⊙ = dead calm.

SEA DISTURBANCE—Where considerable, is shown thus:

$\text{---} = \text{Rough}, \text{---} = \text{High}$

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

During the 15 Years: 1871—1885.

STATIONS	MEAN
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This is a hand-drawn weather map of the British Isles and surrounding regions, including parts of France, the North Atlantic, and the Mediterranean. The map features several isobars (lines of equal pressure) and handwritten annotations.

- Pressure Systems:**
 - A **LOW** pressure system is centered over the North Atlantic, with a minimum pressure of 29.6. It is surrounded by isobars of 29.7, 29.8, 29.9, and 30.0.
 - A **HIGH** pressure system is located over the British Isles, with a maximum pressure of 30.1. It is surrounded by isobars of 30.0, 30.1, and 30.2.
- Isobars:**
 - Isobars are drawn at intervals of 0.1 units, ranging from 29.6 to 30.2.
 - Handwritten labels for isobars include 29.6, 29.7, 29.8, 29.9, 30.0, 30.1, and 30.2.
- Handwritten Annotations:**
 - Barometer:** This word is written multiple times in various locations, including near the British Isles and the North Atlantic.
 - LOW:** This word is written near the low pressure system in the North Atlantic.
 - HIGH:** This word is written near the high pressure system over the British Isles.
 - decidedly:** This word is written near the high pressure system, possibly indicating a strong or clear trend.
 - W:** This letter is written near the low pressure system, possibly indicating a westward trend.
 - risen:** This word is written near the high pressure system, possibly indicating a rise in pressure.
 - 30.15:** This value is written near the high pressure system, possibly indicating a specific pressure reading.
 - 30.12:** This value is written near the high pressure system, possibly indicating a specific pressure reading.
 - 30.06:** This value is written near the high pressure system, possibly indicating a specific pressure reading.
 - 30.08:** This value is written near the high pressure system, possibly indicating a specific pressure reading.
 - 30.02:** This value is written near the high pressure system, possibly indicating a specific pressure reading.
 - 30.04:** This value is written near the high pressure system, possibly indicating a specific pressure reading.
 - 30.06:** This value is written near the high pressure system, possibly indicating a specific pressure reading.
 - 30.08:** This value is written near the high pressure system, possibly indicating a specific pressure reading.
 - 30.10:** This value is written near the high pressure system, possibly indicating a specific pressure reading.
 - 30.12:** This value is written near the high pressure system, possibly indicating a specific pressure reading.
 - 30.15:** This value is written near the high pressure system, possibly indicating a specific pressure reading.

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

WEATHER is shown by Letters of the Beaufort Scale.

RAINFALL—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0·5 in. or more are quoted in figures.

(For the month of October.)

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

GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30.1 in. and upwards, in an anticyclone lying over the southern parts of Germany.
 Lowest, 29.6 in. and less, in a large depression lying to the northward of our Islands, and also in a smaller disturbance lying over the south of Scandinavia.
 Gradients moderate off the northwest of our Islands, but slight elsewhere.
 Barometer rising in Germany, the Netherlands and the east and south of France, but falling elsewhere.

TEMPERATURE

Highest, 61° at Bismarck, 55° at Lisbon, 56° at Hunt Castle, Rheine, and Orient, and 55° at Valencia, Hambro, Scilly and Penzance.
 Lowest, 35° at Paris, 37° at Haparanda and York, 38° at Loughborough and Lyons, 39° at Newcastle and Belfast and 44° at Nain.
 A considerable rise has taken place over the greater part of the United Kingdom.

WIND

Moderate from the S.W. (SE to SW) over the United Kingdom and the west and north of France, as well as in Sweden.
 Light or moderate from the W. over Denmark and Germany; E. in the west of Norway.
 Variable in the south of France; calm at Lisbon.

WEATHER

Fine and unsettled on the coast coasts of our Islands and France, as well as in Scandinavia, with rain in many places.
 Fine in most other localities, but foggy in the north of England and also at the mouth of the Channel.
 Since yesterday morning rain has fallen at our western and many of the Continental stations; the largest amount being 1.3 in. at Leeds and 0.9 in. at Skagen.

SEA

Rough at Scilly and rather rough at Hornsby, but moderate to smooth elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The depression off our extreme northwest coasts will probably travel away in a northerly or northeasterly direction, but conditions are favourable for the advance of other disturbances from the Atlantic. Unsettled weather is likely to spread eastwards to all parts of the Kingdom, with increasing S. winds on all our western coasts.

FORECASTS

For the 24 hours ending at NOON on 16th OCTOBER 1889.

DISTRICTS.

FORECASTS.

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

S. winds, freshening; fine to unsettled and some rain.
 S. winds, freshening; cloudy generally some rain.

DISTRICTS.

FORECASTS

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

SE. and S. winds, increasing in force; cloudy, unsettled, some rain.
 SW. to S. winds, increasing in force; unsettled, rain at times.

WARNINGS

The SOUTH CONE was hoisted last evening in districts 8, 10 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. REPORTS.

	Bar:		Ther:		Wind		Wea:		Sea			Bar:		Ther:		Wind		Wea:		Sea	
	D	W	D	F	D	F	D	F	D	F		D	W	D	F	D	F	D	F	D	F
Skudesnaes ...	29.55	54	49	177W	2	c	2				Holyhead ...	29.90	55	51	SSW	2	e	1			
Sumburgh Head ...	29.91	49	45	20	0	b	0				Valencia ...	29.78	52	51	SSW	4	17W	4			
Stornoway ...	29.84	50	47	20	4	c	1				Scilly ...	29.86	54	51	SSW	5	0	4			
Aberdeen ...	29.90	49	45	2	1	b	2				Jersey ...	29.97	60	55	SW	3	bc	3			
Shields ...	29.90	50	48	14E	1	c	3				Dungeness ...	29.98	55	52	W	2	bc	1			
Ardrossan ...	29.88	53	49	20	0	bc	0				London ...	29.05	57	50	WNW	1	bm	2			
Malin Head ...	29.82	52	47	5	3	c	1				Yarmouth ...	29.90	52	49	WN	3	bcf	2			
Mullaghmore ...	29.81	53	48	SE	4	c	2				Rocheport ...	30.07	63	58	SSW	3	bc	2			
Belmullet ...	29.77	52	49	SSW	3	0	*														

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

The reports for yesterday morning showed that pressure was highest, 30.3 in. and upwards in an anticyclone lying over Central Russia but high 30.2 in. and upwards in another system lying over Central Spain. The lowest reading, 29.5 in. and less, was found in a depression lying over Germany, but other shallow disturbances, with readings below 29.8 in., were lying respectively over the Gulf of Genoa and to the southward of Ireland. The wind was light or moderate from the SE^{and} in the west of our Islands, but NW^{on} over east coast, the North Sea, the Netherlands and the east of France. In the extreme northern parts of Scandinavia and Russia as well as over the southern parts of the Mediterranean the wind was SW or W^{and} and in Italy light and variable, while over Germany and Denmark a cyclonic circulation was shown, the depression existing in that neighbourhood. The weather was dull and unsettled in Denmark, Germany and the south of Scandinavia, as well as at some of the Irish, Italian and Algerian stations, but fine in most other localities. Fog was, however, reported over the central part of England and France. Temperature had risen a few degrees in Central Europe and also in Ireland, but fallen elsewhere; readings ranged from 65° and upwards over the central and southern parts of the Mediterranean to a little below the freezing point over the Central parts of England and France. The highest individual readings were 71° at Tunis, 70° at Bordir, 68° at Malta, 67° at Oren, 66° at Larosstown, 65° at Constantinople, and 60° at Feghorn, Lerina, and Algiers; the lowest were 31° at Loughborough, 32° at Kani and Oxford, 34° at Kiri, 35° at Formosa, and 38° at Hunsand, (Danghader, Larosstown, Dunsfere, and in London).

In the course of the day the depression over Germany travelled northwards to the south of Scandinavia and occasioned heavy rain in the neighbourhood of the Rogen Beck. The disturbance off the south of Ireland increased somewhat in depth and also moved slowly northwards towards night.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

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

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

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

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

DAILY WEATHER REPORT.

for WEDNESDAY 16TH OCT: 1889.
 Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.

STATIONS.		YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
		Barometer at 32° F. and Sea Level.	Temp. in Shade.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Sea. (0 to 2.)	SHADE TEMP.		Amount of Rainfall.		
				Dir.	Force. (0 to 12.)		Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Dir.	Force. (0 to 12.)		Max.	Min.			
SCANDINAVIA.	Haparanda ...	29.81	49	SE	4	0	29.75	-20	49	46	SE	2	0	•	48	34	0.04		
	Hernösand ...	29.78	49	SE	2	0	29.87	-01	45	42	NW	2	0	•	52	?	0.04		
	Stockholm ...	29.89	48	SE	2	0	30.05	+23	43	41	SE	2	0	•	59	?	—		
	Wisby ...	30.01	51	NW	4	0	30.08	+34	49	46	NW	4	0	•	54	48	—		
	Bodö ...	29.60	45	E	2	7	29.71	-16	43	41	E	0	0	1	46	39	0.12		
	Christiansund	29.75	46	WNW	5	7	29.94	+21	48	43	SE	3	0	3	46	43	0.47		
	Skudesnaes ...	29.91	52	NW	2	0	29.92	+19	53	51	SE	6	7	4	?	48	—		
	Christiania Fjord (Fæder)	29.82	51	N	5	0	30.03	+47	48	44	N	3	0	2	52	46	—		
	Skagen (The Scaw)	29.92	50	NW	3	0	30.04	+41	46	46	N	1	0	1	54	45	0.08		
	Fanö ...	30.04	43	S	1	0	30.06	+20	44	44	S	3	0	•	54	41	—		
BRITISH ISLANDS.	Sumburgh Head	29.72	47	SE	3	0	29.64	-16	50	49	S	1	0	4	51	43	0.08		
	Stornoway ...	29.48	50	S	7	7	29.58	-03	50	50	SE	4	7	4	51	47	0.30		
	Wick ...	29.61	49	S	6	0	29.64	-07	49	48	S	2	0	2	51	47	0.10		
	Nairn ...	29.57	49	E	1	0	29.63	-09	46	45	E	0	0	1	51	40	0.16		
	Aberdeen ...	29.67	49	SE	3	0	29.69	-10	49	48	W	1	0	3	52	45	0.10		
	Leith ...	29.59	49	S	1	0	29.67	-11	50	50	E	0	0	•	54	44	0.01		
	Shields ...	29.73	52	SE	3	0	29.70	-13	52	51	W	1	0	2	53	40	0.15		
	Spurn Head ...	29.80	50	SE	3	0	29.76	-13	53	52	SE	4	0	3	53	45	—		
	York ...	29.80	52	S	1	0	29.73	-16	54	53	SE	1	0	•	55	36	0.10		
	Loughborough	29.83	53	S	3	0	29.75	-15	54	53	SE	1	0	•	59	38	—		
GERMANY.	Ardrossan ...	29.61	53	SE	5	0	29.66	-06	51	50	SE	3	0	2	53	43	0.01		
	Malin Head ...	29.56	52	SE	3	0	29.61	+06	49	46	S	4	0	2	53	46	0.01		
	Mullaghmore ...	29.55	52	SE	4	0	29.63	+06	49	47	SE	2	0	2	58	46	0.01		
	Belmullet ...	29.57	53	WSE	3	0	29.62	+09	52	50	SE	2	0	•	53	50	—		
	Donaghadee ...	29.65	52	WSE	2	0	29.69	0.0	46	46	WSE	3	0	1	56	43	0.14		
	Barrow-in-Furness	29.70	53	SE	3	7	29.69	-11	52	51	SE	2	0	•	53	44	0.52		
	Liverpool (Bidston)	29.74	53	SE	3	0	29.71	-11	50	49	NW	1	7	2	54	43	0.26		
	Holyhead ...	29.70	55	SE	4	0	29.70	-05	52	52	S	1	0	2	56	49	0.37		
	Parsonstown ...	29.68	51	E	0	0	29.70	+05	44	43	E	0	0	•	58	42	0.01		
	Valencia ...	29.68	55	SE	3	0	29.74	+09	51	50	W	1	0	2	57	45	0.04		
FRANCE AND NETHERLANDS.	Roche's Point...	29.70	52	WSE	2	0	29.76	+06	46	45	W	1	0	3	55	45	0.10		
	Pembroke (St. Ann's Hd.)	29.73	53	SE	5	0	29.73	-02	53	50	WSE	3	0	3	56	52	0.10		
	Scilly ...	29.77	55	SE	4	0	29.73	-06	51	50	N	4	0	4	60	49	0.35		
	Prawle Point ...	29.83	53	SE	3	0	29.72	-14	51	51	NW	2	0	1	53	50	0.26		
	Jersey (St. Aubin's)	29.88	57	SE	3	0	29.76	-16	57	56	SE	3	0	3	58	52	0.20		
	Hurst Castle ...	29.87	56	S	4	0	29.75	-16	56	55	SE	2	0	2	58	55	0.16		
	Dungeness ...	29.91	57	SE	4	0	29.80	-15	56	55	S	4	0	3	59	54	0.05		
	London ...	29.90	54	S	3	0	29.77	-18	57	56	SE	2	0	•	61	47	0.02		
	Oxford ...	29.88	53	SE	2	0	29.74	-18	54	54	E	0	0	•	58	42	0.22		
	Cambridge ...	29.88	53	S	1	0	29.78	-16	56	55	SE	1	0	•	60	43	0.05		
PENINSULA.	Yarmouth ...	29.92	52	SE	3	0	29.84	-10	53	52	S	4	0	3	53	49	—		
	Cuxhaven ...	30.09	46	S	1	0	30.09	+16	40	39	S	2	0	•	51	39	—		
	Berlin ...	30.15	48	S	0	0	30.19	+15	40	40	E	0	0	•	53	39	—		
	Wiesbaden ...	30.18	40	S	0	0	30.13	+01	36	35	E	0	0	•	46	34	—		
	Munich ...	30.18	40	S	0	0	30.19	+04	33	33	SE	3	0	•	50	?	—		
	The Helder ...	30.02	46	SE	1	0	29.96	-03	45	43	SE	2	0	3	53	43	—		
	Brussels (9 a.m.)	?	?	?	?	?	29.97	-09	48	45	SE	3	0	•	56	?	—		
	Cape Gris Nez	?	56	W	3	0	?	?	52	49	W	4	0	3	59	45	—		
	Paris ...	30.04	52	SE	2	0	29.94	-14	48	48	SE	3	0	•	60	?	—		
	Brest ...	?	58	SE	2	0	?	?	57	56	SE	2	0	3	61	46	—		
FRANCE AND NETHERLANDS.	Lorient ...	29.89	58	SE	3	7	29.76	-13	56	53	SE	2	7	2	59	54	0.08		
	Rochefort ...	30.08	60	SE	3	7	29.92	-10	58	58	SE	4	0	2	61	52	0.08		
	Belfort ...	30.08	48	SE	1	0	30.05	-05	41	37	N	1	0	•	50	35	—		
	Lyons ...	30.14	45	N	2	0	30.11	-02	35	35	S	1	0	•	52	34	—		
	Nice ...	30.08	53	SE	2	0	30.11	+12	48	44	SE	2	0	1	63	46	—		
	Perpignan ...	30.11	54	S	0	0	30.03	-03	50	50	W	1	0	•	68	46	—		
PENINSULA.	Biarritz ...	30.04	62	SE	1	0	29.89	-13	64	57	S	3	0	1	68	57	0.34		
	Corunna ...	30.14	61	WNW	2	0	30.13	-01	62	61	SE	1	0	2	70	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

Wednesdays 16th October

1889.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP

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

Changes since previous morning are stated in words.

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

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

→ = forces 5 to 7; → = forces 1 to 4.

⊙ = dead calm.

SEA DISTURBANCE—Where considerable, is shown thus:

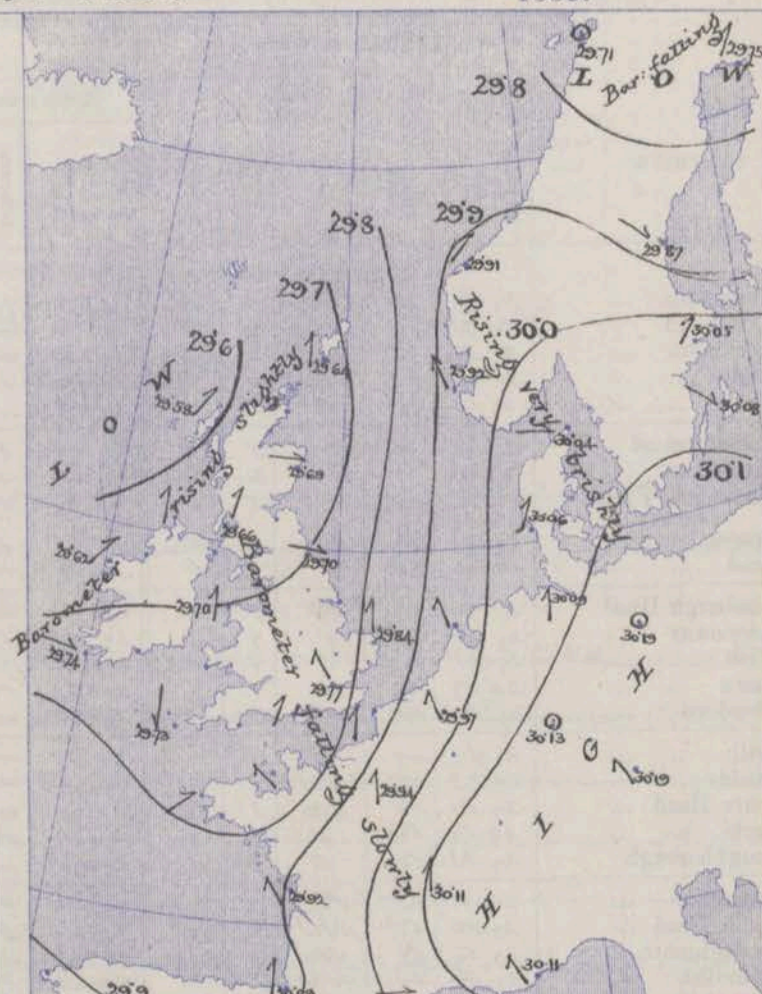
☼ = Rough. ☼ = High.

MEAN HEIGHT OF THE BAROMETER

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

During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS.
Sumburgh Head	29.703
Stornoway	29.735
Wick	29.745
Nairn	29.761
Aberdeen	29.774
Leith	29.804
Shields	29.835
York	29.872
Loughborough	29.891
Ardrossan	29.813
Donaghadee	29.832
Holyhead	29.853
Liverpool	29.861
Parsonstown	29.881
Valencia	29.873
Roche's Point	29.870
Pembroke	29.868
Scilly	29.894
Jersey	29.904
Hurst Castle	29.907
Dover	29.909
LONDON	29.911
Oxford	29.910
Cambridge	29.900
Yarmouth	29.886



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.

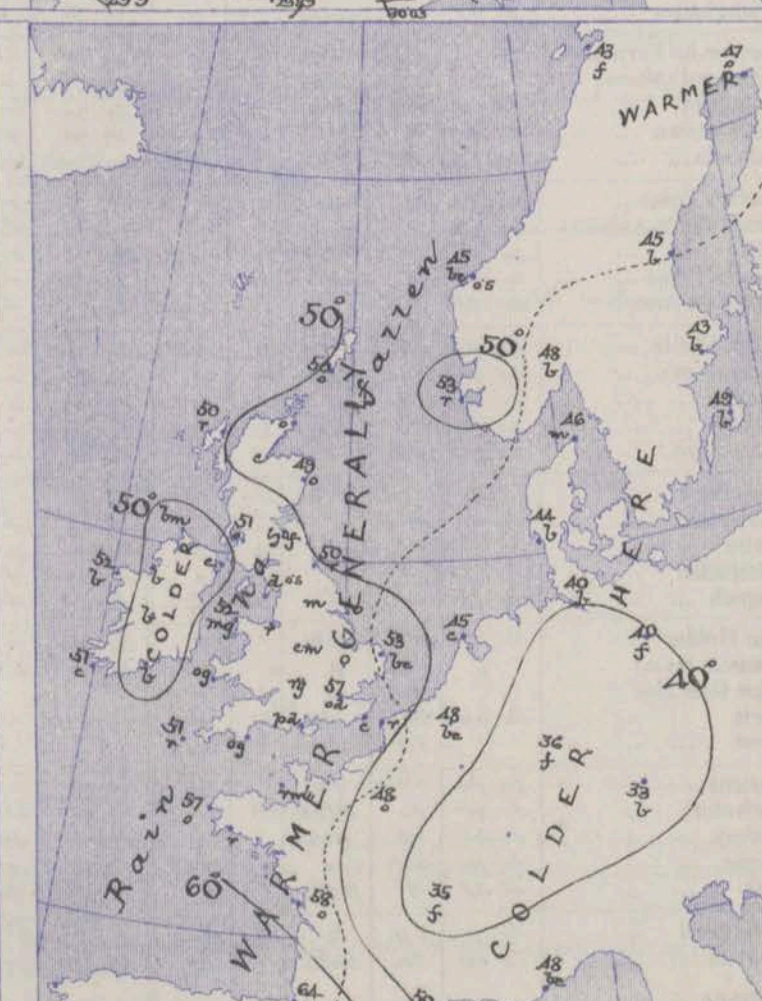
WEATHER is shown by Letters of the Beaufort Scale.

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 October.)

STATIONS.	TEMPERATURE.				RAINFALL. (Inches.)
	Daily Max.	Daily Min.	at 8 a.m. Dry.	Wet.	
Sumburgh Head	49.7	41.6	46.0	44.3	4.33
Stornoway	50.5	39.5	45.3	44.1	4.94
Wick	51.6	40.1	46.1	44.3	2.94
Nairn	51.6	40.6	44.5	42.5	2.38
Aberdeen	52.3	41.0	45.5	43.5	2.88
Leith	54.7	41.5	46.6	44.7	1.94
Shields	53.0	42.8	47.1	45.4	2.46
York	54.8	41.0	45.9	44.5	2.64
Loughborough	55.3	41.4	46.4	45.0	2.98
Ardrossan	53.5	43.6	47.6	45.6	4.31
Donaghadee	53.2	43.3	47.7	46.5	3.35
Holyhead	54.5	47.0	50.2	48.2	4.53
Liverpool	53.6	44.6	47.8	45.8	3.62
Parsonstown	54.7	41.1	46.4	44.7	3.27
Valencia	56.6	46.5	51.3	49.1	6.09
Roche's Point	55.8	45.9	50.2	48.4	4.17
Pembroke	54.8	48.0	51.2	49.1	4.13
Scilly	56.6	50.3	53.8	51.7	3.84
Jersey	58.1	49.2	53.6	51.1	4.34
Hurst Castle	57.1	46.0	51.4	49.6	3.24
Dover	55.8	47.0	50.7	48.7	3.28
LONDON	56.6	45.2	48.0	46.4	2.74
Oxford	55.3	42.5	46.7	45.3	2.72
Cambridge	56.4	41.2	45.4	45.4	2.36
Yarmouth	54.3	44.8	49.2	47.9	2.97

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



GENERAL SITUATION AT 8 A.M.

PRESSURE	Highest, 30.1 in: and upwards, over the Baltic, Germany, Switzerland, and the southeast of France. Lowest, 29.6 in: and less, in the northwest of Scotland; 29.8 in: and less, over the north of Scandinavia. Gradients slight generally. Barometer falling in England and France, but rising elsewhere.
TEMPERATURE	Highest, 64° at Biarritz, 62° at Lisbon, 58° at Rochefort, 57° at Jersey, Brest and in London, and 56° at Hurst Castle (Dungeness, Cambridge, Lorient). Lowest, 33° at Munich, 35° at Lyons, 36° at Wiesbaden, 40° at Bayreuth and Berlin, and 43° at Riga and Stockholm. During yesterday the thermometer rose to 60° at Bally and Cambridge, and 61° in London.
WIND	Light or moderate unmoderated from the SW nd in the northwest of our Islands, as well as at most of the Scandinavian stations. Light from the W nd or NW nd on our southern coast, S ¹ or SE ¹ in nearly all other localities.
WEATHER	Dull and unsettled over Great Britain and France, with rain and mist in many parts of England. Fine in most other countries, but foggy at some of the German and Central French stations. Rain fell yesterday, in many parts of Northern and North-western Europe, the largest amount being 0.5 in: at Christiansund and Bernad in Norway.
SEA	Moderate off the north of Scotland and also at Bally, but slight or smooth elsewhere.



PROBABLE CHANGES IN SYSTEM NOW PREVALENT

Two or three small shallow depressions are lying this morning over the Bay of Biscay, the Channel and the south of England. There will probably move northwards and unsettled weather is therefore likely to continue over Great Britain. There are at present no indications of the advance of any important disturbance.

FORECASTS

For the 24 hours ending at NOON on 17th OCTOBER 1889.

DISTRICTS.	FORECASTS.	DISTRICTS.	FORECASTS
0 { SCOTLAND NORTH	{ S ¹ to SE ¹ winds, light or moderate; cloudy, some rain.	6 { SCOTLAND WEST	Same as Nos 0 and 1.
1 { SCOTLAND EAST		7 { ENGLAND N.W.	Light variable breezes, dull, some rain.
2 { ENGLAND N.E.	{ SE ¹ and S ¹ winds, light or moderate; dull, misty, some rain.	8 { ENGLAND S.W.	NW ¹ to SW ¹ winds, moderate, changeable, some rain.
3 { ENGLAND EAST		9 { IRELAND NORTH	{ W ¹ to SW ¹ winds, moderate; fine to showery.
4 { MIDLAND COUNTIES	{ S ¹ to SW ¹ winds, moderate; mild, changeable, some rain.	10 { IRELAND SOUTH	
5 { ENGLAND SOUTH		WARNINGS	The SOUTH CONE was lowered last evening in districts 8, 10 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. REPORTS.

	Bar:	Ther:		Wind		Wea:	Sea		Bar:	Ther:		Wind		Wea:	Sea:
		D	W	D	F					D	W	D	F		
Skudesnaes ...	29.83	50	46	WNW	4	C	3	Holyhead ...	29.70	56	54	SSW	6	Cg	5
Sumburgh Head ...	29.77	48	44	SE	2	C	3	Valencia ...	29.68	57	54	SW	3	om	3
Stornoway ...	29.51	50	49	SE	4	P	5	Scilly ...	29.77	58	57	SW	5	f	5
Aberdeen ...	29.71	50	47	SE	4	ogT	3	Jersey ...	29.89	58	58	SE	4	ogm	4
Shields ...	29.74	51	49	SW	2	om	2	Dungeness ...	29.92	58	58	SW	5	C	3
Ardrossan ...	29.63	51	49	S	5	om	4	London ...	29.90	60	58	SE	4	C	*
Malin Head ...	29.54	54	52	SW	4	BC	1	Yarmouth ...	29.93	58	51	S	4	C	3
Mullaghmore ...	29.57	57	53	SW	4	C	2	Rocheport ...	29.04	60	59	SE	4	C	2
Belmullet ...	29.57	55	52	WNW	3	C	*								

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

The reports for yesterday morning showed that while the highest pressures of all, 30.3 ins. and upwards, were still found over Russia the barometer was high 30.1 ins. and upwards in two other systems lying respectively over South Germany and over Spain, Algeria, and the adjacent portions of the Mediterranean. The lowest readings, 29.6 ins. and less, were found in depressions lying respectively over the south of Scandinavia and to the westward of the British Islands, but another disturbance, with readings below 29.7 ins., was reported over Southern Austria. The wind was moderate from the Snd (SE to SW) over the United Kingdom and the west and north of France, as well as over Sweden and Finland, but W^{ly} over Denmark and Germany, and E^{ly} in the west of Norway. Over Southern Italy and its immediate neighbourhood NW^{ly} breezes were reported, but in other parts of Southern Europe the wind was light and variable. The weather was dull and unsettled on the west coast of our Islands and France, as well as in Scandinavia, Germany and Austria, with rain in many places. Elsewhere conditions were mostly fine, but fog was reported over the north of England as well as at the mouth of the Channel. Temperature had fallen a few degrees over Italy and Central Europe, as well as in the north of England, but risen in most other localities; readings ranged from 60° and upwards at several of the Spanish and Mediterranean stations to 40° or less over Western Germany and the central parts of England and France. The highest individual reading was 68° at Brindisi, 67° at Malta, 66° at Oran, 65° at Algiers, 64° at Palermo, 63° at Corunna and Barcelona, and 61° at Biarritz, Bilbao, Oporto and La Coruña; the lowest were 35° at Vain, 37° at Haparanda and York, 38° at Loughborough and Lyons, 37° at Mirladon and Wilfort, 41° at Kaini, and 42° at Shields and Newcastle.

In the course of the day the depressions off our western coast travelled northwards and the barometer rose somewhat in Ireland and the west of England, while the wind there veered to the SW^{ly}. Raining weather spread eastwards to nearly all parts of 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 THURSDAY 17th OCTOBER 1889.

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

STATIONS.	YESTERDAY EVENING.						8 A.M. TO DAY.										PAST 24 HOURS.		
	Barometer at 32° F. and Sea Level.	Temp. in Shade.	WIND.		Weather.		BAROMETER.		SHADE TEMP.			WIND.		Weather.	Sea. (0 to 2.)	SHADE TEMP.			
			Dir.	Force. (0 to 12.)			Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Dir.	Force. (0 to 12.)			Max.	Min.	Amount of Rainfall.	
SCANDINAVIA.	Haparanda ...	29.95	40	SW	2	C	30.21	+ .46	35	34	-12	2	0	C	*	48	?	—	
	Hernösand ...	30.17	37	2	0	C	30.26	+ .39	34	33	-11	2	0	C	*	54	?	—	
	Stockholm ...	30.21	44	2	0	C	30.27	+ .22	36	36	-7	2	0	C	*	59	?	—	
	Wisby ...	30.00	43	W	6	P	30.20	+ .49	39	38	-4	E	1	C	*	45	37	0.43	
	Bodö ...	29.95	45	E	2	P	30.05	+ .11	49	47	+4	ESE	2	C	2	50	45	0.12	
	Christiansund	30.01	54	SE	8	O	30.07	+ .15	52	46	-1	SE	6	C	4	54	50	—	
	Skudesnaes ...	30.15	51	SW	2	C	30.21	+ .18	43	43	-5	NNE	3	C	2	52	43	—	
	Christiania Fjord (Færdø)	30.15	52	S	2	C	30.17	+ .13	49	48	+3	ESE	2	C	2	52	45	—	
	Skagen (The Scaw)	30.07	46	SE	5	C	30.04	- .02	44	43	0	SE	5	C	*	54	43	—	
	Fanö ...	29.72	50	2	0	O	29.77	+ .13	50	50	0	SE	5	P	5	52	46	0.34	
BRITISH ISLANDS.	Sumburgh Head	29.66	51	SW	3	C	29.73	+ .15	47	47	-3	2	0	C	2	54	35	0.02	
	Stornoway ...	29.68	49	S	2	O	29.74	+ .10	47	48	0	N	1	C	1	52	48	0.07	
	Wick ...	29.67	48	2	0	C	29.74	+ .11	44	44	-2	W	1	O	1	54	38	—	
	Nairn ...	29.73	51	SE	2	Cloud	29.74	+ .05	47	47	-2	W	2	odm	3	53	47	0.19	
	Aberdeen ...	29.71	47	W	1	P	29.74	+ .07	46	46	-4	W	1	of	*	52	45	0.02	
	Leith ...	29.72	49	W	1	P	29.72	+ .02	47	46	-5	W	1	P	2	52	45	0.27	
	Shields ...	29.69	54	SE	4	O	29.68	- .01	49	48	-4	WNW	4	P	4	54	48	0.63	
	Spurn Head ...	29.71	50	NW	3	P	29.73	0.0	48	47	-6	NW	1	P	*	56	45	0.27	
	York ...	29.74	51	W	2	O	29.76	+ .01	45	45	-9	W	2	bcn	*	57	45	0.23	
	Loughborough	29.69	51	S	2	C	29.74	+ .08	45	44	-6	NW	1	bcn	0	52	41	—	
GERMANY.	Ardrossan ...	29.62	52	S	4	og	29.67	+ .06	47	47	0	SE	3	C	2	58	45	—	
	Malin Head ...	29.63	50	SW	3	C	29.68	+ .05	50	50	+1	SW	4	og	3	58	48	0.23	
	Mullaghmore ...	29.65	52	WSW	2	C	29.70	+ .08	51	50	-1	WNW	3	O	*	55	50	0.11	
	Belmullet ...	29.71	51	SW	2	C	29.74	+ .05	47	47	+1	W	3	C	2	54	45	—	
	Donaghadee ...	29.72	50	SE	1	P	29.72	+ .03	47	46	-5	NW	2	O	*	52	45	0.39	
	Barrow-in-Furness	29.76	49	WNW	1	O	29.76	+ .05	49	49	-1	SW	1	O	2	51	45	0.31	
	Liverpool (Bidston)	29.74	50	2	0	Cm	29.75	+ .05	51	50	-1	WNW	1	C	2	53	48	0.07	
	Holyhead ...	29.71	50	2	0	P	29.76	+ .06	49	49	+5	2	0	C	*	57	43	0.29	
	Parsonstown ...	29.81	54	WSW	3	Cm	29.83	+ .09	51	49	0	WSW	3	C	4	57	48	0.07	
	Valencia ...	29.78	52	W	3	C	29.84	+ .08	49	47	+3	W	2	C	3	57	45	—	
FRANCE AND NETHERLANDS.	Pembroke (St. Ann's Hd.)	29.79	53	W	4	C	29.81	+ .08	53	52	0	WSW	4	C	3	54	51	0.02	
	Scilly ...	29.84	54	WNW	5	C	29.89	+ .16	54	51	+3	WNW	4	C	5	58	50	0.06	
	Prawle Point ...	29.79	50	NW	2	of	29.86	+ .14	52	51	+1	NW	4	C	3	57	46	0.16	
	Jersey (St. Aubin's)	29.72	58	S	2	fog	29.90	+ .14	53	50	-4	WNW	4	C	4	59	52	0.79	
	Hurst Castle ...	29.72	53	W	3	P	29.84	+ .09	50	49	-6	NW	3	C	2	57	47	0.28	
	Dungeness ...	29.71	57	SE	3	P	29.73	- .07	48	48	-8	NW	2	m	1	57	?	0.61	
	London ...	29.72	58	WNW	1	OTm	29.79	+ .02	46	46	-11	W	1	Cm	*	61	44	0.41	
	Oxford ...	29.74	50	NW	2	P	29.80	+ .06	45	44	-9	WSW	2	C	*	59	44	0.10	
	Cambridge ...	29.73	54	S	1	P	29.74	- .04	48	47	-8	W	1	C	*	62	47	1.06	
	Yarmouth ...	29.77	53	S	4	P	29.70	- .14	52	51	-1	W	3	og	4	56	49	0.62	
PENIN. ISLANDS.	Cuxhaven ...	30.06	46	SE	3	C	30.02	- .07	42	41	+2	ESE	5	C	*	54	?	—	
	Berlin ...	30.14	49	NNE	1	C	30.01	- .18	46	45	+6	N	3	P	*	54	?	—	
	Wiesbaden ...	*	*	*	*	*	29.95	- .18	41	41	+5	2	0	C	*	52	36	—	
	Munich ...	30.08	38	E	1	C	30.01	- .18	31	30	-2	SE	3	C	*	52	25	—	
	The Helder ...	29.88	50	SE	2	C	29.80	- .16	47	45	+2	SE	2	O	3	54	45	—	
	Brussels (9 a.m.)	?	56	W	5	O	?	?	52	50	+4	S	2	C	*	62	?	0.04	
	Cape Gris Nez	?	56	W	5	O	?	?	51	50	-1	W	4	T	4	59	50	0.55	
	Paris ...	29.80	61	SE	3	O	29.86	- .08	51	50	+3	WNW	2	C	*	64	?	—	
	Brest ...	?	56	WNW	5	C	?	?	52	51	-5	NW	2	O	3	61	48	0.58	
	Lorient ...	29.83	53	NW	6	O	30.00	+ .24	54	51	-2	WNW	4	C	4	58	50	0.08	
FRANCE AND NETHERLANDS.	Rochefort ...	29.96	59	W	5	C	30.09	+ .17	56	54	-2	W	4	C	2	64	50	0.08	
	Belfort ...	29.95	45	E	1	C	29.95	- .10	41	36	0	NW	2	C	*	54	35	0.16	
	Lyons ...	29.97	58	S	3	O	30.04	- .07	48	48	+13	N	1	C	*	64	?	0.20	
	Nice ...	30.07	55	2	0	C	29.97	- .14	51	50	+3	ESE	4	P	2	63	48	0.12	
	Perpignan ...	30.02	58	2	0	O	30.08	+ .05	57	53	+7	N	3	C	*	64	?	0.08	
	Biarritz ...	30.07	60	NW	6	P	30.13	+ .24	56	53	-8	WSW	4	C	3	66	54	0.12	
	Corunna ...	30.19	59	WNW	4	C	30.21	+ .08	54	51	-8	W	1	C	2	68	54	0.12	
	Lisbon ...	30.19	59	WNW	4	C	30.21	+ .08	54	51	-8	W	1	C	2	68	54	0.12	

For Explanation of Columns, see bottom of p 4.

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

WEATHER CHARTS

for 8 a.m. on

Thursday, 17th October,

1889.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP

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

Changes since previous morning are stated in words.

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

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

→ = forces 5 to 7; → = forces 1 to 4.

☉ = dead calm.

SEA DISTURBANCE—Where considerable, is shown thus:

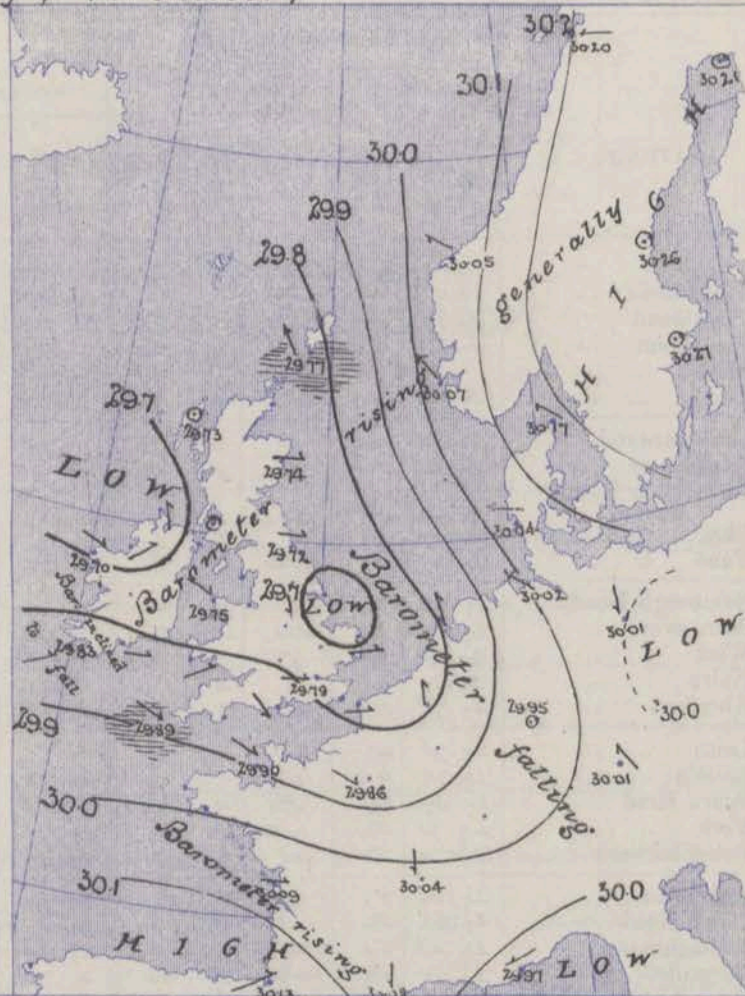
☼ = Rough. ☼ = High.

MEAN HEIGHT OF THE BAROMETER

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

During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS.
Sumburgh Head	29.708
Stornoway	29.735
Wick	29.745
Nairn	29.761
Aberdeen	29.774
Leith	29.804
Shields	29.835
York	29.872
Loughborough	29.891
Ardrossan	29.813
Donaghadee	29.832
Holyhead	29.853
Liverpool	29.864
Parsonstown	29.881
Valencia	29.873
Roche's Point	29.870
Pembroke	29.868
Scilly	29.894
Jersey	29.904
Hurst Castle	29.907
Dover	29.909
LONDON	29.911
Oxford	29.910
Cambridge	29.900
Yarmouth	29.886



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.

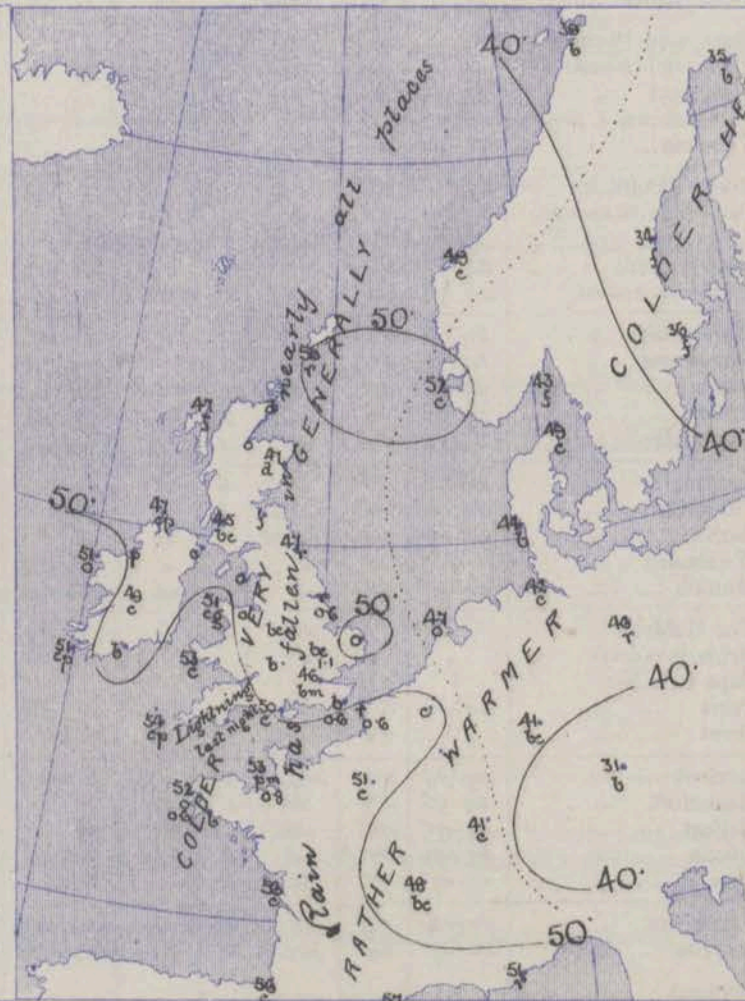
MEANS OF TEMPERATURE IN SHADE,

AND RAINFALL.

(For the month of October.)

STATIONS.	TEMPERATURE.				RAINFALL. (Inches.)
	Daily Max.	Daily Min.	Dry, at 8 a.m.	Wet, at 8 a.m.	
Sumburgh Head.....	49.7	41.6	46.0	41.3	4.33
Stornoway	50.5	39.5	45.3	44.1	4.94
Wick	51.6	40.1	46.1	44.3	2.94
Nairn	51.6	40.6	44.5	42.5	2.38
Aberdeen	52.3	41.0	45.5	43.5	2.88
Leith	54.7	41.5	46.5	44.7	1.94
Shields	53.0	42.8	47.1	45.4	2.46
York	54.8	41.0	45.9	44.5	2.04
Loughborough	55.3	41.4	46.4	45.0	2.98
Ardrossan	53.5	43.6	47.6	45.6	4.31
Donaghadee.....	53.2	43.3	47.7	46.5	3.35
Holyhead.....	54.5	47.0	50.2	48.2	4.53
Liverpool	53.6	44.6	47.8	45.8	3.62
Parsonstown	54.7	41.1	46.4	44.7	3.27
Valencia	56.6	46.5	51.3	49.1	6.09
Roche's Point	55.8	45.9	50.2	48.4	4.17
Pembroke.....	54.8	48.0	51.2	49.1	4.13
Scilly	56.6	50.3	53.8	51.7	3.84
Jersey	58.1	49.2	53.6	51.1	4.34
Hurst Castle	57.1	46.0	51.4	49.6	3.24
Dover	55.8	47.0	50.7	48.7	3.28
LONDON	56.6	45.2	48.0	46.4	2.74
Oxford	55.3	42.5	46.7	45.3	2.72
Cambridge	56.4	41.2	46.4	45.4	2.36
Yarmouth	54.3	44.8	49.2	47.0	2.97

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



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30.2 in. and upwards, in Sweden and also in the south of Portugal.
 Lowest, 29.7 in. in a shallow depression lying off our extreme northwest coast, as well as in a smaller system lying off the east of England.
 Gradient moderate over the North Sea, but slight elsewhere. Barometer rising at all but the Danish, German, and Dutch stations.

TEMPERATURE

Highest, 57° at Perpignan, 56° at Rochefort and Biarritz, 54° at Billy and Lorient, and 53° at Lumbro, and Jersey.
 Lowest, 31° at Munich, 34° at Helsingfors, 35° at Haparanda, 36° at Stockholm, 35° at Rode, and 41° at Mierbadon and Belfast.
 During yesterday the thermometer rose to 61° in London and 62° at Cambridge.

WIND

Light or moderate from the West over the greater part of our Islands and also over the west of France.
 Light from the NWrd in the east of France and from the Nrd at Berlin.
 Fresh from the SErd on the eastern shores of the North Sea; calm at the Swedish stations.

WEATHER

Rainy in the north and northeast of England, as well as at Lumbro, H^l, Berlin, and Kiel; showery at some of our western stations.
 Fair in most other localities, but foggy in Sweden and the south of Norway as well as at Leith.
 Heavy rain fell yesterday over the south and east of England and the north of France. Lightning was seen at Biscaya Point at night.

SEA

Rather rough at Lumbro, H^l, and Billy, but moderate to smooth elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The shallow depressions noticed above will probably move slowly northwards, and further rains are, therefore, likely over our northern district. Another disturbance is apparently advancing north-eastwards from Central Europe, so that the improvement in the weather which has set in over our eastern and southeastern counties is hardly likely to prove permanent.

FORECASTS

For the 24 hours ending at NOON on 18th OCTOBER 1889.

DISTRICTS.

FORECASTS.

- | | | |
|---|-----------------------|---|
| 0 | { SCOTLAND
NORTH | Light and somewhat Variable breezes;
unsettled, rain at times. |
| 1 | { SCOTLAND
EAST | |
| 2 | { ENGLAND
N.E. | W ^{ly} and NW ^{ly} winds, light or moderate;
unsettled, rain at times. |
| 3 | { ENGLAND
EAST | W ^{ly} to NW ^{ly} winds, light or moderate;
fair to showery. |
| 4 | { MIDLAND
COUNTIES | W ^{ly} and NW ^{ly} winds, moderate; fair generally,
but perhaps local showers. |
| 5 | { ENGLAND
SOUTH | |

DISTRICTS.

FORECASTS

- | | | |
|----|--------------------|--|
| 6 | { SCOTLAND
WEST | Light Variable breezes; changeable,
some rain. |
| 7 | { ENGLAND
N.W. | |
| 8 | { ENGLAND
S.W. | W ^{ly} to NW ^{ly} winds, moderate or fresh;
changeable, some showers. |
| 9 | { IRELAND
NORTH | |
| 10 | { IRELAND
SOUTH | |

WARNINGS

NONE ISSUED.

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

YESTERDAY'S 2 P.M. REPORTS.

	Bar:	Ther:		Wind		Wea:	Sea		Bar:	Ther:		Wind		Wea:	Sea.
		D	W	D	F					D	W	D	F		
Skudesnaes ...	29.97	54	50	SE	8	o	5	Holyhead ...	29.71	52	52	NW	1	rm	2
Sumburgh Head ...	29.69	51	51	S	1	7	0	Valencia ...	29.77	57	54	WSW	4	cp	4
Stornoway ...	29.62	52	51	SW	4	7	4	Scilly ...	29.80	55	52	NW	5	bc	5
Aberdeen ...	29.71	51	50	SE	2	od	3	Jersey ...	29.72	58	56	SW	3	omp	3
Shields ...	29.70	52	50	WNW	1	o	2	Dungeness ...	29.76	57	55	S	4	c	3
Ardrossan ...	29.68	52	50	S	2	o	1	London ...	29.73	60	57	S	2	opd	*
Malin Head ...	29.62	54	50	S	3	6	1	Yarmouth ...	29.79	54	52	S	5	cg	4
Mullaghmore ...	29.63	58	52	SW	4	bc	3	Rocheport ...	29.89	61	59	W	5	c	3
Behmullet ...	29.61	52	52	SW	2	o	*								

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

The reports for yesterday morning showed that pressure was highest 30.3 ins. and upwards in an anticyclone lying over Central Russia, but high 30.1 ins. to 30.2 ins. in another large system, which extended in the form of a broad band from the Mediterranean across Italy and Central Europe to the Baltic. The lowest readings, 29.6 ins. and less, were found in an area lying to the northward of the British Isles but a depression with readings below 29.7 ins. was lying over Eastern Austria, while some small and very shallow disturbances were moving northwards across the Bay of Biscay to the English Channel. The wind was light from the Wnd in the south of Ireland and the north of Spain, and from the NWnd in the southwest of England, but over the eastern parts of Great Britain, as well as over the Netherlands and the North Sea, Sth or SE^{ly} breezes were reported. Over Eastern Europe the wind circulated round the Austrian depression, but over the Mediterranean light breezes from E. and NE were general. The weather was dull and unsettled over Great Britain and France, as well as over Eastern Europe, with rain in many parts of England, and also at some of the Austrian stations. Elsewhere conditions were mostly fine, but fog was reported over Germany, Central France, and the south of Russia. Temperatures had risen over Great Britain, France and Spain — several degrees in the eastern districts — but fallen in most other countries, readings ranged from a little above 65° at some of the Mediterranean stations and a little above 55° over France and the southeast of England to 45° or less over Central and Northern Russia and to 40° or less over Germany. The highest individual readings were 66° at Barcelona, Palma, Algiers and La Calle, 65° at Brindisi, 64° at Biscaya and Constantinople, 62° at Apok, Diobow, and Palermo, and 61° at Sanquian; the lowest were 33° at Munich, 35° at Lyons, 36° at Munster and Wiesbaden, 39° at Prague, 40° at Buxhaven and Berlin and 41° at Archangel, Rascow and Belfast.

In the course of the day the shallow depressions over the Channel and Bay of Biscay moved northwards, and occasioned heavy rain over the south and east of England. In their rear the wind veered to the Wnd over France.

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 18TH OCTOBER 1889.
Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.

STATIONS.		YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
		Barometer at 3 rd P. and Sea Level.	Temp. in Shade.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Sea. (0 to 9.)	SHADE TEMP.				
				Dirce.	Force. (0 to 12.)		Reading at 3 rd 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.	Amount of Rainfall.		
SCANDINAVIA.	Haparanda ...	30.44	31	2	0	c	30.30	+0.9	42	42	+7	SW	2	0	•	46	30	—	
	Hernösand ...	30.36	38	2	0	f	30.32	+0.6	40	39	+6	2	0	f	•	52	32	—	
	Stockholm ...	30.27	45	NE	4	c	30.15	-0.12	48	46	+12	ENE	4	0	•	52	32	—	
	Wisby ...	30.15	46	NE	4	c	30.01	-0.18	50	50	+6	ENE	6	0	•	52	35	—	
	Bodö ...	30.19	43	E	2	c	30.08	-0.12	44	40	+2	E	2	0	1	45	36	—	
	Christiansund	30.06	47	E	2	c	30.02	-0.03	44	41	-5	ENE	2	0	1	54	41	—	
	Skudesnaes ...	30.03	53	ENE	4	0	29.53	-0.14	52	48	0	ENE	4	7	4	54	48	0.12	
	Christiania Fjord (Færder)	30.18	48	NE	5	c	30.11	-0.10	42	40	-1	NNE	5	0	2	?	41	—	
	Skagen (The Scaw)	30.08	48	E	4	0	29.58	-0.19	48	46	-1	E	4	0	4	50	46	—	
	Fanö ...	30.01	49	ENE	4	7	29.84	-0.20	48	48	+4	ENE	4	0	•	52	43	0.08	
BRITISH ISLANDS.	Sumburgh Head	29.80	50	SE	5	0	29.72	-0.05	51	50	+1	SE	5	0	7	51	45	0.16	
	Stornoway ...	29.71	48	SE	2	bc	29.53	-0.20	46	45	-1	SE	2	0	2	53	36	—	
	Wick ...	29.71	52	S	3	7	29.64	-0.10	50	49	+1	S	4	0	4	52	48	0.44	
	Nairn ...	29.68	49	2	0	7	29.55	-0.15	40	40	-4	2	0	bc	0	53	40	—	
	Aberdeen ...	29.71	50	SE	4	0	29.67	-0.07	50	48	+3	SE	3	0	5	51	45	0.54	
	Leith ...	29.70	46	W	1	0	29.62	-0.12	45	43	-1	S	1	0	•	48	37	—	
	Shields ...	29.71	50	NW	1	0	29.65	-0.07	45	45	-2	SW	2	0	2	51	42	0.04	
	Spurn Head ...	29.73	50	SW	1	bc	29.68	0.0	45	48	0	SE	3	0	3	52	47	0.01	
	York ...	29.72	48	N	1	0	29.68	-0.05	47	46	-1	SE	1	0	•	53	43	0.03	
	Loughborough	29.77	52	SW	1	0	29.69	-0.07	43	43	-2	SE	1	0	•	59	41	—	
BRITISH ISLANDS.	Ardrossan ...	29.68	49	2	0	bc	29.56	-0.18	47	47	+4	E	4	0	2	53	44	—	
	Malin Head ...	29.64	50	SE	2	0	29.48	-0.24	47	46	0	SE	4	0	1	52	45	—	
	Mullaghmore ...	29.67	51	W	3	0	29.36	-0.32	50	48	0	SE	5	0.79	3	53	45	0.19	
	Belmullet ...	29.67	50	SW	1	0	29.26	-0.44	50	49	-1	SE	5	0	•	54	48	0.30	
	Donaghadee ...	29.70	51	SW	2	0	29.52	-0.22	50	50	+3	S	4	0	2	54	46	0.05	
	Barrow-in-Furness	29.70	50	ENE	1	0	29.57	-0.15	48	47	+1	SE	4	0	•	52	45	0.04	
	Liverpool (Bidston)	29.75	50	W	1	0	29.61	-0.15	45	44	-4	SE	3	0	3	53	44	—	
	Holyhead ...	29.72	52	W	2	0	29.54	-0.21	48	46	-3	SE	2	0	2	56	48	0.11	
	Parsonstown ...	29.70	50	2	0	0	29.57	-0.39	50	49	+1	SE	1	0	•	53	47	0.16	
	Valencia ...	29.68	52	SE	4	0	29.27	-0.56	52	51	+1	WNW	2	0	2	58	49	1.02	
BRITISH ISLANDS.	Roche's Point...	29.76	52	W	2	0	29.31	-0.53	54	54	+5	SE	7	0	4	56	49	0.45	
	Pembroke (St. Ann's Hd.)	29.77	53	W	4	0	29.48	-0.33	53	52	0	SE	5	0.97	4	56	50	0.02	
	Scilly ...	29.80	53	WNW	4	0	29.38	-0.51	54	54	0	SE	7	0	6	58	50	0.11	
	Prawle Point ...	29.84	51	W	4	0	29.47	-0.39	53	52	+1	SE	5	0	3	57	48	0.10	
	Jersey (St. Aubin's)	29.85	54	W	3	0	29.65	-0.25	54	52	+1	SE	4	0	4	57	51	0.14	
	Hurst Castle ...	29.84	54	W	3	0	29.65	-0.19	55	54	+5	S	6	0	3	58	49	0.09	
	Dungeness ...	29.79	54	W	4	0	29.71	-0.02	54	51	+6	SW	4	0	3	57	47	0.13	
	London ...	29.82	53	W	2	0	29.69	-0.10	46	45	0	2	0	•	53	40	—		
	Oxford ...	29.80	48	SW	2	0	29.66	-0.14	46	45	+1	SE	1	0	•	57	45	0.01	
	Cambridge ...	29.79	57	2	0	0	29.70	-0.04	44	44	-4	2	0	bc	•	60	43	—	
GERMANY.	Yarmouth ...	29.77	52	W	1	0	29.74	+0.04	49	48	-3	2	0	bc	3	53	46	0.06	
	Cuxhaven ...	29.96	50	ENE	4	0	29.84	-0.18	52	51	+10	E	1	0	•	53	?	0.13	
	Berlin ...	29.92	51	NW	2	0	29.76	-0.25	52	52	+6	E	2	0	•	52	48	0.08	
	Wiesbaden ...	?	•	•	•	•	29.84	-0.11	45	45	+4	2	0	•	46	?	0.04		
	Munich ...	29.99	45	SW	2	0	29.87	-0.14	45	44	+14	NW	2	0	•	52	30	0.12	
	The Helder ...	29.83	49	SE	1	0	29.78	-0.02	46	46	-1	SE	1	0	1	50	46	0.04	
	Brussels (9 a.m.)	?	•	•	•	•	29.80	0.0	49	48	-3	SW	1	0	•	56	48	0.08	
	Cape Gris Nez	?	54	SW	4	0	?	?	46	45	-5	S	4	0	3	57	46	0.24	
	Paris ...	29.93	51	SW	1	0	29.81	-0.05	47	46	-4	SE	1	0	•	57	46	0.16	
	Brest ...	?	56	W	3	0	?	?	55	51	+3	SW	6	0	6	57	46	0.20	
FRANCE AND NETHERLANDS.	Lorient ...	29.94	54	SW	2	0	29.62	-0.38	56	53	+2	S	4	0	4	57	52	0.12	
	Rochefort ...	30.05	56	W	3	0	29.79	-0.30	51	51	-5	SE	4	0	2	59	46	0.12	
	Belfort ...	29.97	48	NW	1	0	29.85	-0.10	42	38	+1	NW	1	0	•	58	37	0.12	
	Lyons ...	30.03	51	WNW	1	0	29.89	-0.15	41	41	-7	WNW	1	0	•	60	39	0.04	
	Nice ...	29.91	53	SW	3	0	29.80	-0.17	50	48	-1	E	2	0	1	53	46	0.29	
	Perpignan ...	30.04	57	SW	1	0	29.84	-0.24	53	48	-7	2	0	•	66	?	—		
	Biarritz ...	30.06	58	W	3	0	29.74	-0.39	59	52	+3	SW	5	0	3	61	50	—	
	Corunna ...	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
	Lisbon ...	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
	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 Friday, 18th October

1889.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP

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

Changes since previous morning are stated in words.

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their barbs and feathers refer to force thus—

→ forces above 10; → forces 8 to 10;

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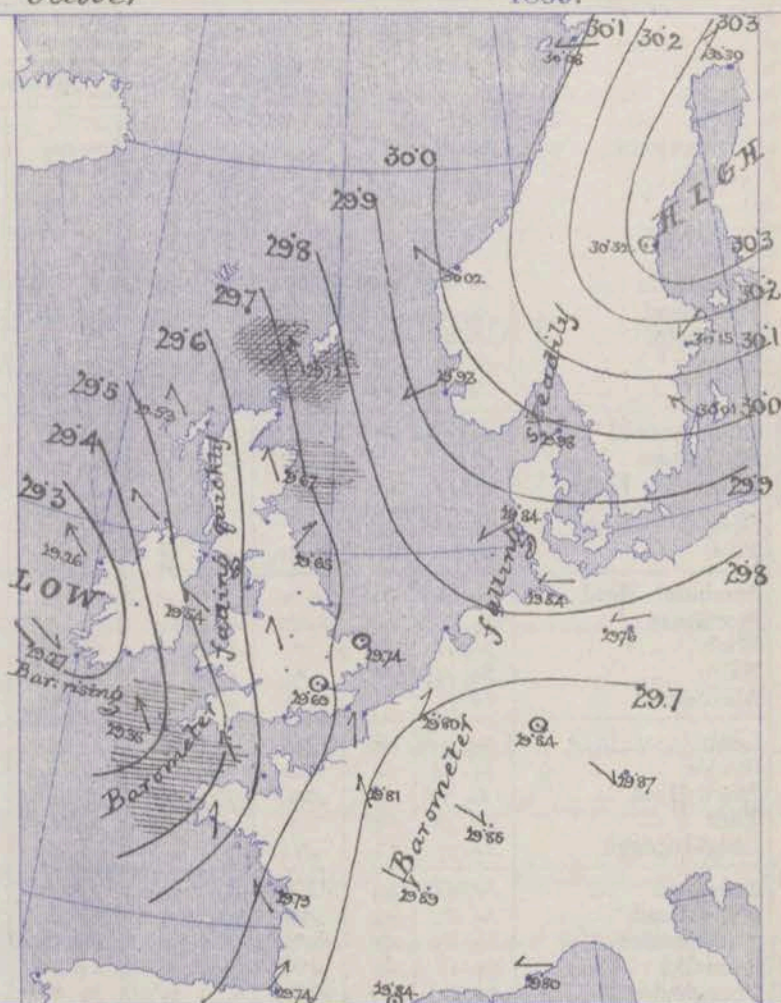
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at 8.0 a.m. for the month of October.

During the 15 Years: 1871—1885.

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

WEATHER is shown by Letters of the Beaufort Scale.

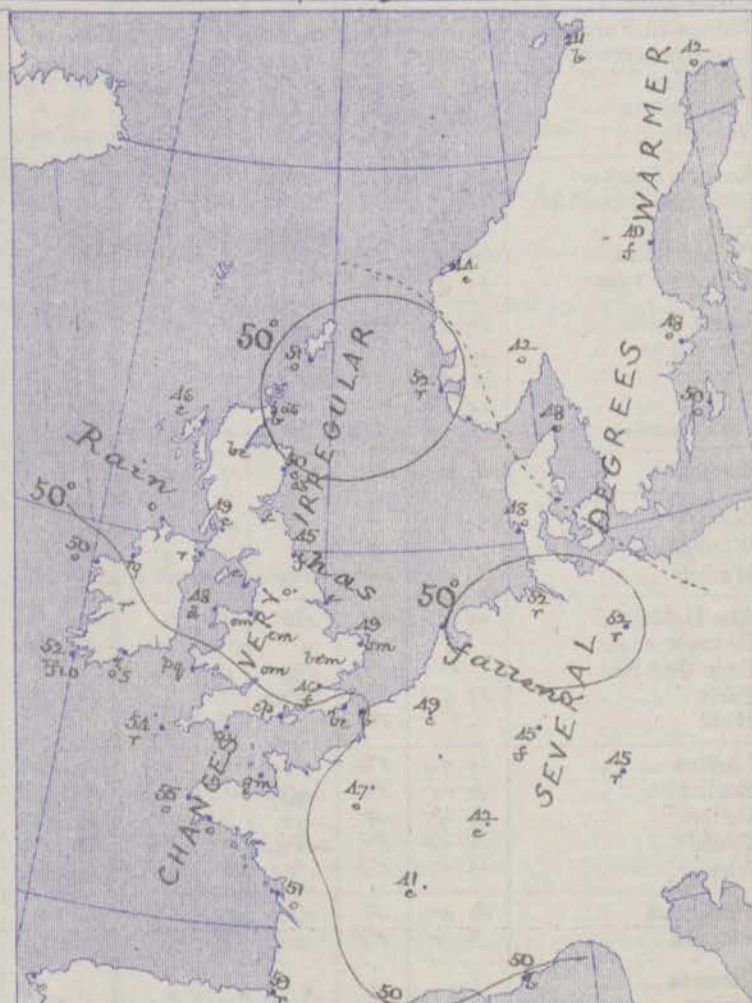
RAINFALL—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

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(For the month of October.)

STATIONS.	TEMPERATURE.				RAINFALL (Inches.)
	Daily Max.	Daily Min.	at 8 a.m.		
			Dry.	Wet.	
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York	54.8	41.0	45.9	44.5	2.64
Loughborough	55.3	41.4	46.4	45.0	2.98
Ardrossan	53.5	43.6	47.6	45.6	4.31
Donaghadee.....	53.2	43.3	47.7	46.5	3.35
Holyhead.....	54.5	47.0	50.2	48.2	4.53
Liverpool	53.6	44.6	47.8	45.8	3.62
Parsonstown	54.7	41.1	46.4	44.7	3.27
Valencia	56.6	46.5	51.3	49.1	6.09
Roche's Point	55.8	45.9	50.2	48.4	4.17
Pembroke.....	54.8	48.0	51.2	49.1	4.13
Scilly	56.6	50.3	53.8	51.7	3.84
Jersey	58.1	49.2	53.6	51.1	4.34
Hurst Castle	57.1	46.0	51.4	49.6	3.24
Dover	55.8	47.0	50.7	48.7	3.28
LONDON	56.6	43.2	48.0	46.4	2.74
Oxford	55.3	42.5	46.7	45.3	2.72
Cambridge	56.4	41.2	46.4	45.4	2.36
Yarmouth	54.3	44.8	49.2	47.9	2.97

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



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30.3 in. and upwards, over the Gulf of Bohemia; high (apparently) over the Iberian Peninsula, but report from Lisbon not yet received.
Lowest, 29.3 in. and less, in a V-shaped depression the centre of which lies off the west of Ireland. A shallow disturbance, with readings below 29 in., is situated over Germany.
Gradients rather steep over some parts of our coast, but moderate or slight elsewhere.
Barometer falling generally—quickly at some of our eastern stations—but rising again at Valencia.

TEMPERATURE

Highest, 53° at Bunnitz, 56° at Lorient, 55° at Huel Guët and Brest, and 54° at Rocher Point, Lally and Jersey.
Lowest, 40° at Hennau and Naum, 41° at Bode and Aym, 42° at Haparanda, Vaerø, and Belfort, and 43° at Loughborough.
The maxima registered over our islands yesterday were somewhat lower than on Wednesday; in London the thermometer did not exceed 53°.

WIND

SE^{ly} over the greater part of our islands and the coast of France, but WNW^{ly} at Valencia; strong in force at some of our southern stations.
Moderate from the E^{ast} in Scandinavia and Denmark; light from the same quarter in North Germany.
Light and variable over the east and south of France.

WEATHER

Fine in the north and east of Great Britain, as well as in the coast of Norway and south of France.
Dull elsewhere with rain at most of our eastern stations and also over Germany.
Rain fell yesterday in many parts of Great Britain, the largest amount being 1.0 in. at Valencia, and 0.5 in. at Wick, Aberdeen, and Rocher Point.

SEA

High at Lumbagh Head, and rather rough at Aberdeen, as well as at the mouth of the Channel, but moderate to smooth elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The depression off our western coast will probably move northwards, but small secondary systems are likely to advance over England, occasionally an extension of dull, rainy weather to all districts. The shallow depression over Germany may possibly advance slowly in a westerly direction towards the east of England.

FORECASTS

For the 24 hours ending at NOON on 19th OCTOBER 1889.

DISTRICTS.

FORECASTS.

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

SE^{ly} winds, moderate or fresh; fair to dull and some rain.

Varying S^{ly} breezes, dull, unsettled, some rain.

DISTRICTS.

FORECASTS

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

SE^{ly} and S^{ly} winds, moderate or fresh; unsettled, rain at times.

SE^{ly} winds, strong to SW^{ly} moderate; unsettled, rain at times.

Same as No 6 and 7.

SW^{ly} and W^{ly} winds, moderate; changeable, showery.

WARNINGS

NONE ISSUED.

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

YESTERDAY'S 2 P.M. REPORTS.

	Bar.	Ther.		Wind		Wea.	Sea		Bar.		Ther.		Wind		Wea.	Sea
		D	W	D	F						D	W	D	F		
Skudesnaes ...	30.06	54	48	SE	6	C	4		Holyhead ...	29.74	55	52	WNW	2	bc p	2
Sumburgh Head ...	29.79	50	49	SE	5	T	6		Valencia ...	29.76	54	51	S	3	c r	3
Stornoway ...	29.72	52	50	SE	3	b	3		Scilly ...	29.85	56	53	SW	4	c	5
Aberdeen ...	29.72	49	48	NW	2	OT	4		Jersey ...	29.91	57	53	WNW	4	c pg	4
Shields ...	29.70	51	50	NW	2	T	2		Dungeness ...	29.78	58	53	W	4	bc	3
Ardrossan ...	29.71	52	50	L	0	om	0		London ...	29.81	58	53	W	2	c	*
Malin Head ...	29.68	52	50	SE	3	0	1		Yarmouth ...	29.74	53	51	W	3	om	4
Mullaghmore ...	29.68	53	51	WSW	3	C	3		Rocheport ...	30.08	58	53	WNW	3	c	2
Belmullet ...	29.70	54	52	WNW	3	of	*									

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

The reports for yesterday morning showed that while the highest pressures of all, 30.4 ins. and upwards, were found over Central Finland a large anticyclonic system, with readings above 30.2 ins. covered the whole of Central Russia, Finland and Sweden, while a smaller system with similarly high readings was reported over the south of Portugal. The lowest readings, 29.7 ins. and less, were found in a depression lying off the extreme northwest of our Islands, and also in a smaller system lying off the east of England, but another disturbance, with readings below 29.8 ins. was reported over Eastern Austria, while a fourth, with readings below 30.0 ins. existed over Sardinia, Corsica, and the Gulf of Genoa. With these conditions the wind varied greatly in direction; over the greater part of our Islands and France it was W², and on the eastern shores of the North Sea SE² or E². Over Central, Eastern, and Southern Europe it circulated round one or other of the depressions lying in those regions, but in the north of Russia it was light and variable, while in Sweden calms were reported. The weather was fine in the south of England, as well as in Norway, Denmark, the northern parts of Scandinavia and Russia, and the greater part of Southern Europe. Fog was, however, reported at several of the Swedish, German and Austrian stations, passing showers were falling in the west of our Islands, and steady rain in the north and northeast of England, the extreme south of France and some part of Germany and Austria. Temperature had risen a little over Central Europe and the west of our Islands, but fallen elsewhere; readings ranged from 65° and upwards over some of the central and southern parts of the Mediterranean to 40° or less over Sweden, Finland, and South Germany. The highest individual readings were 68° at Malta and 67° at Algiers, 64° at Brindisi, 63° at La Cella, 61° at Ovan and 60° at Langunioire. Constantinople and San Fernando; the lowest were 31° at Munich, 34° at Hamburg, 35° at Haparanda, 36° at Stockholm, 37° at Helsingfors, 39° at Rode, Uleaborg, Kuopio and Vango.

In the course of the day the depressions off our east and northwest coasts both moved slowly northwards, but a new disturbance began to approach the southwest of our Islands. Racking winds were therefore reported in the west and southwest, with a threatening appearance at 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 *Saturday, 19th October, 1880*
 Issued by the Meteorological Office, 63, Victoria Street, London. *R. H. SCOTT, Secretary.*

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

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

WEATHER CHARTS

for 8 a.m. on

Saturday, 19th October

1889.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP

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

Changes since previous morning are stated in words.

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

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

→ = forces 5 to 7; → = forces 1 to 4.

☉ = dead calm.

SEA DISTURBANCE—Where considerable, is shown thus:

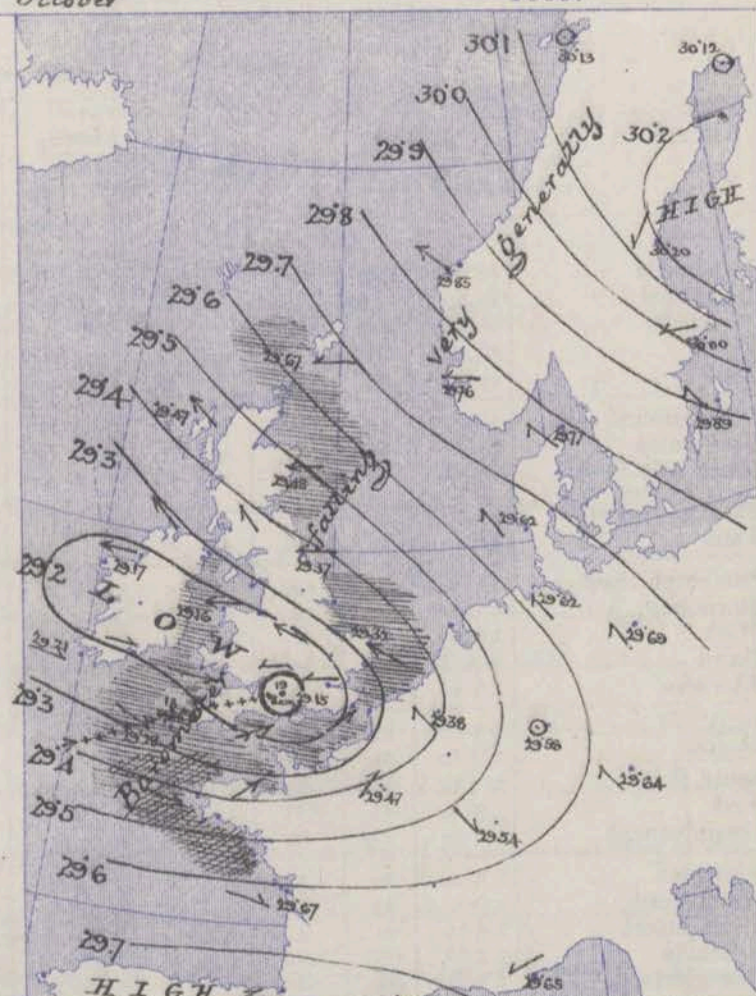
☼ = Rough. ☼ = High.

MEAN HEIGHT OF THE BAROMETER

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

During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS.
	ins.
Sumburgh Head	29.708
Stornoway	29.735
Wick	29.745
Nairn	29.761
Aberdeen	29.774
Leith	29.804
Shields	29.835
York	29.872
Loughborough	29.891
Ardrossan	29.813
Donaghadee	29.832
Holyhead	29.853
Liverpool	29.864
Parsonstown	29.881
Valencia	29.873
Roche's Point	29.870
Pembroke	29.868
Scilly	29.894
Jersey	29.904
Hurst Castle	29.907
Dover	29.909
LONDON	29.911
Oxford	29.910
Cambridge	29.900
Yarmouth	29.886



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.

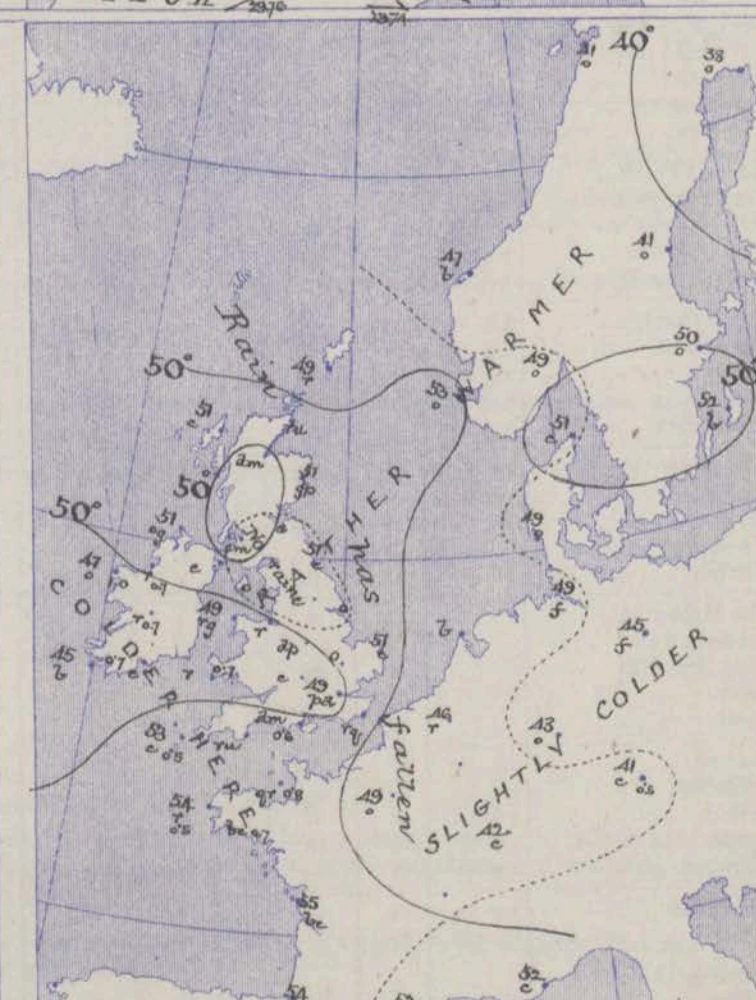
RAINFALL—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of October.)

STATIONS.	TEMPERATURE.				RAINFALL (Inches.)
	Daily Max.	Daily Min.	at 8 a.m.		
			Dry.	Wet.	
Sumburgh Head.....	49.7	41.6	46.0	44.3	4.33
Stornoway	50.5	39.5	45.3	44.1	4.94
Wick.....	51.6	40.1	46.1	44.3	2.94
Nairn	51.6	40.6	44.5	42.5	2.38
Aberdeen	52.3	41.0	45.5	43.5	2.88
Leith.....	54.7	41.5	46.5	44.7	1.94
Shields	53.0	42.8	47.1	45.4	2.46
York	54.8	41.0	45.9	44.5	2.64
Loughborough	55.3	41.4	46.4	45.0	2.98
Ardrossan	53.5	43.6	47.6	45.6	4.31
Donaghadee.....	53.2	43.3	47.7	46.5	3.35
Holyhead.....	54.5	47.0	50.2	48.2	4.53
Liverpool	53.6	44.6	47.8	45.8	3.62
Parsonstown	54.7	41.1	46.4	44.7	3.27
Valencia	56.6	46.5	51.3	49.1	6.09
Roche's Point	55.8	45.9	50.2	48.4	4.17
Pembroke.....	54.8	48.0	51.2	49.1	4.13
Scilly	56.6	50.3	53.8	51.7	3.84
Jersey	58.1	49.2	53.6	51.1	4.34
Hurst Castle	57.1	46.0	51.4	49.6	3.24
Dover	55.8	47.0	50.7	48.7	3.28
LONDON	56.0	43.2	48.0	40.4	2.74
Oxford	55.3	42.5	46.7	45.3	2.72
Cambridge	56.4	41.2	46.4	45.4	2.36
Yarmouth	54.3	44.8	49.2	47.9	2.97

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



GENERAL SITUATION AT 8 A.M.

PRESSURE	<i>Highest, 30.2 in: and upwards, over the Gulf of Bothnia; somewhat high 29.8 in: and upwards, over the Iberian Peninsula. Lowest, 29.1 in: and less, in a small depression lying over the south of England; 29.2 in: and less, in a long trough extending from the east of Ireland to the southeast of England. Gradients rather steep generally. Barometer rising a little in the southwest of England and the coast of France, but falling elsewhere.</i>
TEMPERATURE	<i>Highest, 58° at Lubeck, 55° at Rochefort, 52° at Jersey, Brest and Lorient, and 53° at St. Malo, St. Pierre, Brest, and Brest. Lowest, 38° at Haparanda, 41° at Rodez, 42° at Brest, 43° at Brest, and 44° at Brest.</i>
WIND	<i>Fresh or strong from the E. or S.E. in all the more northern and eastern parts of our Islands, moderate from the same quarters in the Channel. W. over France and the south of our Islands, with a moderate to fresh gale in the Channel. A strong gale from WNW was experienced last night at the mouth of the Channel.</i>
WEATHER	<i>Cloudy or overcast generally with fog in North Germany and rain in many parts of the United Kingdom. Fine at some of the Western French stations, as well as at Lubeck. Since yesterday morning 0.7 in: of rain has fallen at Mullaghmore, Limerick, Pembroke and Lorient, 0.8 in: at Jersey, and 1.0 in: at Bismarck.</i>
SEA	<i>High off the northwest of France, and rough on all but our southern coast.</i>

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The low pressure system over our Islands is not likely to alter its position much at present, and unsettled rainy weather will probably continue in most districts, with strong winds or gales on many parts of our coasts.

FORECASTS

For the 24 hours ending at NOON on 20th OCT^r 1889.

DISTRICTS.	FORECASTS.	DISTRICTS.	FORECASTS
0 { SCOTLAND NORTH	<i>SE² and E² winds, strong, a gale in places; squally, rain at times.</i>	6 { SCOTLAND WEST	<i>E² winds, fresh or strong; unsettled, rain at times.</i>
1 { SCOTLAND EAST		7 { ENGLAND N.W.	
2 { ENGLAND N.E.		8 { ENGLAND S.W.	<i>W² strong winds or gales; squally, showery.</i>
3 { ENGLAND EAST	<i>SE² and E² winds, strong; changeable, some rain.</i>	9 { IRELAND NORTH	<i>Same as N^{os} 6 and 7.</i>
4 { MIDLAND COUNTIES		10 { IRELAND SOUTH		W^{2} and NW^{2} winds, freshening; changeable, showery.
5 { ENGLAND SOUTH	<i>W² and SW² winds, strong to a gale on coast, unsettled, rain at times.</i>	WARNINGS	
		<i>The SOUTH CONE was hoisted last evening in districts 0 to 3 and 5, and the NORTH CONE in district 8.</i>	

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

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

YESTERDAY'S 2 P.M. REPORTS.

	Bar.		Ther.		Wind		Wea.	Sea		Bar.		Ther.		Wind		Wea.	Sea
	D	W	D	F	D	F				D	W	D	F	D	F		
Skudesnaes ...	29.87	55	29	E	4	4	0	4		Holyhead ...	29.89	54	50	ESE	4	c q	3
Sumburgh Head ...	29.73	51	30	SS E	4	0	0	6		Valencia ...	29.26	50	49	NW	4	r m	4
Stornoway ...	29.51	55	51	SE	4	6	4	4		Scilly ...	29.13	55	55	8	5	r	6
Aberdeen ...	29.63	52	50	SE	4	c q	5	5		Jersey ...	29.48	54	53	SE	6	0	5
Shields ...	29.57	53	51	ESE	2	c	3	3		Dungeness ...	29.60	56	52	8	4	bc	3
Ardrossan ...	29.43	53	49	ESE	3	0	2	2		London ...	29.56	56	51	ESE	4	0	2
Malin Head ...	29.32	50	48	SE	5	0	3	3		Yarmouth ...	29.64	54	52	8	3	bcv	3
Mullaghmore ...	29.22	52	50	ESE	6	r q	4	4		Rocheport ...	29.65	54	53	SE	5	r	3
Belmullet ...	29.17	54	53	SE	4	r	*	*									

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

The reports for yesterday morning showed that pressure was highest, 30.4 in: and upwards, in an anticyclone, the central portion of which lay over Finland, but high, 30.1 in: and upwards, over Central Algeria and the extreme south of Spain. The lowest readings 29.3 in: and less, were found in a depression lying off the west of Ireland, but another disturbance, with readings below 29.6 in: was reported over Bosnia and Serbia, while shallow systems with readings below 29.8 in: were lying respectively over North Germany and the Gulf of Genoa. The wind was SE over our Islands and the coast of France, and strong in force at some of our southwestern stations, but SW in Spain. Over the greater part of Northern Europe light or moderate breezes from the E³ were reported, but in the eastern countries the wind was very variable, while in Algeria it was chiefly S². The weather was fine in Russia as well as in the eastern part of Great Britain and the extreme south of France but cloudy or overcast elsewhere, with rain in the west and southwest of our Islands and also at some of the German stations. Fog was reported over Western Germany and some ^{parts} of England, as well as at Hernando and Kuopio. Temperature had risen several degrees in Sweden, Denmark and Germany, and to a less extent in Italy, but changed irregularly elsewhere, reading ranged from 60° and upwards at some of the Spanish and Mediterranean stations to 40° or less, over Northern and Central Russia and the south of Austria. The highest individual readings were 63° at Palermo, 64° at Malta, 65° at Reina, 64° at Algiers and La Felle, 63° at Barcelona, and 62° at Lubon, Luxembourg and Oren, the lowest were 35° at Kuopio, 37° at Moscow, 39° at Stummbadt, 40° at Antangel, Hernando and Helsingfors, and 41° at Rodo, St. Petersburg, and Lyons.

In the course of the ^{day} the depression off the coast of Ireland moved slowly northwards, but a deep secondary disturbance advanced from the SW² to the mouth of the Bristol Channel. A further increase of wind was therefore experienced on our southern coasts, and heavy rain fell at many of our western stations.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

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

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

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

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

DAILY WEATHER REPORT.

for SUNDAY 20TH OCTOBER 1889.

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

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For Explanation of Columns, see bottom of p 4.

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

WEATHER CHARTS

for 8 a.m. on

Sunday

20th OCTOBER

1889.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP

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

Changes since previous morning are stated in words.

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

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

→ = forces 5 to 7; → = forces 1 to 4.

⊙ = dead calm.

SEA DISTURBANCE—Where considerable, is shown thus:

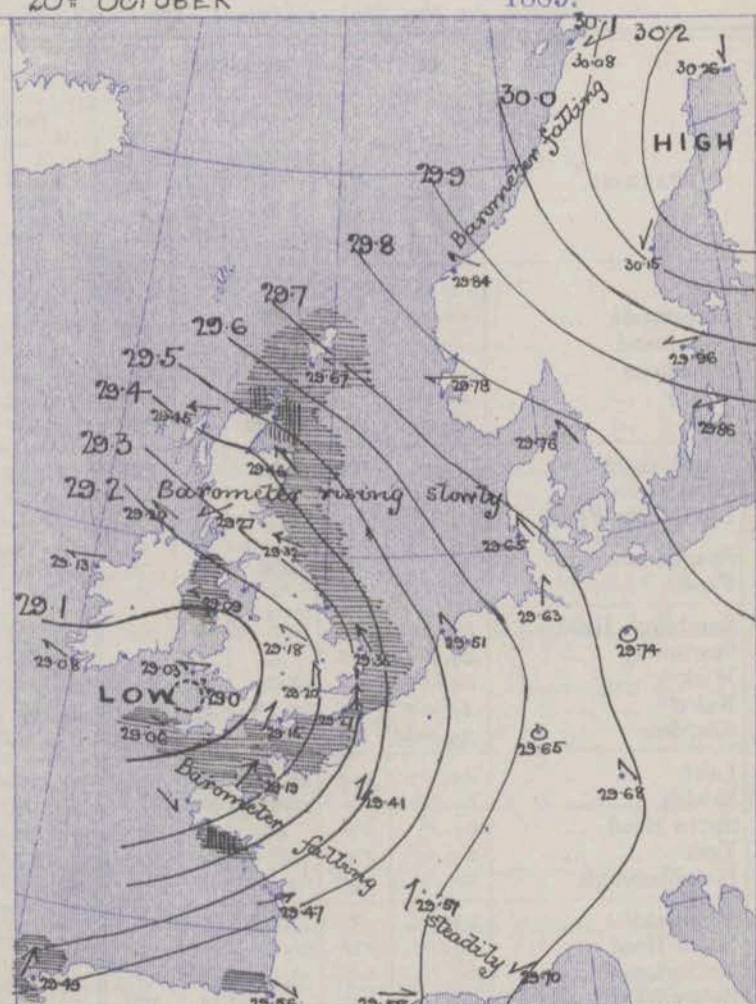
⊞ = Rough. ⊞ = High.

MEAN HEIGHT OF THE BAROMETER

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

During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS.
Sumburgh Head	29.708
Stornoway	29.735
Wick	29.745
Nairn	29.761
Aberdeen	29.774
Leith	29.804
Shields	29.835
York	29.872
Loughborough	29.891
Ardrossan	29.813
Donaghadee	29.832
Holyhead	29.853
Liverpool	29.861
Parsonstown	29.881
Valencia	29.873
Roche's Point	29.870
Pembroke	29.868
Scilly	29.894
Jersey	29.904
Hurst Castle	29.907
Dover	29.909
LONDON	29.911
Oxford	29.910
Cambridge	29.900
Yarmouth	29.886



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.

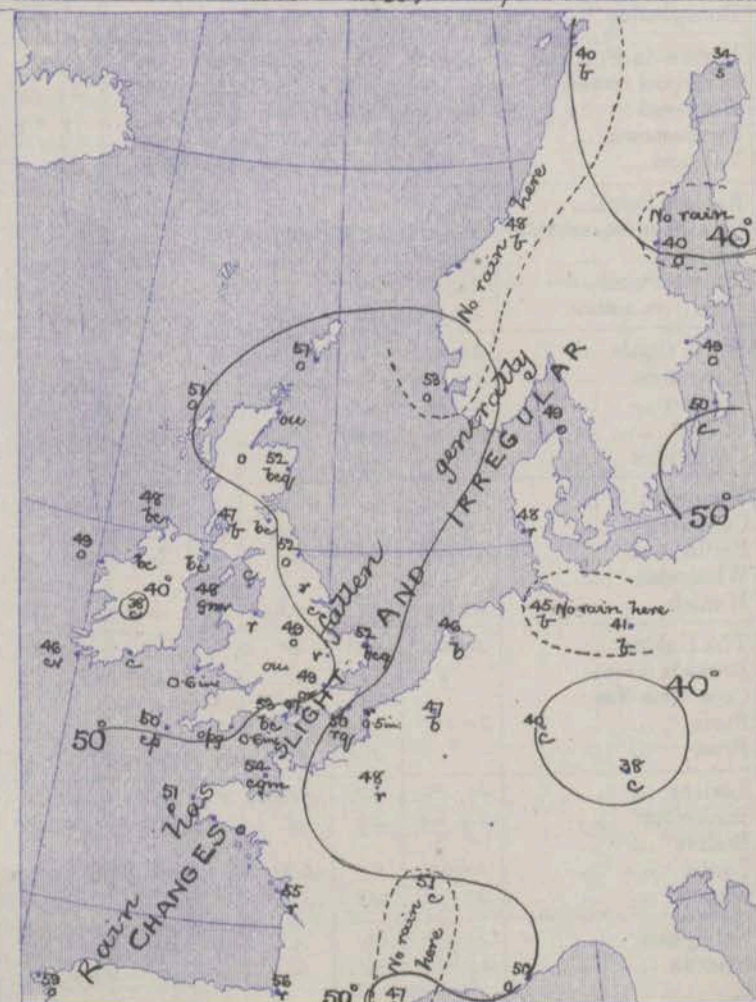
WEATHER is shown by Letters of the Beaufort Scale.

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 October.)

STATIONS.	TEMPERATURE.				RAINFALL (Inches.)
	Daily Max.	Daily Min.	at 8 a.m.		
			Dry.	Wet.	
Sumburgh Head.....	49.7	41.6	46.0	44.3	4.33
Stornoway	50.5	39.5	45.3	44.1	4.94
Wick	51.6	40.1	46.1	44.3	2.94
Nairn	51.6	40.6	44.5	42.5	2.38
Aberdeen	52.3	41.0	45.5	43.5	2.88
Leith	54.7	41.5	46.5	44.7	1.94
Shields	53.0	42.8	47.1	45.4	2.46
York	54.8	41.0	45.9	44.6	2.64
Loughborough	55.3	41.4	46.4	45.0	2.98
Ardrossan	53.5	43.6	47.6	45.6	4.31
Donaghadee.....	53.2	43.3	47.7	46.5	3.35
Holyhead.....	54.5	47.0	50.2	48.2	4.53
Liverpool	53.6	44.6	47.8	45.8	3.02
Parsonstown	54.7	41.1	46.4	44.7	3.27
Valencia	56.6	46.5	51.3	49.1	6.09
Roche's Point	55.8	45.9	50.2	48.4	4.17
Pembroke.....	54.8	48.0	51.2	49.1	4.13
Scilly	56.6	50.3	53.8	51.7	3.84
Jersey	58.1	49.2	53.6	51.1	4.34
Hurst Castle	57.1	46.0	51.4	49.6	3.24
Dover	55.8	47.0	50.7	48.7	3.28
LONDON	56.6	45.2	48.0	46.4	2.74
Oxford	55.3	42.5	46.7	45.3	2.72
Cambridge	56.4	41.2	46.4	45.4	2.36
Yarmouth	54.3	44.8	49.2	47.9	2.97

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



GENERAL SITUATION AT 8 A.M.

PRESSURE	<p>Highest 30.2 ins. and upwards, over the north of Sweden; 29.80 ins. at Lisbon.</p> <p>Lowest 29.03 ins. at Pembroke; 29.1 ins. and less, over Wales the south of Ireland and the southwest of England.</p> <p>Gradients rather steep over Great Britain and France, but moderate or slight elsewhere.</p> <p>Barometer rising at some of our northern stations, as well as in Denmark & the Netherlands, but falling elsewhere.</p>
TEMPERATURE	<p>Highest 60° at Lisbon, 59° at Corunna, 56° at Biarritz, 55° at Rochefort, 54° at Jersey & Lorient, and 53° at Hurst Castle.</p> <p>Lowest 34° at Haparanda, 38° at Munich and Parsonstown, 40° at Porto, Hernösand and Elsiebaden, 41° at Berlin, and 43° at Roches Point.</p>
WIND	<p>Strong from the SE. or E. in the more northern and eastern parts of the United Kingdom, moderate from the same quarter in Scandinavia and Denmark.</p> <p>SW. or S. over the Iberian Peninsula, France and the south of our Islands; strong in force in the Channel, with a gale at Dungeness.</p> <p>A whole gale from ESE has been experienced at Wick during the night.</p>
WEATHER	<p>Fine in Ireland and the south and east of Scotland, as well as over Germany, the Netherlands and the west of Norway.</p> <p>Cloudy or overcast elsewhere, with rain in France and the SE of England, and passing showers on our southwest coasts.</p> <p>Since yesterday morning 0.5 in. of rain has fallen at Lorient & Rochefort, 0.6 in. at Pembroke & Hurst Castle & 0.7 in. in London.</p>
SEA	<p>Very high at Wick, high off the northwest of France, and rough or rather so on nearly all parts of our coasts.</p>

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

FORECASTS

For the 24 hours ending at NOON on 21ST OCTOBER 1889.

DISTRICTS.

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

FORECASTS.

NONE ISSUED

DISTRICTS.

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

FORECASTS

NONE ISSUED

WARNINGS

The North cone was hoisted last evening in districts 6, 7, and 9 and the South cone in districts 8 and 10. The signals are now flying with cross.

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	55	53	E	2	0	3	Holyhead ...	...	29.10	50	49	E	5	cg	5
Sumburgh Head ...	29.66	50	49	E	3	0	5	Valencia ...	...	29.14	57	52	SE	1	cm	2
Stornoway ...	29.44	53	52	E	5	bc	4	Scilly ...	...	29.23	54	51	SW	6	cp	6
Aberdeen ...	29.46	51	50	ESE	4	c	6	Jersey ...	...	29.28	53	51	WSW	6	bcgt	5
Shields ...	29.33	52	50	ESE	5	c	5	Dungeness ...	...	29.26	53	51	WSW	7	bc	5
Ardrossan ...	29.29	53	49	ENE	2	bc	1	London ...	...	29.22	52	49	SW	3	ofd	*
Malin Head ...	29.21	52	48	ESE	6	0	3	Yarmouth ...	...	29.25	53	51	SE	6	c	5
Mullaghmore ...	29.15	50	49	ENE	6	7g	5	Rochefort ...	...	29.68	60	60	W	5	c	3
Belmullet ...	29.14	49	49	ENE	1	0	*									

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

The reports for yesterday morning showed that pressure was highest 30.2 ins. and upwards, in a large anticyclone lying over northern and central Russia. The lowest readings 29.1 ins. and less, were found in a small depression lying over the south of England, but a trough of low readings 29.2 ins. and less, extended in a west northwesterly to east southeasterly direction across the greater part of Ireland and England. Another depression with readings below 29.6 ins. was also reported over Poland, while a shallow area with readings below 29.7 ins. was reported off the south of France. The wind was strong from the E or SE over the northern and eastern parts of our Islands & light or moderate from the same quarters over nearly the whole of northern and central Europe. Over Spain, France and the south of our Islands, however, the wind was W^{ly}, with a gale in the English Channel, while over Algeria, Italy and eastern Europe it was very variable. The weather was cloudy or overcast in nearly all countries, with fog at several of the German and Russian stations, and rain in many parts of the United Kingdom, as well as in the extreme north of France and Italy. Temperature had fallen somewhat in many parts of central and southern Europe, but risen in most other localities; readings ranged from 60° and upwards, over the central and southern parts of the Mediterranean to 40° or less, over the northern parts of Sweden and Russia and some parts of western Germany. The highest individual readings were 68° at Palermo and Sfax, 67° at Algiers, 66° at Nemours and Oran, 64° at Brindisi, Cagliari and La Galle, and 62° at Naples; the lowest were 33° at Archangel, 34° at Uleaborg, 38° at Haparanda and Munster, 41° at Rode, Herrissand, Moscow and Munich, and 42° at Lracow and Belfort. In the course of the day the low pressure system over Ireland and England appears to have moved somewhat to the northward, but during the ensuing night a new disturbance advanced over our Islands from the southward. The wind increased to a whole gale from ESE at Wick, and to a strong gale from the S^W in the Straits of Dover.

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 21ST OCTOBER 1889.

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

STATIONS.		YESTERDAY EVENING.					8 A.M. TO DAY.								PAST 24 HOURS.			
		Barometer at 32° F. and Sea Level.	Temp. in Shade.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Sea. (0 to 2.)	SHADE TEMP.		Amount of Rainfall.	
				Dirce.	Force. (0 to 12.)		Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Dirce.	Force. (0 to 12.)		Weather.	Max.		Min.
SCANDINAVIA.	Haparanda ...	30.23	32	N	2	0	30.23	?	32	31	-2	ENE	2	0	•	39	30	—
	Hernösand ...	30.13	40	NNE	4	7	30.12	-0.3	38	37	-2	NNE	4	7	•	46	?	0.12
	Stockholm ...	29.95	47	E	2	0	29.89	?	46	45	-3	NNE	4	7	•	52	46	0.32
	Wisby ...	29.87	50	E	4	0	29.76	-1.0	46	46	-2	E	4	C	•	52	48	0.08
	Bodö ...	30.08	40	E	2	0	30.11	+0.3	38	34	-2	ENE	4	0	2	43	37	—
	Christiansund ...	29.87	47	ESE	2	0	29.89	+0.5	45	41	-3	ESE	2	0	3	54	43	—
	Skudesnaes ...	29.80	54	E	4	0	29.81	+0.3	32	46	-1	ENE	4	0	3	53	50	—
	Christiania Fjord (Færder) ...	29.88	50	NNE	4	0	29.85	+0.5	46	44	-2	NNE	5	C	2	50	46	—
	Skagen (The Scaw) ...	29.76	50	ESE	3	0	29.76	0.0	45	47	0	ESE	4	0	4	52	48	0.04
	Fanö ...	29.66	47	SE	4	0	29.61	-0.04	47	47	-1	E	4	C	•	54	48	—
BRITISH ISLANDS.	Sumburgh Head ...	29.74	50	E	2	C	29.79	+1.2	50	49	-1	NNE	2	0	5	53	48	0.01
	Stornoway ...	29.56	51	SE	5	C	29.67	+1.22	51	50	0	SE	4	0	4	54	47	—
	Wick ...	29.64	51	ESE	4	0	29.71	+1.9	50	49	0	SE	3	0	5	54	49	0.12
	Nairn ...	29.56	50	E	2	C	29.64	+1.25	45	44	-5	E	2	C	2	53	44	—
	Aberdeen ...	29.58	51	E	6	0	29.65	+1.9	51	48	-1	ENE	6	C	6	54	50	—
	Leith ...	29.44	51	ESE	4	C	29.51	+1.7	51	50	+3	E	4	C	•	53	46	0.05
	Shields ...	29.36	52	E	6	0	29.46	+1.14	50	49	-2	E	6	0	6	53	43	0.44
	Spurn Head ...	29.30	52	ESE	6	7	29.38	+1.1	51	49	-2	ENE	3	0	4	53	49	0.18
	York ...	29.30	49	E	1	7	29.41	+1.5	48	48	-3	E	1	0	•	54	43	0.37
	Loughborough ...	29.28	48	SE	1	7	29.36	+1.8	48	47	-1	NNE	1	0	•	52	43	0.19
BRITISH ISLANDS.	Ardrossan ...	29.35	51	ENE	4	0	29.49	+1.22	50	48	+3	NNE	3	0	2	57	41	0.12
	Malin Head ...	29.24	53	E	7	0	29.44	+1.24	51	48	+3	E	5	C	3	53	47	—
	Mullaghmore ...	29.22	51	ENE	6	0	29.41	+1.25	50	48	+3	ENE	5	C	4	52	47	0.01
	Belmullet ...	29.20	53	ENE	3	0	29.44	+1.31	49	48	0	E	2	0	•	53	47	—
	Donaghadee ...	29.28	52	E	6	7	29.42	+1.22	52	50	+3	ENE	6	C	5	52	48	0.13
	Barrow-in-Furness ...	29.24	49	E	3	C	29.37	+1.22	46	44	-3	NNE	2	0	•	51	44	0.08
	Liverpool (Bldston) ...	29.24	48	ESE	3	0	29.38	+1.26	47	46	-1	E	3	0	3	52	48	0.04
	Holyhead ...	29.17	51	E	4	C	29.36	+1.23	48	46	0	E	3	0	3	53	46	0.01
	Parsonstown ...	29.16	46	2	0	0	29.34	+1.22	45	44	+7	2	0	•	51	38	0.09	
	Valencia ...	29.16	50	NNE	2	C	29.29	+1.21	47	46	+1	NNE	2	0	2	58	44	0.06
BRITISH ISLANDS.	Roche's Point ...	29.12	48	NNW	3	C	29.24	+1.17	48	47	+5	E	3	C	4	50	43	0.15
	Pembroke (St. Ann's Hd.) ...	29.12	48	E	3	7	29.28	+1.25	47	46	0	E	4	C	3	53	45	0.48
	Scilly ...	29.11	51	NNW	2	C	29.20	+1.14	51	48	+1	ESE	1	0	4	53	47	0.01
	Prawle Point ...	29.17	49	NNW	1	0	29.27	+1.18	50	48	+2	NNW	2	0	2	54	42	0.12
	Jersey (St. Aubin's) ...	29.20	51	0	5	C	29.28	+1.09	50	48	-4	0	4	C	4	53	45	0.27
	Hurst Castle ...	29.21	52	SW	5	0	29.29	+1.14	50	49	-3	E	3	C	5	54	48	0.69
	Dungeness ...	29.26	54	SW	6	0	29.28	+1.01	50	49	0	E	1	0	1	53	49	0.31
	London ...	29.26	49	0	3	0	29.32	+1.12	46	45	-3	E	2	0	•	54	44	0.23
	Oxford ...	29.27	47	ESE	1	0	29.33	+1.17	45	45	-2	ENE	1	0	•	54	42	0.04
	Cambridge ...	29.32	49	E	1	0	29.35	+1.12	47	46	-2	E	1	0	•	50	41	0.12
GERMANY.	Yarmouth ...	29.34	50	SE	6	0	29.35	0.0	52	50	0	E	4	0	5	53	48	0.20
	Cuxhaven ...	29.61	47	E	3	0	29.53	-0.8	47	47	+2	E	5	0	•	53	47	—
	Berlin ...	29.65	50	SE	2	0	29.52	-2.2	48	47	+7	E	4	0	•	53	?	—
	Wiesbaden ...	*	*	*	*	*	29.36	-2.9	48	47	+8	2	0	7	•	52	?	0.08
	Munich ...	29.53	45	2	0	0	29.48	-2.5	48	42	+5	E	2	C	•	54	37	0.08
FRANCE AND NETHERLANDS.	The Helder ...	29.46	51	ESE	1	7	29.39	-1.2	48	46	+2	E	2	C	3	54	46	0.08
	Brussels (a.m.) ...	?	•	•	•	•	29.28	-1.9	44	44	-3	ENE	1	0	•	54	43	0.24
	Cape Gris Nez ...	?	50	0	4	0	?	?	46	44	-2	NNE	1	0	0	57	45	0.16
	Paris ...	29.38	48	SE	2	0	29.31	-1.0	47	46	-1	SE	1	0	•	58	46	0.38
	Brest ...	?	52	NW	1	0	?	?	49	48	-2	SE	2	0	3	57	46	0.12
FRANCE AND NETHERLANDS.	Lorient ...	29.20	51	SW	3	C	29.25	+0.2	51	50	-3	ESE	2	0	5	53	46	0.12
	Rochefort ...	29.38	52	SW	5	7	29.39	-0.8	51	51	-4	ESE	4	C	2	59	46	2.01
	Belfort ...	29.33	45	NW	1	7	29.41	*	41	38	*	N	1	0	•	55	37	0.67
	Lyons ...	29.48	52	SE	1	0	29.37	-2.0	51	51	0	NNW	1	0	•	60	51	0.08
	Nice ...	29.58	54	ENE	4	0	29.52	-1.8	52	52	+2	NE	3	0	4	63	50	0.95
PENINSULA.	Perpignan ...	29.45	53	2	0	0	29.43	-1.5	54	51	+7	W	2	0	•	67	?	—
	Biarritz ...	29.38	54	NE	3	7	29.42	-1.4	53	51	-3	?	3	0	5	63	50	1.62
	Corunna ...	29.48	64	SW	6	0	29.53	-2.7	65	64	+5	SW	6	0	?	?	?	0.53
Lisbon ...		29.48	64	SW	6	0	29.53	-2.7	65	64	+5	SW	6	0	?	?	?	0.53

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, 21st October,*

1889.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP.

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

Changes since previous morning are stated in words.

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

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

→ = forces 5 to 7; → = forces 1 to 4.

⊙ = dead calm.

SEA DISTURBANCE—Where considerable, is shown thus:

☼ = Rough. ☼ = High.

MEAN HEIGHT OF THE BAROMETER

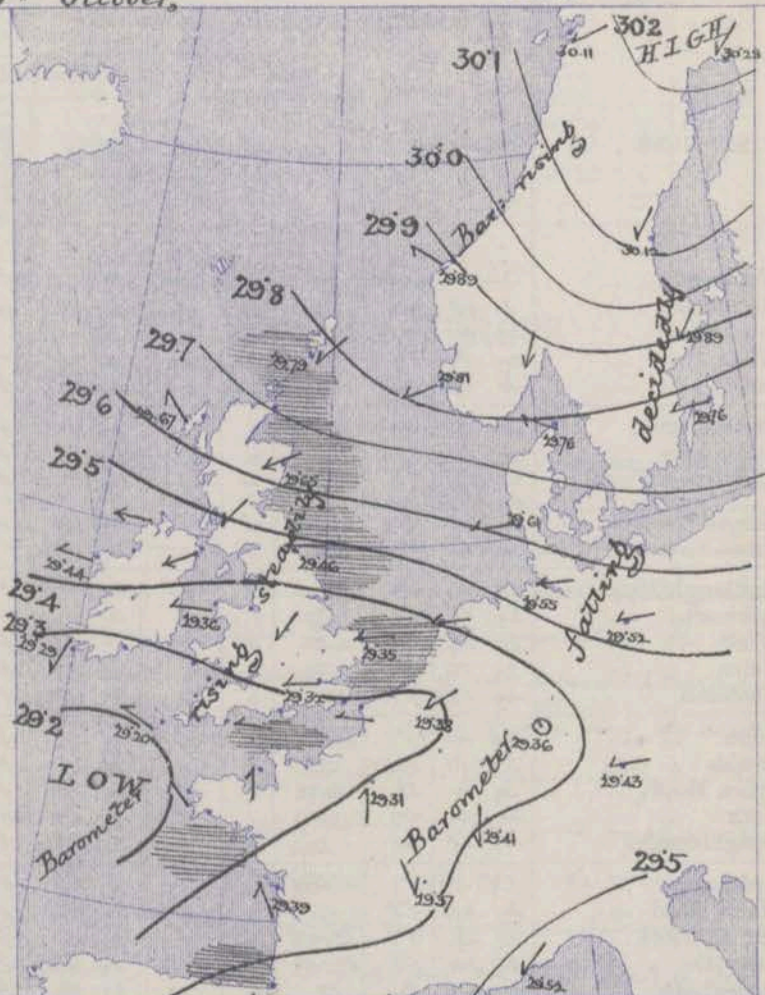
at 8.0 a.m. for the month of October.

During the 15 Years: 1871—1885.

STATIONS.

MEAN READINGS.

STATIONS.	MEAN READINGS.
Sumburgh Head	29.708
Stornoway	29.735
Wick	29.745
Nairn	29.761
Aberdeen	29.774
Leith	29.804
Shields	29.835
York	29.872
Loughborough	29.891
Ardrossan	29.813
Donaghadee	29.832
Holyhead	29.853
Liverpool	29.861
Parsonstown	29.881
Valencia	29.873
Roche's Point	29.870
Pembroke	29.868
Silly	29.894
Jersey	29.904
Hurst Castle	29.907
Dover	29.909
LONDON	29.911
Oxford	29.910
Cambridge	29.900
Yarmouth	29.886



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.

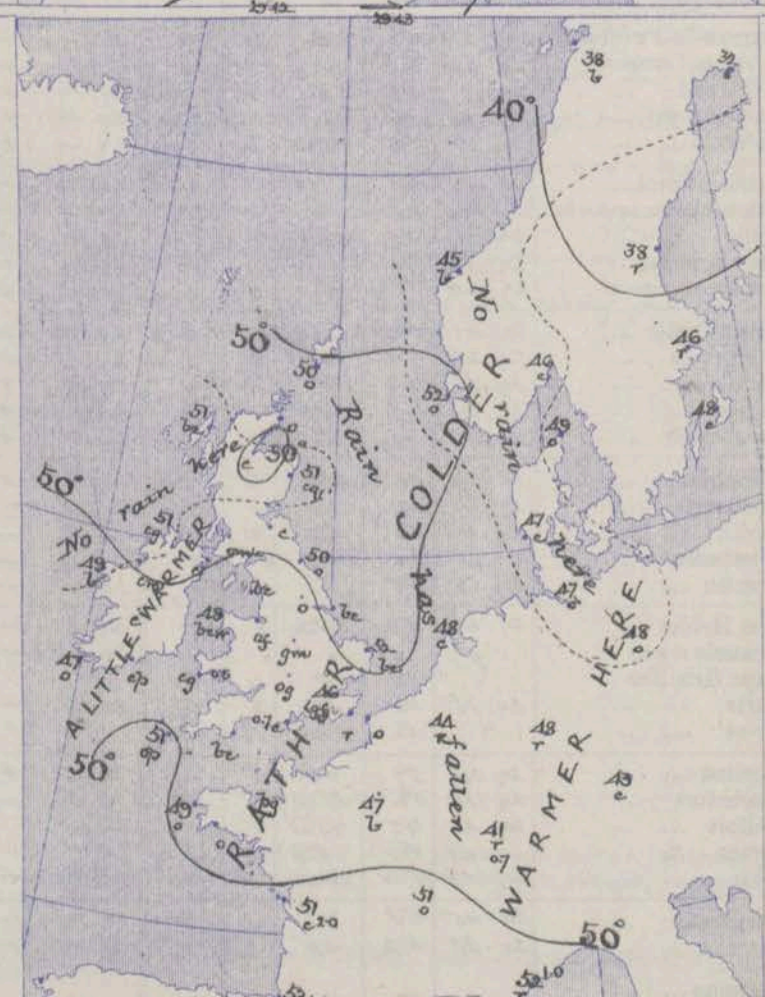
RAINFALL—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of October.)

STATIONS.	TEMPERATURE.				RAINFALL (Inches.)
	Daily Max.	Daily Min.	at 8 a.m.		
			Dry.	Wet.	
Sumburgh Head.....	49.7	41.6	46.0	44.3	4.33
Stornoway.....	50.5	39.5	45.3	44.1	4.94
Wick.....	51.6	40.1	46.1	44.3	2.94
Nairn.....	51.0	40.6	44.5	42.5	2.38
Aberdeen.....	52.3	41.0	45.5	43.5	2.88
Leith.....	54.7	41.5	46.5	44.7	1.94
Shields.....	53.0	42.8	47.1	45.4	2.46
York.....	54.8	41.0	45.9	44.5	2.64
Loughborough.....	55.3	41.4	46.4	45.0	2.98
Ardrossan.....	53.5	43.6	47.6	45.6	4.31
Donaghadee.....	53.2	43.3	47.7	46.5	3.35
Holyhead.....	54.5	47.0	50.2	48.2	4.58
Liverpool.....	53.6	44.6	47.8	45.8	3.62
Parsonstown.....	54.7	41.1	46.4	44.7	3.27
Valencia.....	56.6	46.5	51.3	49.1	6.09
Roche's Point.....	55.8	45.9	50.2	48.4	4.17
Pembroke.....	54.8	48.0	51.2	49.1	4.13
Scilly.....	56.6	50.3	53.8	51.7	3.84
Jersey.....	58.1	49.2	53.6	51.1	4.34
Hurst Castle.....	57.1	46.0	51.4	49.6	3.24
Dover.....	55.8	47.0	50.7	48.7	3.28
LONDON.....	56.6	43.2	48.0	46.4	2.74
Oxford.....	55.3	42.5	46.7	45.3	2.72
Cambridge.....	56.4	41.2	46.4	45.4	2.36
Yarmouth.....	54.3	44.8	49.2	47.0	2.97

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



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30.2 in: and upwards, in the north of Sweden.

Lowest, 29.2 in: and less, in a depression lying near the mouth of the Channel, 29.3 in: and less, over Belgium, the south of our Islands and the north of France.

Gradients moderate generally. Barometer rising in our Islands and the west of France, but falling elsewhere—most in Germany.

TEMPERATURE

Highest, 65° at Lisbon, 54° at Perpignan, 53° at Biarritz, and 52° at Donaghadee, Yarmouth and Aker.

Lowest, 32° at Haparanda, 38° at Bodø and Hemmeland, 41° at Belfort, 43° at Helsingfors, and 44° at Brussels.

WIND

E^{ly} at all the French stations, light or moderate in force generally, but strong on some parts of our north and northeast coast. SE^{ly} or S^{ly} in the north and west of France, variable in the south of that country; strong from SW at Lisbon.

WEATHER

Showery at several of our southern stations, and raining in Belgium and the east and south of France.

Fair in most other localities, but foggy or misty at some of the English stations.

Heavy rain has fallen in France and the extreme south of England. Thunder was heard at Oxford yesterday and lightning was seen at Skid and Aungmye at night.

SEA

Rough or rather so on all our north and east coast as well as in the Bay of Biscay.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

Shallow depressions are apparently forming over the Netherlands and Germany, and as the distribution of pressure is favourable for the advance of these systems in a westerly direction unsettled showery weather will probably continue in many parts of the United Kingdom. The disturbance near the mouth of the Channel is moving southwards.

FORECASTS

For the 24 hours ending at NOON on 22nd OCT^r 1889.

DISTRICTS.

FORECASTS.

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

E^{ly} to NE^{ly} winds, moderate or fresh; cloudy, some showers.

E^{ly} to NE^{ly} winds, moderate; changeable, some showers.

DISTRICTS.

FORECASTS

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

E^{ly} and NE^{ly} winds, moderate; fair generally, but perhaps local showers.

Same as Nos 3 to 5

Same as Nos 0 to 2

Same as Nos 3 to 5.

WARNINGS

The signals have been lowered this morning in districts 6 to 10.

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

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

YESTERDAY'S 2 P.M. REPORTS.

	Bar.	Ther.		Wind		Wea.	Sea		Bar.	Ther.		Wind		Wea.	Sea.
		D	W	D	F					D	W	D	F		
Skudesnaes ...	29.77	55	49	E	4	0	3		Holyhead ...	29.14	53	49	ESE	3	3
Sumburgh Head									Valencia ...						
Stornoway ...	29.51	54	51	SE	5	6	4		Scilly ...						
Aberdeen ...									Jersey ...	29.20	53	50	S	4	4
Shields ...									Dungeness ...	29.26	53	51	SW	6	5
Ardrossan ...									London ...						
Malin Head ...	29.22	52	50	ENE	6	0	4		Yarmouth ...						
Mullaghmore ...									Rochefort ...	29.44	53	53	SW	5	3
Belmullet ...	29.21	53	50	NE	3	0	*								

GENERAL REMARKS ON THE WEATHER OVER EUROPE

DURING THE PAST 24 HOURS.

The reports for yesterday morning showed that pressure was highest, 30.2 ins. and upwards, in an anticyclone lying over Lapland and Finland, but somewhat high 29.9 ins. and upwards, over Morocco and the central parts of Algeria. The lowest readings 29.1 ins. and less, were found in a depression lying over Wales, the south of Ireland and the southwest of England. The wind was fresh or strong from the SW over France and the west and north of the Iberian Peninsula, and strong to a gale from the S in the extreme southeast of England. Over all the more northern parts of Europe, however, the wind was E, and in the north of Scotland it blew with the force of a gale, while over central and eastern Europe and the greater part of the Mediterranean it was light and variable. The weather was fine over the north of Ireland and the south of Scotland, as well as over Germany, the Netherlands and the west of Norway. Elsewhere, however, the sky was cloudy or overcast with passing showers in the southwest of our Islands, heavy rain in France and the southeast of England, and snow at Haparanda. Temperature had risen a little in Italy and Algeria, but fallen in most other countries; readings ranged from 65° and upwards at several of the Mediterranean stations to 40° or less, over the northern parts of Scandinavia and Russia, and the west and south of Germany. The highest individual readings were 73° at Malta, 70° at Palermo, Algiers and Sfax, 69° at Oran, 68° at Palma and La Calle, and 65° at Brindisi and Cagliari; the lowest were 34° at Haparanda, 35° at Kuopio, 36° at Uleaborg, 38° at Parsonstown, Munster, Munich, 39° at Archangel, and 40° at Bodö, Hermsund and Wiesbaden. In the course of the day the depression over the southwest of our Islands began to move slowly in a S^W direction, and the barometer rose in most parts of the Kingdom. The weather, however, remained showery and unsettled with thunder and lightning in some parts of England.

SUMMARY OF CHANGES IN THE WEATHER OVER THE BRITISH ISLANDS AND THEIR NEIGHBOURHOOD FROM THE 13TH TO THE 19TH OCTOBER 1889.

The weather of the past week has remained in a changeable, unsettled state, with heavy local falls of rain in many parts of western Europe. Lightning was seen in the south of England on the night of the 16th. Barometrical pressure has been highest over northern Europe, but an area of high readings has also existed over Spain, so that the general conditions have been somewhat complicated. Several depressions have appeared over our Islands or their immediate neighbourhood. The first a large but somewhat shallow disturbance moved northward along our extreme west coasts on the night of the 14th and morning of the 15th, its progress being marked by an extension of S^W winds over the United Kingdom, and by heavy falls of rain at some of our western stations. Simultaneously with the passage of this disturbance a rather deep depression moved northwards from Germany to the north of Scandinavia, and heavy rain was therefore reported also at some of the Danish and Norwegian stations. The second a small and very shallow system advanced from the Bay of Biscay on the night of the 15th and afterwards travelled northwards across the southeast and east of England. Its passage was attended by a good deal of rain over our southern and eastern coasts, and by lightning at some of the Channel stations. On the 16th when the system lay off the east of England a new depression appeared off our extreme northwest coasts. The third a large and rather deep disturbance advanced to the west of Ireland on the night of the 17th and produced heavy rain in the extreme west with moderate SE^W gales at some of our southwestern stations. On the 18th a well marked secondary disturbance advanced to the Cornish coast, and in the course of the following night this system moved eastwards across the south of England. The wind therefore increased to a gale from SW and W. in the Channel, while on our north and east coasts it increased to a strong breeze from the SE^W. At the close of the week a fresh disturbance was advancing from the Southward to our southwest coasts, and on the night of the 19th the wind again increased to a strong gale in the Straits of Dover, while in the north of Scotland it reached the force of a whole gale from the E^W. Temperature was low at the commencement of the period, sharp frosts being experienced over the inland parts of St. Britain on the night of the 13th. During the remainder of the time, however, the thermometer was upon the whole a little above the average for the time of year.

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 22nd OCTOBER 1897.**
 Issued by the Meteorological Office, 63, Victoria Street, London. **R. H. SCOTT, Secretary.**

STATIONS.		YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
		Barometer at 3 ³⁰ P. and Sea Level.	Temp. in Shade.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Sea. (0 to 8.)	SHADE TEMP.		Amount of Rainfall.		
				Dirac.	Force. (0 to 12.)		Reading at 8 ⁰⁰ P. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Dirac.	Force. (0 to 12.)		Max.	Min.			
SCANDINAVIA.	Haparanda ...	30.35	31	NE	4	0	30.29	+0.01	30	30	-2	E	2	C	*	34	28	—	
	Hernösand ...	30.12	38	NE	6	T	30.14	+0.02	34	32	-4	NNE	6	S	*	45	?	0.24	
	Stockholm ...	29.85	43	NNE	6	bc	29.87	-0.02	44	38	-5	NE	6	O	*	50	41	0.12	
	Wisby ...	29.68	45	E	4	T	29.68	-0.02	45	43	-2	ENE	6	O	*	50	45	0.67	
	Bodö ...	30.17	36	ENE	4	bc	30.18	+0.01	35	32	-3	ENE	4	C	2	41	32	—	
	Christiansund	29.50	44	E	2	bc	29.93	+0.04	40	37	-3	E	1	bc	2	50	39	—	
	Skudesnaes ...	29.86	49	ENE	4	C	29.88	+0.02	48	41	-7	ENE	4	O	3	53	46	—	
	Christiania Fjord (Færder)	29.88	46	NNE	6	O	29.89	0.01	42	40	-2	NNE	6	O	2	46	41	—	
	Skagen (The Scaw)	29.76	48	E	6	O	29.76	0.00	46	44	-2	ENE	6	O	4	50	45	—	
	Fanö ...	29.51	48	NE	6	O	29.57	-0.06	47	46	-1	NE	6	O	*	52	46	0.04	
BRITISH ISLANDS.	Sumburgh Head	29.86	50	S	0	O	29.87	+0.01	46	45	-1	NE	1	bc	3	52	43	—	
	Stornoway ...	29.76	51	NE	4	O	29.87	+0.11	47	46	-1	E	2	C	3	53	46	—	
	Wick ...	29.80	51	ESE	5	O	29.90	+0.10	50	49	-1	ESE	2	bc	3	53	45	0.05	
	Nairn ...	29.73	49	ESE	3	O	29.84	+0.11	49	47	-2	E	2	Cp	2	53	43	0.07	
	Aberdeen ...	29.73	50	ENE	7	0.04	29.83	+0.10	49	45	-4	NE	5	Cp	6	54	47	0.06	
	Leith ...	29.61	49	E	4	O	29.72	+0.11	49	47	-2	NE	5	Cp	*	52	46	0.53	
	Shields ...	29.53	50	E	5	C	29.62	+0.09	51	50	-1	E	4	T	6	52	47	0.13	
	Spurn Head ...	29.40	51	ENE	5	T	29.42	+0.02	52	50	-2	NE	6	Cp	5	54	49	0.17	
	York ...	29.45	50	NE	1	m	29.51	+0.06	50	48	-2	NE	3	T	*	53	47	0.38	
	Loughborough	29.41	50	NE	2	O	29.44	+0.03	49	49	0	NE	3	Op	*	50	47	0.06	
GERMANY.	Ardrossan ...	29.53	51	ENE	3	om	29.74	+0.21	48	45	-3	NNE	2	C	1	54	42	0.07	
	Malin Head ...	29.56	51	E	6	Cp	29.75	+0.19	50	48	-2	NE	5	O	3	52	49	0.05	
	Mullaghmore ...	29.53	50	ENE	5	bc	29.70	+0.17	50	49	-1	NE	6	C	5	53	49	—	
	Belmullet ...	29.53	50	ENE	3	O	29.73	+0.20	49	47	-2	NE	2	C	*	53	48	0.12	
	Donaghadee ...	29.52	53	ENE	5	O	29.67	+0.15	50	48	-2	NE	6	bc	5	53	49	—	
	Barrow-in-Furness	29.47	49	SW	3	T	29.50	+0.03	50	47	-3	ENE	5	bc	*	52	45	0.04	
	Liverpool (Bidston)	29.45	48	E	3	C	29.52	+0.07	49	47	-2	NE	3	O	3	54	47	0.10	
	Holyhead ...	29.44	52	ENE	4	bc	29.53	+0.09	51	49	-2	NE	6	pgm	5	54	47	0.21	
	Parsonstown ...	29.46	49	NE	1	O	29.61	+0.15	45	44	-1	S	0	O	*	53	44	0.04	
	Valencia ...	29.40	49	NNE	2	Cp	29.63	+0.23	49	47	-2	NE	1	O	2	57	46	0.03	
FRANCE AND NETHERLANDS.	Roche's Point...	29.38	49	NE	2	T	29.54	+0.16	47	46	-1	NE	4	p	4	54	46	1.05	
	Pembroke (St. Ann's Hd.)	29.37	50	E	3	C	29.44	+0.07	49	48	-1	NNE	3	C	2	52	44	0.03	
	Scilly ...	29.28	52	ENE	2	C	29.36	+0.08	50	48	-2	NNE	6	Op	5	56	48	0.16	
	Prawle Point ...	29.32	51	E	3	C	29.35	+0.03	48	48	0	ENE	4	Tg	3	58	46	2.07	
	Jersey (St. Aubin's)	29.28	54	E	3	0.07	29.33	+0.05	54	52	-2	SE	3	bc m	3	53	48	0.51	
	Hurst Castle ...	29.36	52	E	3	bc	29.38	+0.02	48	47	-1	NE	3	C	3	53	46	—	
	Dungeness ...	29.32	51	WNW	1	C	29.37	+0.05	44	43	-1	N	1	O	1	58	41	—	
	London ...	29.37	48	S	0	om	29.39	+0.02	46	45	-1	W	1	Op	*	52	42	0.16	
	Oxford ...	29.41	44	ESE	1	O	29.41	+0.00	49	48	-1	N	2	O	*	57	44	0.06	
	Cambridge ...	29.38	47	NE	1	bc	29.40	+0.02	48	48	0	N	1	O	*	57	43	—	
PENIN- SULA.	Yarmouth ...	29.34	51	NE	3	C	29.36	+0.02	52	50	-2	ENE	4	bc	4	53	40	0.05	
	Cuxhaven ...	29.51	49	E	6	T	29.49	-0.02	50	50	0	E	4	O	*	51	47	0.34	
	Berlin ...	29.49	49	ESE	2	T	29.51	+0.02	50	49	-1	SE	2	T	*	52	48	0.16	
	Wiesbaden ...	*	*	*	*	*	29.35	-0.01	49	48	-1	E	2	T	*	52	41	0.32	
	Munich ...	29.54	48	S	0	bc	29.38	-0.05	46	45	-1	SE	3	O	*	61	41	—	
	The Helder ...	29.32	48	SE	1	O	29.43	+0.11	48	47	-1	SE	1	C	1	50	48	0.09	
	Brussels (9 a.m.)	*	*	*	*	*	29.39	+0.11	47	46	-1	S	1	C	*	49	44	0.04	
	Cape Gris Nez	?	51	W	2	O	?	?	47	47	0	S	1	C	2	54	45	0.04	
	Paris ...	29.40	48	SE	1	bc	29.40	+0.00	46	46	0	SEW	1	O	*	53	45	0.04	
	Brest ...	?	51	S	0	bc	?	?	52	49	-3	NW	3	O	3	57	46	0.04	
FRANCE AND NETHERLANDS.	Lorient ...	29.26	53	SW	1	bc	29.32	+0.06	53	50	-3	WNW	4	C	5	57	50	0.24	
	Rochefort ...	29.35	57	E	3	T	29.50	+0.15	55	53	-2	WNW	4	C	2	59	48	0.24	
	Belfort ...	29.46	45	NW	1	O	29.35	-0.11	39	36	-3	NW	1	T	*	54	37	0.78	
	Lyons ...	29.44	50	ENE	1	O	29.34	-0.10	?	?	?	SW	3	T	*	53	50	0.04	
	Nice ...	29.54	60	W	3	f	29.50	-0.04	?	?	?	SEW	4	T	2	61	?	—	
	Perpignan ...	29.47	58	S	0	O	29.52	+0.05	56	51	-5	NW	3	O	*	67	52	—	
	Biarritz ...	29.12	57	ESE	3	O	29.35	+0.23	53	53	0	W	6	Tg	4	63	52	0.83	
	Corunna ...	29.73	59	WNW	3	bc	29.82	+0.09	57	53	-4	WNW	1	bc	?	66	53	0.04	
	Lisbon ...	29.73	59	WNW	3	bc	29.82	+0.09	57	53	-4	WNW	1	bc	?	66	53	0.04	

For Explanation of Columns, see bottom of p 4

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

WEATHER CHARTS

for 8 a.m. on Tuesday, 22nd October.

1889.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP.

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

Changes since previous morning are stated in words.

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

their barbs and feathers refer to force thus—

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

→ = forces 5 to 7; → = forces 1 to 4.

⊙ = dead calm.

SEA DISTURBANCE—Where considerable, is shown thus:

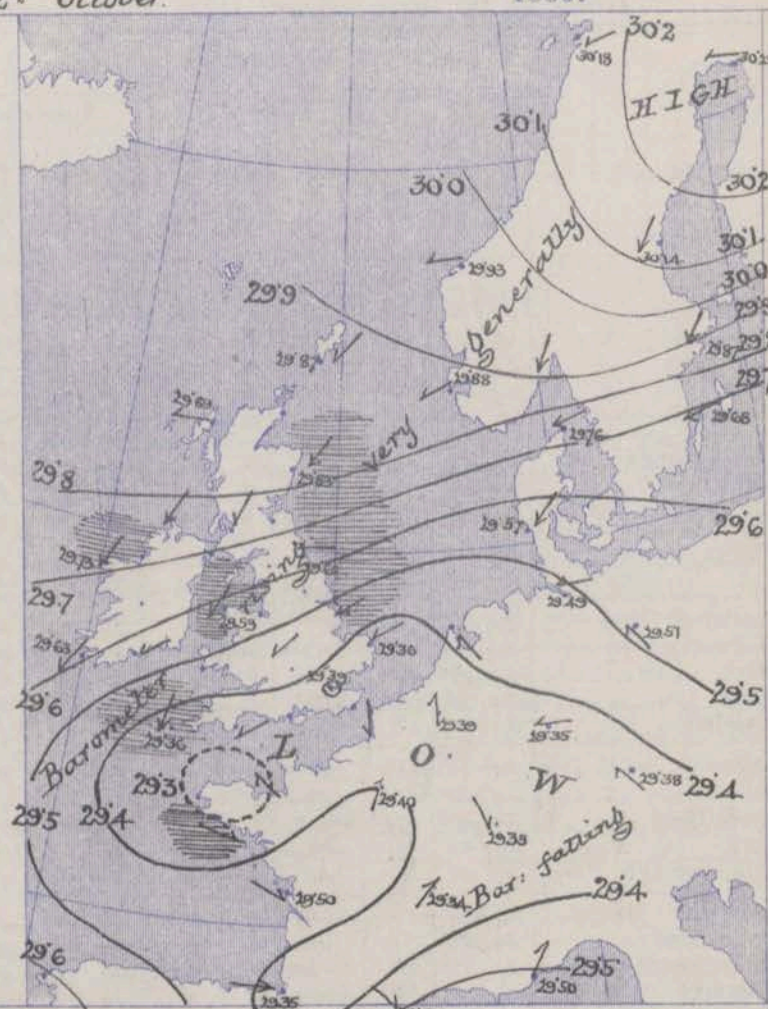
■ = Rough. ■ = High.

MEAN HEIGHT OF THE BAROMETER

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

During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS.
	<i>in.</i>
Sumburgh Head	29.708
Stornoway	29.735
Wick	29.745
Nairn	29.761
Aberdeen	29.774
Leith	29.804
Shields	29.835
York	29.872
Loughborough	29.891
Ardrossan	29.813
Donaghadee	29.832
Holyhead	29.853
Liverpool	29.864
Parsonstown	29.881
Valencia	29.873
Roche's Point	29.870
Pembroke	29.868
Scilly	29.894
Jersey	29.904
Hurst Castle	29.907
Dover	29.909
LONDON	29.911
Oxford	29.910
Cambridge	29.900
Yarmouth	29.886



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.

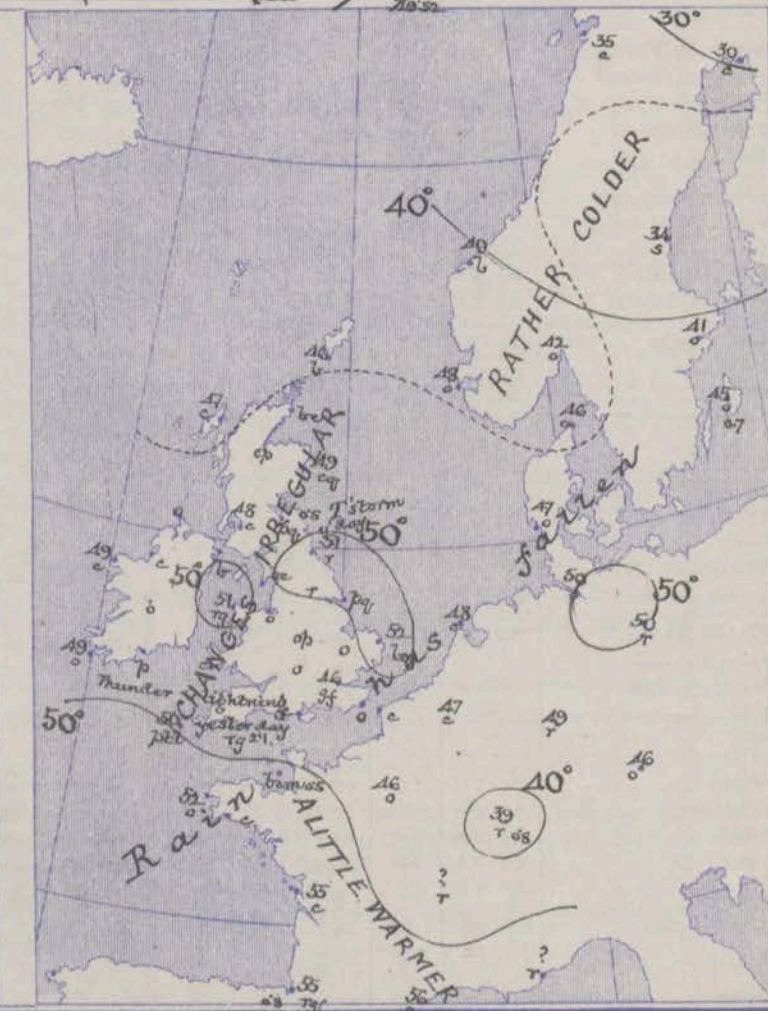
RAINFALL—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of October.)

STATIONS.	TEMPERATURE.				RAINFALL (Inches.)
	Daily Max.	Daily Min.	at 8 a.m.		
			Dry.	Wet.	
Sumburgh Head.....	49.7	41.6	46.0	44.3	4.33
Stornoway	50.5	39.5	45.3	44.1	4.94
Wick.....	51.6	40.1	46.1	44.3	2.94
Nairn	51.0	40.6	44.5	42.5	2.38
Aberdeen	52.3	41.0	45.5	43.5	2.88
Leith.....	54.7	41.5	46.5	44.7	1.94
Shields	53.0	42.8	47.1	45.4	2.46
York	51.8	41.0	45.9	44.5	2.64
Loughborough	55.3	41.4	46.4	45.0	2.98
Ardrossan	53.5	43.6	47.6	45.6	4.31
Donaghadee.....	53.2	43.3	47.7	46.5	3.35
Holyhead.....	51.5	47.0	50.2	48.2	4.53
Liverpool	53.6	44.6	47.8	46.8	3.62
Parsonstown	54.7	41.1	46.4	44.7	3.27
Valencia	56.6	46.5	51.3	49.1	6.09
Roche's Point	55.8	45.9	50.2	48.4	4.17
Pembroke.....	54.8	48.0	51.2	49.1	4.13
Scilly	56.6	50.3	53.8	51.7	3.84
Jersey	58.1	49.2	53.6	51.1	4.34
Hurst Castle	57.1	46.0	51.4	49.6	3.24
Dover	55.8	47.0	50.7	48.7	3.28
LONDON	56.6	43.2	48.0	46.4	2.74
Oxford	55.3	42.5	46.7	45.3	2.72
Cambridge	56.4	41.2	46.4	45.4	2.36
Yarmouth	54.3	44.8	49.2	47.9	2.97

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



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30.2 in. and upwards, over the north of Sweden, 29.8 in. and upwards, over the south of Portugal.
 Lowest, 29.4 in. and less, in an irregularly shaped area (with several minima) lying over the greater part of France, S. Germany, the Netherlands, and the south of England.
 Gradients moderate over our Islands and the North Sea, but slight elsewhere.
 Barometer rising generally, but falling in some parts of Germany and the east and south of France.

TEMPERATURE

Highest, 57° at Lisbon, 56° at Perpignan, 55° at Rochefort and Biarritz, 54° at Jersey, 53° at Lorient, and 52° at Guernsey, Yarmouth and Great.
 Lowest, 30° at Haparanda, 34° at Helsingfors, 35° at Riga, 33° at Belfast, 40° at Christianund, and 41° at Stockholm.

WIND

Chiefly E² or NE⁴, but W¹ over the Bay of Biscay, and SW¹ in the south and east of France.
 Over Sweden, Denmark, and the more exposed parts of our east and north-west coasts the NE⁴ wind blows strongly.

WEATHER

Fine in the north of Scotland, and the west of Norway, but cloudy or overcast in nearly all other localities.
 Rain is falling in many parts of England, France, and Germany, snow is reported at Helsingfors, and a thunderstorm, probably at Seilly.
 Thunder and lightning have occurred in several isolated parts of England and Ireland.

SEA

Rough or rather so on our east and north-west coasts, as well as at the mouth of the Channel, but moderate to smooth elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

No very decided change in the weather is indicated at present. The large and complex area of low pressure to the southward of our Islands is inclined to move slowly northwards, and as the barometer is rising somewhat decidedly in the north of our Islands there is a tendency for an increase in the steepness of the gradients over our north and east coasts.

FORECASTS

For the 24 hours ending at NOON on 23rd OCTOBER 1889.

DISTRICTS.

FORECASTS.

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

NE² and E² winds, strong in exposed places, squally, some rain.

NE² winds, light or moderate; changeable, some rain, fog locally.

DISTRICTS.

FORECASTS

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

NE² winds, strong, fair generally, but local showers.

NE² and N² winds, fresh, changeable, some showers.

Same as Nos 6 and 7.

NE² winds, light or moderate; fair generally, but local showers.

WARNINGS

The NORTH CONE was hoisted last evening in districts 0 to 2, 6, 7, 9 and part of 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.

	Bar:	Ther:		Wind		Wea:	Sea		Bar:	Ther:		Wind		Wea:	Sea
		D	W	D	F					D	W	D	F		
Skudesnaes ...	29.83	55	49	E	2	C	3		Holyhead ...	29.41	53	50	E	3	c m g 3
Sumburgh Head ...	29.84	51	49	ENE	1	O	4		Valencia ...	29.37	56	50	E	4	b c v 4
Stornoway ...	29.71	53	51	E	4	C	4		Scilly ...	29.26	58	50	E	4	C 4
Aberdeen ...	29.68	51	49	ENE	6	O q	6		Jersey ...	29.30	53	50	ENE	3	C q p 3
Shields ...	29.51	51	50	E	5	O	6		Dungeness ...	29.31	56	51	W S W	2	b c 1
Ardrossan ...	29.58	52	49	E	3	O m	2		London ...	29.36	50	49	E	1	O r f *
Malin Head ...	29.51	51	49	ENE	6	O m p	4		Yarmouth ...	29.35	53	51	N E	4	C 4
Mullaghmore ...	29.47	52	49	ENE	5	C m	4		Rocheport ...	29.40	59	56	S	5	C 2
Belmullet ...	29.49	53	50	ENE	3	b c	*								

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

The reports for yesterday morning showed that pressure was highest, 30.0 in. to 30.3 in. over Iceland and the northern parts of Scandinavia, and that it varied from between 29.7 in. and 30.1 in. over the Balkan Peninsula and the southern parts of Russia. It was lowest, 29.2 in. and less, in a depression lying off the mouth of the Channel, whence a "hollow" spread eastwards over the south of England and north of France. Thus, while the wind over the northern half of Europe (including the British Isles) was NE¹ and E⁴, moderate to strong in force, that over France was S² and SE⁶, while that over Southern Europe and the Mediterranean was SW³. Over Central Europe it was more variable, but chiefly S³ or SE⁴. The weather was fine and bright in the west of Norway, and apparently at a few isolated stations in the British Isles and France. As a whole, however, it was very dull and gloomy, with fog haze or rain in several places; — the rainfalls had been heaviest over France and the southern parts of our Islands. Temperature ranged, as a whole, from between 65° and 73° over the southern and eastern parts of the Mediterranean and Spain to less than 40° over Northern Europe; it was locally high (above 50°) over the northern and eastern parts of our Islands and the extreme southwest of Norway. The highest morning values were 73° at Algiers and Palma, 71° at La Calle, 69° at Palermo and Cagliari, 68° at Barcelona, 67° at Rome, 66° at Fez, Boudier and Ovan, and 65° at Lisbon; the lowest were 32° at Haparanda, 33° at Archangel and Ulsaborg, 36° at Kuopio, and 38° at Bodö and Humana.

Later on the disturbances in the southwest and south moved eastwards slightly and underwent considerable modification in form — while the weather remained very unsettled and thunderstorms occurred in the southwest of the United Kingdom.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

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

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

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

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

DAILY WEATHER REPORT.

for WEDNESDAY 23RD OCTOBER. 1889.
 Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.

STATIONS.		YESTERDAY EVENING.						8 A.M. TO DAY.										PAST 24 HOURS.		
		Barometer at 3 rd P. and Sea Level.	Temp. in Shade.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Sea. (0 to 2.)	SHADE TEMP.					
				Direc.	Force. (0 to 12.)		Reading at 3 rd P. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Direc.	Force. (0 to 12.)		Weather.	Max.	Min.	Amount of Rainfall.		
SCANDINAVIA.	Haparanda ...	30.32	30	X	0	0	30.34	+0.05	31	30	+1	X	0	0	*	34	28	—		
	Hernösand ...	30.19	36	NNE	4	0	30.24	+0.10	35	30	+1	X	0	bc	*	43	32	0.04		
	Stockholm ...	29.96	38	NNE	4	0	30.01	+0.14	36	35	-5	NE	6	7	*	45	36	—		
	Wisby ...	29.77	43	NE	6	0	29.84	+0.16	42	39	-3	ENE	6	0	*	46	41	0.08		
	Bodö ...	30.23	36	ENE	2	0	30.22	+0.04	35	32	0	ENE	2	0	1	37	32	—		
	Christiansund	29.99	41	E	2	0	30.06	+0.13	37	35	-3	E	2	0	2	46	36	—		
	Skudesnaes ...	29.96	48	ENE	2	0	30.04	+0.16	41	35	-7	ENE	6	bc	2	52	41	—		
	Christiania Fjord (Fjorder)	30.01	40	NNE	5	0	30.04	+0.15	39	35	-3	NNE	5	0	2	45	37	—		
	Skagen (The Scaw)	29.91	42	ENE	6	0	29.86	+0.10	41	39	-5	E	6	0	5	46	41	—		
	Fanö ...	29.70	46	NE	6	0	29.74	+0.17	44	40	-6	NE	6	7	*	50	41	0.04		
BRITISH ISLANDS.	Sumburgh Head	29.94	47	NE	1	C	29.96	+0.09	45	43	-1	NE	1	7	3	51	41	0.09		
	Stornoway ...	29.92	49	NE	4	C	29.99	+0.10	47	46	0	NW	3	0	3	52	42	0.05		
	Wick ...	29.93	48	E	3	bc	30.00	+0.10	45	44	-5	W	2	0	3	53	35	0.10		
	Nairn ...	29.88	47	2	0	C	29.98	+0.14	44	43	-5	SW	1	bc	1	52	35	0.08		
	Aberdeen ...	29.88	47	NE	5	og	29.97	+0.14	45	44	-4	E	2	0	6	50	45	0.14		
	Leith ...	29.82	48	NE	4	C	29.89	+0.17	48	47	-1	E	4	C	*	50	46	0.25		
	Shields ...	29.68	49	NE	7	7	29.84	+0.22	49	47	-2	NE	6	0	7	52	47	0.30		
	Spurn Head ...	29.48	52	NE	6	0	29.65	+0.23	50	48	-2	NE	7	7	5	53	48	0.40		
	York ...	29.57	49	NE	4	7	29.73	+0.22	49	47	-1	NE	4	0	*	51	46	0.21		
	Loughborough	29.49	49	NNE	3	C	29.64	+0.20	48	47	-1	N	2	odgm	*	53	47	0.10		
GERMANY.	Ardrossan ...	29.80	47	ENE	2	0	29.89	+0.15	46	44	-2	NE	3	0	2	52	44	—		
	Malin Head ...	29.81	52	NE	5	C	29.90	+0.15	49	48	-1	NE	5	bc	3	52	48	—		
	Mullaghmore ...	29.82	51	NE	6	C	29.91	+0.21	47	45	-3	NNE	4	bc	2	53	42	—		
	Belmullet ...	29.85	50	NE	3	0	29.95	+0.22	48	46	-1	NNE	1	0	*	54	46	0.12		
	Donaghadee ...	29.76	52	ENE	5	0	29.84	+0.17	49	48	-1	ENE	6	0	5	53	47	0.01		
	Barrow-in-Furness	29.60	48	NE	6	C	29.71	+0.21	48	47	-2	NE	4	0	*	53	46	0.21		
	Liverpool (Bidston)	29.58	48	NW	5	0	29.71	+0.19	49	47	0	ENE	3	0	3	52	46	0.09		
	Holyhead ...	29.62	51	NE	6	og	29.72	+0.19	50	49	-1	ENE	5	og	5	53	40	0.13		
	Parsonstown ...	29.72	49	NE	1	0	29.84	+0.23	43	42	-2	NW	1	0	*	52	40	0.02		
	Valencia ...	29.74	51	NNE	4	cm	29.90	+0.27	47	45	-2	ENE	1	C	1	52	44	—		
FRANCE AND NETHERLANDS.	Roche's Point ...	29.65	50	NNE	4	C	29.78	+0.24	45	42	-2	N	4	0	4	51	42	0.10		
	Pembroke (St. Ann's Hd.)	29.53	50	NE	3	C	29.67	+0.23	49	48	0	NNE	2	C	1	53	48	—		
	Scilly ...	29.48	51	N	5	7	29.67	+0.31	51	49	+1	N	6	0	5	52	47	0.82		
	Prawle Point ...	29.45	49	NE	4	0	29.66	+0.31	55	44	-3	WNW	2	0	2	51	42	0.63		
	Jersey (St. Aubin's)	29.42	54	SW	1	ogm	29.67	+0.34	50	49	-4	WNW	3	cm	3	58	48	0.07		
	Hurst Castle ...	29.44	57	ENE	2	7	29.64	+0.26	46	45	-2	NNE	3	C	1	52	44	0.45		
	Dungeness ...	29.42	54	SW	3	0	29.56	+0.19	48	47	+4	NW	3	C	2	58	43	0.24		
	London ...	29.46	50	0	1	ogm	29.61	+0.22	46	46	0	W	1	ogf	*	53	43	0.01		
	Oxford ...	29.48	48	NE	2	0	29.63	+0.22	47	46	-2	N	1	0	*	54	45	—		
	Cambridge ...	29.46	47	N	1	C	29.62	+0.22	45	45	-3	N	1	C	*	56	42	0.05		
PENINSULA.	Yarmouth ...	29.45	52	SE	1	bc	29.58	+0.22	50	49	-2	ENE	4	og	4	54	47	0.35		
	Cuxhaven ...	29.54	46	ENE	6	0	29.61	+0.12	46	46	-4	NE	6	7	*	52	46	0.46		
	Berlin ...	29.50	52	NE	4	0	29.54	+0.03	48	48	-2	NW	3	7	*	52	48	0.43		
	Wiesbaden ...	*	*	*	*	*	29.75	+0.40	45	44	-4	SW	1	bc	*	52	43	0.08		
	Munich ...	29.63	48	SW	7	7	29.86	+0.48	48	44	+2	SW	4	bc	*	63	45	0.35		
	The Helder ...	29.54	47	E	4	0	29.62	+0.19	44	44	-4	SE	1	C	1	50	43	0.08		
	Brussels (9 a.m.)	?	*	*	*	*	29.64	+0.25	48	47	+1	SW	2	C	*	51	45	0.16		
	Cape Gris Nez	?	51	SE	2	0	?	?	48	46	+1	0	2	C	1	57	45	0.08		
	Paris ...	29.53	49	SW	1	0	29.70	+0.30	48	47	+2	0	2	0	*	57	46	0.08		
	Brest ...	?	53	NW	5	7	?	?	53	51	+1	N	2	0	2	57	46	0.20		

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, 23rd October.

1889.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP

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

Changes since previous morning are stated in words.

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

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

→ = forces 5 to 7; → = forces 1 to 4.

⊙ = dead calm.

SEA DISTURBANCE—Where considerable, is shown thus:

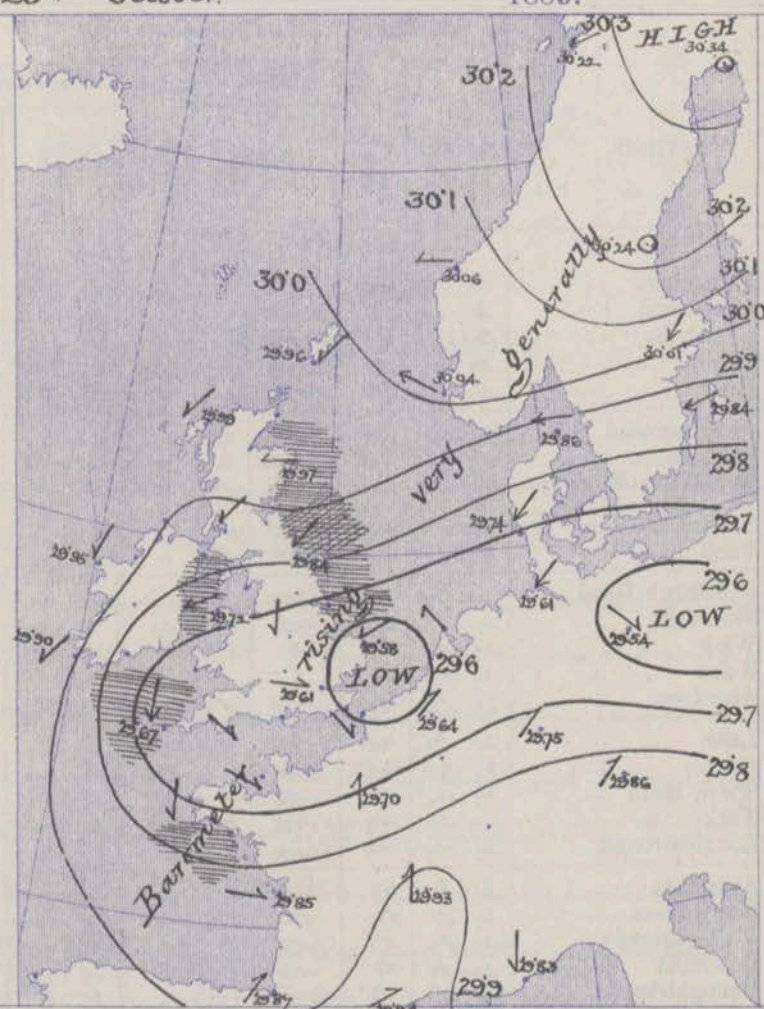
☼ = Rough. ☼ = High.

MEAN HEIGHT OF THE BAROMETER

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

During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS.
Sumburgh Head	29.708
Stornoway	29.735
Wick	29.745
Nairn	29.761
Aberdeen	29.774
Leith	29.804
Shields	29.835
York	29.872
Loughborough	29.891
Ardrossan	29.813
Donaghadee	29.832
Holyhead	29.853
Liverpool	29.861
Parsonstown	29.881
Valencia	29.873
Roche's Point	29.870
Pembroke	29.868
Scilly	29.894
Jersey	29.904
Hurst Castle	29.907
Dover	29.909
LONDON	29.911
Oxford	29.910
Cambridge	29.900
Yarmouth	29.886



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.

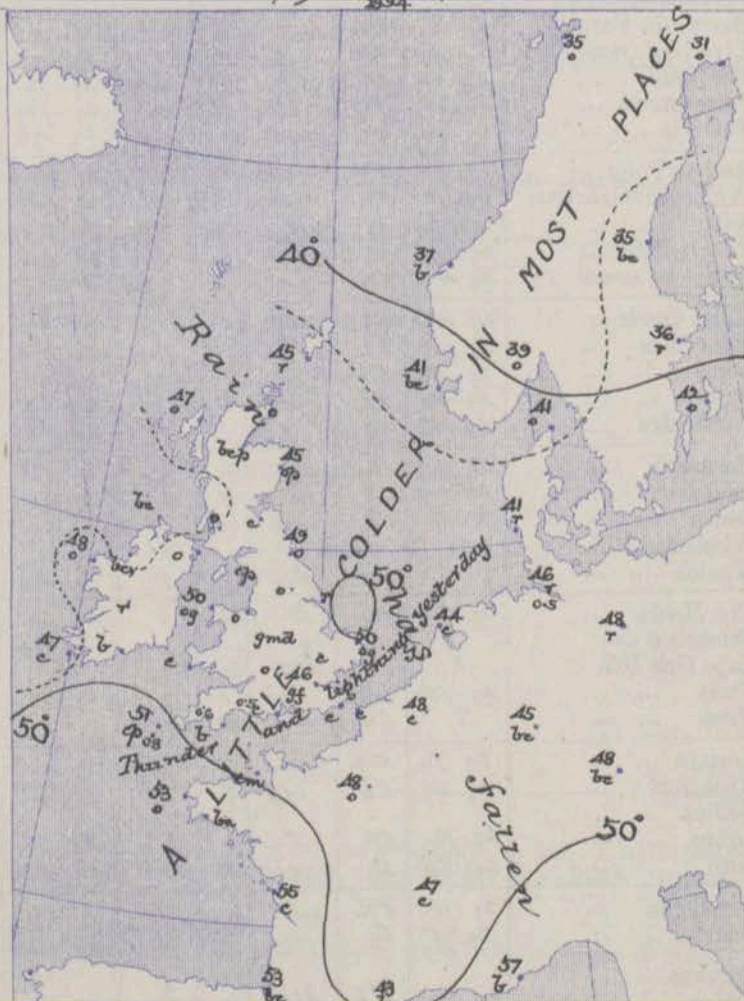
RAINFALL—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of October.)

STATIONS.	TEMPERATURE.				RAINFALL. (Inches.)
	Daily Max.	Daily Min.	at 8 a.m.		
			Dry.	Wet.	
Sumburgh Head.....	49.7	41.6	46.0	44.3	4.33
Stornoway.....	50.5	39.5	45.3	44.1	4.94
Wick.....	51.6	40.1	46.1	44.3	2.94
Nairn.....	51.6	40.6	44.5	42.5	2.38
Aberdeen.....	52.3	41.0	45.5	43.5	2.88
Leith.....	54.7	41.5	46.5	44.7	1.94
Shields.....	53.0	42.8	47.1	45.4	2.46
York.....	54.8	41.0	46.9	44.5	2.64
Loughborough.....	55.3	41.4	46.4	45.0	2.98
Ardrossan.....	53.6	43.6	47.6	45.6	4.31
Donaghadee.....	53.2	43.3	47.7	46.5	3.36
Holyhead.....	54.5	47.0	50.2	48.2	4.53
Liverpool.....	53.6	44.6	47.8	45.8	3.62
Parsonstown.....	54.7	41.1	46.4	44.7	3.27
Valencia.....	56.6	46.5	51.3	49.1	6.09
Roche's Point.....	55.8	45.9	50.2	48.4	4.17
Pembroke.....	54.8	48.0	51.2	49.1	4.13
Scilly.....	56.6	50.3	53.8	51.7	3.84
Jersey.....	58.1	49.2	53.6	51.1	4.34
Hurst Castle.....	57.1	46.0	51.4	49.6	3.24
Dover.....	55.8	47.0	50.7	48.7	3.28
LONDON.....	56.6	43.2	48.0	46.4	2.74
Oxford.....	55.3	42.5	46.7	45.3	2.72
Cambridge.....	56.4	41.2	46.4	45.4	2.36
Yarmouth.....	54.3	44.8	49.2	47.9	2.97

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



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30.3 in. and upwards in the north of Sweden; 29.9 in. and upwards in the south of Portugal.
 Lowest, 29.6 in. and less, in two shallow depressions lying respectively off the southeast of England and over North Germany.
 Gradients moderate over the North Sea, the northern part of England and Ireland, and the south of Scandinavia, but slight elsewhere.
 Barometer rising generally.

TEMPERATURE

Highest, 57° at Nice, 55° at Rochefort, 54° at Lisieux and Fribourg, 53° at Brest and Havre, and 51° at Seilly.
 Lowest, 31° at Haparanda, 35° at Rode and Helsingfors, 36° at Stockholm, 37° at Christiania, and 39° at Bender.

WIND

Strong from the NErd or Est over Denmark, the North Sea, the south of Scandinavia, and the northern part of England and Ireland.
 Variable in the south of Scotland, calm in the north of Sweden.

WEATHER

Light or moderate from N. in the south of our Islands, and from between W. and S. in France.
 B. and unsettled, with local rains, over Denmark, North Germany, the south of Scandinavia, and the northern part of Ireland and England.
 Fair in most other localities, but gloomy and foggy in London.
 Rain fell yesterday in most parts of Western Europe, and thunder and lightning occurred in the south and east of England during the evening or night.

SEA

High at Shields, and rather rough on our east and northwest coasts generally, as well as at the mouth of the Channel.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The low pressure system which extends from Central Europe to the southern part of our Islands is gradually filling up, and some improvement in the weather is probable over England.

The barometer is however, still high both over Northern and Southwestern Europe, and with these conditions the weather is scarcely likely to become settled.

FORECASTS

For the 24 hours ending at NOON on 24th OCT^r 1889.

DISTRICTS.

FORECASTS.

0	SCOTLAND NORTH	E st and NE st winds, light or moderate; cloudy, rain locally.
1	SCOTLAND EAST	
2	ENGLAND N.E.	NE st winds, fresh or strong; drizzle, some rain.
3	ENGLAND EAST	
4	MIDLAND COUNTIES	N st and NW st winds, light; cloudy, fog and rain locally.
5	ENGLAND SOUTH	

DISTRICTS.

FORECASTS

6	SCOTLAND WEST	Same as N ^o 0 and 1.
7	ENGLAND N.W.	Same as N ^o 2 and 3.
8	ENGLAND S.W.	N st and NW st winds, moderate, fair generally but local showers.
9	IRELAND NORTH	Same as N ^o 2 and 3.
10	IRELAND SOUTH	Same as N ^o 8.

WARNINGS

The NORTH CONE has been lowered this morning in districts 0.1. and 6, but the signals are still flying in districts 2.7.9. and part of 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.

	Bar:	Ther:		Wind		Wea:	Sea		Bar.	Ther:		Wind		Wea:	Sea.
		D	W	D	F					D	W	D	F		
Skudesnaes ...	29.91	52	43	ENE	2	C	2		Holyhead ...	29.57	53	49	NE	6	5
Sumburgh Head ...	29.91	50	47	NE	2	C	3		Valencia ...	29.69	52	47	NNE	3	3
Stornoway ...	29.90	52	51	NE	4	C	4		Scilly ...	29.45	49	48	2	0	4
Aberdeen ...	29.86	48	44	ENE	4	bc	6		Jersey ...	29.40	56	52	SW	3	3
Shields ...	29.66	50	48	NE	6	T	7		Dungeness ...	29.40	57	53	2	0	0
Ardrossan ...	29.77	51	47	NE	3	C	2		London ...	29.43	52	50	2	0	4
Malin Head ...	29.80	52	48	NE	5	C	3		Yarmouth ...	29.39	54	52	2	0	3
Mullaghmore ...	29.77	53	48	NE	6	C	5		Rochefort ...	29.60	60	55	W	5	3
Belmullet ...	29.80	54	50	NE	4	C	*								

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

The reports for yesterday morning showed that pressure was highest, 30.2 in: and upwards, in a large area lying over Lapland and Northern Russia, but somewhat high 29.9 in: and upwards, over Morocco and the extreme south of Spain. Over France and Central Europe numerous shallow depressions were found the most important being a small disturbance, with readings below 29.4 in: over the south-west of France and a somewhat larger system, with readings below 29.5 in: over the Baltic Provinces. The wind was strong from the NEst over the greater part of Northern and North-western Europe, but very variable in the more central countries. Wst in Spain, Algeria, and Sst over Italy and Eastern Europe. The weather was fine in Italy, Algeria, and the Mediterranean, as well as in the west of Norway and north of Scotland. Elsewhere, however, the sky was cloudy or overcast with rain in many places, snow at Helsingfors and fog in London as well as over Germany. Temperature had fallen somewhat over Russia and Scandinavia, but changed irregularly elsewhere; readings ranged from between 65° and 71° over Italy, Algeria, and the Mediterranean to a little below the freezing point in Lapland, and to several degrees below it in the extreme north of Russia. The highest individual readings were 71° at Cagliari and Algiers, 65° at Palermo and Cagliari, and 68° at Pescara, Rome, Liphorn, Sanguinaria, and Osn; the lowest were 22° at Archangel, 23° at Uleaborg, 30° at Haparanda, 34° at Kuopio and Helsingfors, 35° at Rode and Helsingfors, 37° at Hango, 38° at St. Petersburg, 39° at Belfast and 40° at Christiansund.

In the course of the day the barometer fell in all parts of Western Europe, but no important change occurred in the winds or weather. Heavy rain fell in the extreme south of England, and thunder and lightning were reported at several of our southern and eastern stations.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

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

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

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

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

DAILY WEATHER REPORT.

for THURSDAY 24th OCT^r 1889.

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

STATIONS.	YESTERDAY EVENING.						8 A.M. TO DAY.										PAST 24 HOURS.		
	Barometer at 32° F. and Sea Level.	Temp. in Shade.	WIND.		Weather.	Barometer. Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	SHADE TEMP.		Difference from 8 a.m. yesterday.	WIND.		Sea. (0 to 9.)	SHADE TEMP.		Amount of Rainfall.			
			Dirce.	Force. (0 to 12.)				Dry.	Wet.		Dirce.	Force. (0 to 12.)		Max.	Min.				
SCANDINAVIA.																			
Haparanda ...	30.29	32	W	2	0	30.33	-0.01	33	32	+2	SW	2	0	*	34	28	0.04		
Hernösand ...	30.29	33	NNE	2	0	30.32	+0.08	34	31	-1	NNE	2	0	*	39	?	-		
Stockholm ...	30.08	37	ENE	8	0	30.16	+0.15	36	33	0	NNE	6	0	*	41	32	0.79		
Wisby ...	29.90	38	ENE	4	0	29.99	+0.15	35	32	-7	NNE	4	0	*	43	?	-		
Bodö ...	30.23	36	ENE	2	0	30.20	-0.02	33	32	-2	ENE	4	0	2	37	32	-		
Christiansund	30.09	37	E	2	0	30.16	+0.10	36	35	-1	S	2	0	2	43	34	-		
Skudesnaes ...	30.11	40	E	1	bc	30.23	+0.19	39	33	-2	ENE	2	0	2	48	37	-		
Christiania Fjord (Færder)	30.13	38	NNE	6	0	30.22	+0.18	35	31	-4	NNE	5	0	2	39	34	-		
Skagen (The Seaw)	30.04	41	ENE	7	0	30.08	+0.22	40	36	-1	NNE	4	0	3	43	39	-		
Fanö ...	29.88	41	NE	7	0	29.97	+0.23	41	40	0	NNE	6	0	*	45	41	0.12		
Sumburgh Head	30.03	44	2	0	0	30.14	+0.18	43	42	-2	S	0	0	2	50	39	0.02		
Stornoway ...	30.01	45	NNE	3	0	30.09	+0.10	36	36	-11	S	0	0	2	48	35	0.05		
Wick ...	30.02	45	E	2	0	30.15	+0.15	45	44	0	SW	2	0	2	48	39	0.15		
Nairn ...	30.13	45	S	0	0	30.12	+0.14	37	35	-7	S	0	0	1	50	35	0.01		
Aberdeen ...	30.05	44	NW	1	og	30.17	+0.20	39	38	-6	NW	1	cm	5	47	39	0.06		
Leith ...	30.01	47	E	2	0	30.12	+0.23	46	45	-2	NNE	2	0	*	52	44	0.03		
Shields ...	29.93	46	NNE	4	0	30.06	+0.22	47	46	-2	ENE	3	0	6	49	44	0.34		
Spurn Head ...	29.82	49	NNE	4	0	29.98	+0.23	48	46	-2	NNE	4	0	4	50	46	0.29		
York ...	29.89	46	N	1	bc	30.03	+0.20	44	43	-5	N	1	0	*	51	41	0.01		
Loughborough	29.84	47	ENE	3	0	30.03	+0.29	41	41	-7	WNW	2	cm	*	49	38	0.26		
Ardrossan ...	30.01	46	ENE	2	0	30.13	+0.24	43	41	-3	NNE	2	0	1	50	42	-		
Malin Head ...	30.00	50	ENE	3	bc	30.11	+0.21	45	43	-4	S	1	0	0	57	44	0.06		
Mullaghmore ...	29.99	50	ENE	5	0	30.13	+0.22	38	37	-9	S	0	0	0	52	37	-		
Belmullet ...	30.00	50	NNE	1	0	30.13	+0.18	44	42	-4	ENE	1	0	*	53	40	0.01		
Donaghadee ...	29.98	51	ENE	4	bc	30.12	+0.28	47	45	-2	ENE	4	bc	3	53	46	-		
Barrow-in-Furness	29.90	45	NNE	4	0	30.04	+0.33	45	43	-3	NNE	2	bc	*	53	42	-		
Liverpool (Bidston)	29.90	47	ENE	2	0	30.08	+0.37	42	40	-7	NNE	1	bc	2	57	40	-		
Holyhead ...	29.90	49	ENE	5	bc	30.07	+0.35	47	45	-3	ENE	3	bc	3	52	46	0.01		
Parsonstown ...	29.95	47	2	0	0	30.12	+0.28	40	30	-13	2	0	0	*	51	30	0.02		
Valencia ...	29.95	50	NE	1	og	30.11	+0.21	44	43	-3	W	1	0	1	53	42	-		
Roche's Point...	29.87	50	NNE	4	bc	30.08	+0.30	42	40	-3	N	3	0	4	51	40	0.15		
Pembroke (St. Ann's Hd.)	29.84	51	NNE	3	0	30.05	+0.38	47	45	-2	NNE	3	0	2	53	44	-		
Scilly ...	29.77	52	NW	5	0	29.97	+0.30	52	50	+1	ENE	3	0	3	52	49	0.07		
Prawle Point ...	29.75	46	WNW	2	bc	29.99	+0.33	48	47	+3	NNE	3	og	2	57	45	0.01		
Jersey (St. Aubin's)	29.80	53	SW	3	og	30.00	+0.33	51	49	+1	WNW	2	cm	2	56	48	0.40		
Hurst Castle ...	29.80	51	NNE	2	bc	30.01	+0.37	48	47	+2	NNE	2	cm	1	53	44	-		
Dungeness ...	29.73	52	WNW	3	bc	29.92	+0.36	48	42	-5	NW	2	0	1	53	37	-		
London ...	29.78	50	WNW	1	0	30.00	+0.39	47	46	+1	N	1	og	*	51	45	0.05		
Oxford ...	29.84	46	NNE	2	0	30.08	+0.40	43	42	-4	NNE	2	og	*	50	43	0.05		
Cambridge ...	29.79	48	N	1	0	30.00	+0.38	43	43	-2	N	1	bc	*	51	39	0.10		
Yarmouth ...	29.78	50	NE	4	bc	29.93	+0.35	49	48	-1	NNE	3	0	4	53	47	0.37		
Cuxhaven ...	29.70	46	ENE	5	bc	29.88	+0.27	48	47	+2	ENE	1	0	*	48	46	0.20		
Berlin ...	29.78	48	WNW	4	bc	29.94	+0.40	47	46	-1	W	2	0	*	52	45	0.16		
Wiesbaden ...	*	*	*	*	*	30.03	+0.28	42	42	-3	SW	1	0	*	54	39	-		
Munich ...	30.01	48	SW	4	bc	30.13	+0.29	46	43	-2	SW	4	0	*	54	41	-		
FRANCE AND NETHERLANDS.																			
The Helder ...	29.75	48	NNE	2	bc	29.87	+0.25	48	47	+4	NNE	2	0	2	50	?	-		
Brussels (a.m.)	?	50	W	2	0	29.96	+0.32	43	45	-1	SW	1	0	*	53	45	0.39		
Cape Gris Nez	?	50	SW	2	0	?	?	50	48	+2	NW	3	0	3	53	46	-		
Paris ...	29.88	50	SW	2	0	30.04	+0.34	44	44	-4	SW	2	0	*	?	41	-		
Brest ...	?	53	2	0	bc	?	?	51	50	-2	2	0	0	?	57	48	-		
Lorient ...	29.87	53	WNW	2	0	29.97	+0.23	50	49	-4	ENE	1	bc	4	57	48	0.04		
Rocheport ...	29.97	57	SW	4	bc	30.06	+0.21	51	51	-4	SE	3	0	2	63	46	0.04		
Belfort ...	30.09	47	NW	1	bc	30.09	+0.25	44	38	+1	NW	1	bc	*	56	35	0.04		
Lyons ...	30.01	50	SW	2	bc	30.13	+0.20	46	44	-1	N	1	0	*	62	44	-		
Nice ...	30.01	57	SW	4	bc	30.10	+0.27	52	46	-5	ENE	5	bc	2	66	50	-		
Perpignan ...	30.01	52	NE	2	bc	30.08	+0.14	48	48	+5	W	2	0	*	64	?	-		
Biarritz ...	29.94	59	ENE	2	0	29.98	+0.11	56	53	+3	S	2	0	2	64	50	-		
Corunna ...	29.87	60	ENE	3	bc	29.87	-0.01	57	56	+3	NNE	3	0	5	66	?	0.12		
Lisbon ...	29.87	60	ENE	3	bc	29.87	-0.01	57	56	+3	NNE	3	0	5	66	?	0.12		

For Explanation of Columns, see bottom of p 4

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

1889.

EXPLANATION OF MAP

Changes since previous morning are stated in words.

$\Rightarrow \Rightarrow$ = forces above 10; $\Rightarrow \Rightarrow \Rightarrow$ = forces 8 to 10;

→ = forces 5 to 7; → = forces 1 to 4.

SEA DISTURBANCE—Where considerable, is shown thus:

= Rough, = High.

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

During the 15 Years: 1871—1885.

[illegible]

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

WEATHER is shown by Letters of the Beaufort Scale.

RAINFALL—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0·5 in. or more, are quoted in figures.

(For the month of October.)

A hand-drawn map of Europe and North Africa with handwritten annotations. The map shows latitude and longitude lines. Handwritten labels include "SEVERE" near the British Isles, "LITTLE" near the Mediterranean coast, "SOMEWHAT" near the Sahara, "COLDER" near the Alps, "WETTER" near the British Isles, "Drier" near the Mediterranean coast, "Rain" near the Sahara, "CHANGING" near the Alps, "FALLING" near the Alps, "PLACES" near the Alps, "Snow has fallen" near the Alps, "Snow or Rain has fallen" near the Alps, "40°" and "50°" latitude markers, and "4000" at the top. Various numbers and letters are scattered across the map, possibly representing data points or coordinates.

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. at 30.3 in. over Scandinavia, 30.1 in. and more over Scotland and Ireland, as well as over South Germany and the southeast of France.
Lowest, 29.9 in. and less, over Holland and also over the southwestern half of the Spanish Peninsula.
Gradients moderate and variable over Holland, the east of England and the southern part of the North Sea, slight elsewhere — mainly for E. winds.
Barometer rising almost everywhere — most in the east and south of England and the northeast of France.

TEMPERATURE

Highest, 57° at Lisle, 56° at Biarritz, 52° at Brest, and 51° at Lorient and Jersey.
Lowest, 30° at Larnaca, 33° at Bodo and Haparanda, 35° at Viki, 36° at Stockholm, Christiania and Tromsø.
It has fallen in most parts of our Islands and the west and north of France; in Ireland and Scotland the change has been considerable.

WIND

Has subsided to a calm at many of the Scotch and Irish stations, and S. winds have appeared locally.
It is moderate to light from NE. over England and from SW. and W. in Germany.
In France it is light and variable — in the west of France light from SE.

WEATHER

Fair generally in Ireland, Scotland and Norway, as well as in the west and south of France and North Germany, dull, gloomy, and rainy over England, with fog or mist in several places.
Rain has been general except in the west, and at several of the eastern and southern stations the fall has been considerable.

SEA

Rough (but going down) on our northeast coasts, moderate at Spun Ht., Yarmouth, Holyhead, and Lorient, slight or smooth elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

As the depression in the southeast fills up the high-pressure ridge over our northern stations seems likely to spread over England, bringing with it colder and drier weather, but local fogs. With the present distribution of pressure the appearance of S. winds in the northwest of Ireland and at Viki seems to show that low-pressure systems are about to pass by our extreme northwestern and northern coasts on their way to Northern Europe; under these circumstances SW. breezes will probably become general in the northwest and north of our Islands before long, with some recovery of temperature, and rain.

FORECASTS

For the 24 hours ending at NOON on 25TH OCT^R 1889.

DISTRICTS.

FORECASTS.

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

Varying and NE. winds, fair, fog or haze locally.
NE. breezes, light or moderate, unsettled, foggy, slight rain occasionally. Colder.

DISTRICTS.

FORECASTS

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

NE. breezes, moderate or light, fair.

WARNINGS

NONE ISSUED.

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

YESTERDAY'S 2 P.M. REPORTS.

	Bar:	Ther:		Wind		Wea:	Sea		Bar:	Ther:		Wind		Wea:	Sea
		D	W	D	F					D	W	D	F		
Skudesnaes ...	30.07	40	29	ESE	2	bc	3	Holyhead ...	29.84	51	40	ENE	5	bc	5
Sumburgh Head ...	30.00	40	45	NE	1	b	2	Valencia ...	29.92	51	40	N	3	c	3
Stornoway ...	30.01	40	46	NE	4	o	4	Scilly ...	29.76	52	49	NW	5	o	4
Aberdeen ...	30.02	46	45	NW	1	c	6	Jersey ...	29.76	54	51	WNW	3	o	3
Shields ...	29.90	40	45	NE	4	o	7	Dungeness ...	29.60	53	52	WNW	3	c	2
Ardrossan ...	29.96	50	46	NNE	2	cm	1	London ...	29.72	51	49	NW	2	o	m
Malin Head ...	29.95	50	46	ENE	4	bcm	2	Yarmouth ...	29.67	53	51	NE	3	c	4
Mullaghmore ...	29.95	52	48	NE	5	bcw	3	Rocheport ...	29.93	61	56	W	4	bc	2
Belmullet ...	29.99	53	49	NE	1	bc	*								

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

The reports for yesterday morning showed that pressure was highest, 30.3 ins. and upwards, over Lapland and Northern Russia, but high, 30.0 ins. and upwards over Algeria and the greater part of the Mediterranean. The lowest reading, 29.4 ins. and less, was found in a small depression lying over Holland, but another small disturbance, with readings below 29.6 ins. was lying between the English and Dutch coasts, while a large trough of low pressure, with readings below 29.7 ins. extended from the south of Russia across Central Europe to the southwest of England. The wind was moderate to strong from the E. or NE. over all the more northern, and light or moderate from the SW. or W. in most of the southern countries. In the neighbourhood of the small depressions noticed above, however, cyclonic circulations were shown, while in Algeria the wind was S. or SE. The weather was fine over nearly the whole of Southern and Eastern Europe, as well as in the northern part of Scandinavia and Russia. Elsewhere, however, the sky was cloudy or overcast with rain or passing showers in many parts of our Islands and Central Europe, fog in London and a thunderstorm at Breslau. Temperature had risen a little in some parts of Germany, France and Austria, but fallen elsewhere; readings ranged from 40° and upwards in the extreme south of Italy, and 65° and upwards at some of the Algerian stations to 30° or less over Northern and Central Russia. The highest individual readings were 72° at Malta, 70° at Brindisi and Palermo, 68° at Algiers, La Calle, and Constantinople, 67° at Sfax, 66° at Barcelona and 65° at Livorno; the lowest were 16° at Archangel, 27° at Uleaborg, 28° at St. Petersburg, 30° at Moscow, 31° at Napanawa, 33° at Harbin and Nanking, and 35° at Rode, Hermand, Kuopio and Riga.

In the course of the day the barometer rose in all parts of Western Europe, and the small depression between England and Holland partially filled up. No important change was observed in the winds or weather.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

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

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

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

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

DAILY WEATHER REPORT.

for FRIDAY 25TH OCTOBER

1889.

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

STATIONS.	YESTERDAY EVENING.						8 A.M. TO DAY.										PAST 24 HOURS.		
	Barometer at 32° F. and Sea Level.	Temp. in Shade.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Sea. (0 to 9.)	SHADE TEMP.					
			Dir.	Force. (0 to 12.)		Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Dir.	Force. (0 to 12.)		Weather.	Max.	Min.	Amount of Rainfall.		
SCANDINAVIA.	Haparanda ...	30.28	34	SE	2	0	30.13	-20	28	27	-5	2	0	bc	*	34	?	-	
	Hernösand ...	30.36	32	2	0	0	30.36	+0.4	27	25	-7	2	0	bc	*	37	?	-	
	Stockholm ...	30.29	34	N	2	0	30.35	+1.9	30	28	-6	N	2	bc	*	39	?	-	
	Wisby ...	30.17	32	NNE	4	bc	30.23	+2.4	32	32	-3	N	4	0	*	37	28	-	
	Bodö ...	30.19	36	?	2	0	30.12	-0.8	37	37	+4	N	4	T	3	?	32	0.12	
	Christiansund	30.25	43	WSPW	3	0	30.34	+1.8	42	40	+6	SPW	3	0	2	43	41	0.08	
	Skudesnaes ...	30.31	39	E	2	bc	30.40	+1.7	39	34	0	SPW	2	C	4	45	37	-	
	Christiania Fjord (Fæder)	30.28	37	N	4	0	30.38	+1.6	38	31	0	N	3	0	2	37	34	-	
	Skagen (The Seaw)	30.24	40	NE	3	0	30.29	+2.1	38	34	-2	E	3	0	2	41	37	-	
	Fanö ...	30.15	39	NE	4	C	30.22	+2.5	37	36	-4	NE	2	C	*	43	36	0.08	
BRITISH ISLANDS.	Sumburgh Head	30.22	44	2	0	C	30.34	+2.0	44	41	+1	2	0	C	2	51	42	0.04	
	Stornoway ...	30.16	45	SW	2	bc	30.27	+1.8	39	38	+3	2	0	bc	2	51	34	-	
	Wick ...	30.21	45	S	1	bc	30.35	+2.0	45	44	0	S	2	0	1	50	35	-	
	Nairn ...	30.19	39	2	0	bc	30.34	+2.2	30	29	-7	2	0	bc	1	51	26	-	
	Aberdeen ...	30.25	41	NNW	1	bc	30.36	+1.9	39	37	0	NW	1	Cm	4	49	37	0.02	
	Leith ...	30.21	43	ESE	1	C	30.32	+2.0	43	42	-3	NE	1	C	*	49	39	0.04	
	Shields ...	30.17	48	ESE	2	0	30.29	+2.3	45	42	-2	NE	3	C	5	48	42	0.08	
	Spurn Head ...	30.10	47	NNE	3	C	30.20	+2.2	48	46	0	NNW	4	Cf	4	50	45	0.09	
	York ...	30.15	45	N	1	bc	30.27	+2.4	40	38	-4	N	1	bc	*	50	37	0.09	
	Loughborough	30.13	46	NE	1	P	30.25	+2.2	41	41	0	N	1	Cm	*	51	40	0.05	
GERMANY.	Ardrossan ...	30.19	44	NE	2	bc	30.30	+1.7	40	39	-3	NE	2	bc	1	50	38	-	
	Malin Head ...	30.17	47	SE	1	bc	30.26	+1.5	41	39	-4	S	3	bc	1	52	40	-	
	Mullaghmore ...	30.18	46	ESE	1	bc	30.26	+1.3	42	41	+4	E	3	bc	2	53	37	-	
	Belmullet ...	30.18	49	SPW	2	bc	30.26	+1.3	42	41	-2	E	1	bc	*	53	42	0.01	
	Donaghadee ...	30.19	45	N	2	C	30.29	+1.7	47	45	0	ESE	3	bc	2	52	43	-	
	Barrow-in-Furness	30.14	47	NE	2	0	30.26	+2.2	42	40	-3	NE	1	C	*	50	40	-	
	Liverpool (Bidston)	30.16	46	ESE	1	0	30.27	+1.9	43	41	+1	ESE	1	of	2	50	39	-	
	Holyhead ...	30.14	48	ESE	2	bc	30.25	+1.8	43	42	-4	E	1	C	2	51	42	0.01	
	Parsonstown ...	30.17	44	2	0	bc	30.25	+1.3	28	28	-2	2	0	C	*	52	28	-	
	Valencia ...	30.17	46	2	0	bc	30.22	+1.1	40	39	-4	2	0	bc	1	53	36	-	
FRANCE AND NETHERLANDS.	Roche's Point...	30.14	47	NE	2	bc	30.19	+1.1	41	40	-1	NE	3	bc	3	54	39	-	
	Pembroke (St. Ann's Hd.)	30.12	46	NE	2	bc	30.20	+1.5	42	42	-5	ESE	2	bc	2	53	42	-	
	Scilly ...	30.05	51	ESE	4	C	30.10	+1.3	49	48	-3	ESE	4	C	2	54	48	0.01	
	Prawle Point ...	30.09	49	ESE	3	C	30.15	+1.6	47	46	-1	ESE	4	of	2	52	45	-	
	Jersey (St. Aubin's)	30.05	53	WSPW	2	bc	30.11	+1.1	50	48	-1	NE	2	Cm	2	60	45	-	
	Hurst Castle ...	30.09	48	NNE	3	bc	30.18	+1.7	45	44	-3	NE	4	m	1	52	43	-	
	Dungeness ...	30.06	50	NNW	3	0	30.15	+2.3	43	42	0	NNW	2	m	1	53	40	-	
	London ...	30.11	47	N	1	m	30.19	+1.9	42	41	-5	2	0	fg	*	50	39	-	
	Oxford ...	30.15	43	SE	2	0	30.23	+2.0	43	42	0	NE	2	0	*	49	39	-	
	Cambridge ...	30.12	48	N	1	C	30.22	+2.2	40	39	-3	N	1	bc	*	53	36	-	
PENINSULA.	Yarmouth ...	30.05	49	NNE	1	C	30.14	+2.1	48	47	-1	N	2	Cf	4	52	45	0.02	
	Cuxhaven ...	29.98	43	SE	2	P	30.15	+2.7	43	42	-5	ESE	5	P	*	49	42	0.50	
	Berlin ...	30.04	49	W	2	C	30.12	+1.8	44	43	-3	E	3	P	*	54	43	0.04	
	Wiesbaden ...	*	*	*	*	*	30.14	+1.1	37	36	-3	2	0	f	*	54	36	-	
	Munich ...	30.16	43	NE	1	bc	30.14	+0.1	37	38	-7	NE	4	C	*	53	36	-	
	The Helder ...	*	*	*	*	*	30.15	+1.9	40	40	-7	WSPW	1	f	*	51	39	0.04	
	Brussels (9 a.m.)	?	51	N	3	0	?	?	49	45	-1	NNW	3	C	3	57	46	-	
	Cape Gris Nez	30.11	48	S	1	bc	30.14	+1.0	38	38	-6	NE	2	f	*	53	37	-	
	Paris ...	?	51	2	0	bc	?	?	48	48	-3	E	2	0	2	59	46	0.04	
	Brest ...	?	51	2	0	bc	?	?	48	48	-3	E	2	0	2	59	46	0.04	
GERMANY.	Lorient ...	30.05	35	2	0	bc	30.04	+0.7	50	49	0	E	4	0	2	61	46	-	
	Rochefort ...	30.05	58	E	1	bc	30.02	-0.4	49	48	-2	E	3	bc	2	70	43	-	
	Belfort ...	30.04	48	S	1	bc	30.06	-0.3	41	37	-3	S	1	0	*	59	35	-	
	Lyons ...	30.08	?	NE	1	C	30.09	-0.4	49	48	+3	W	1	T	*	64	?	0.35	
	Nice ...	30.06	58	E	4	bc	29.94	-1.6	59	51	+7	SE	2	bc	1	66	?	-	
	Perpignan ...	30.04	57	2	0	0	30.00	-0.8	56	55	+8	2	0	0	*	62	?	-	
	Biarritz ...	29.93	60	E	4	0	29.91	-0.7	55	52	-1	SE	4	0	1	66	52	-	
	Corunna ...	29.81	61	E	2	0	29.79	-0.4	59	58	+2	SE	3	bc	5	64	57	0.20	
	Lisbon ...	29.81	61	E	2	0	29.79	-0.4	59	58	+2	SE	3	bc	5	64	57	0.20	

WEATHER CHARTS

for 8 a.m. on

Friday, 25th October.

1889.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP.

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

Changes since previous morning are stated in words.

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

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

→ = forces 5 to 7; → = forces 1 to 4.

○ = dead calm.

SEA DISTURBANCE—Where considerable, is shown thus:

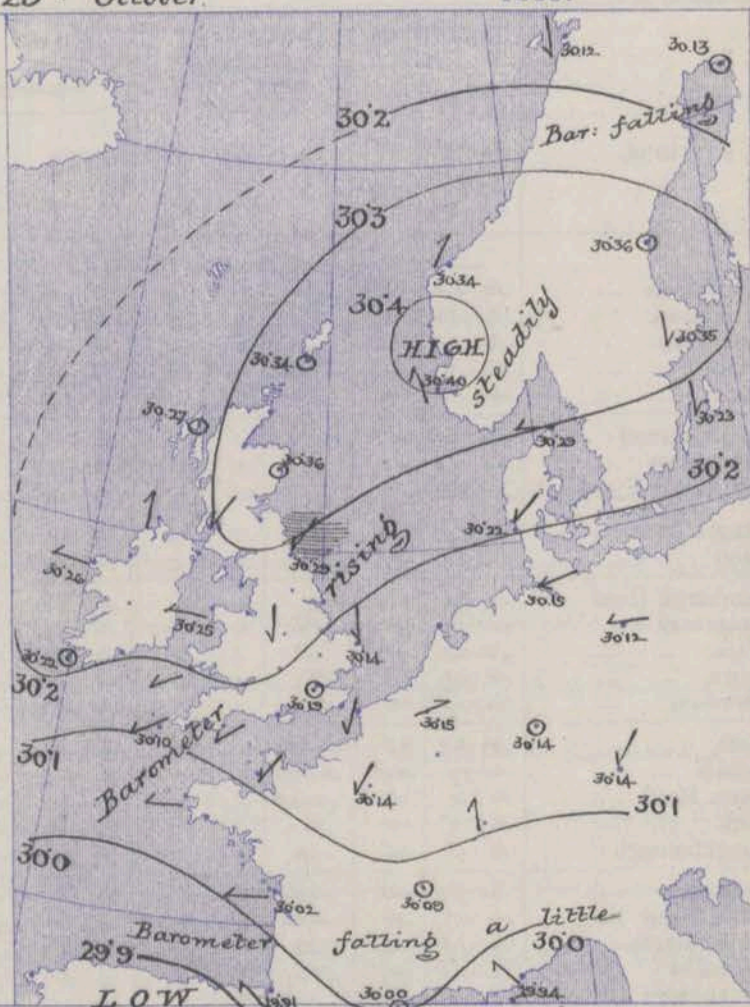
☼ = Rough. ☼ = High.

MEAN HEIGHT OF THE BAROMETER

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

During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS.
Sumburgh Head	29.708
Stornoway	29.735
Wick	29.745
Nairn	29.761
Aberdeen	29.774
Leith	29.804
Shields	29.835
York	29.872
Loughborough	29.891
Ardrossan	29.813
Donaghadee	29.832
Holyhead	29.853
Liverpool	29.864
Parsonstown	29.881
Valencia	29.873
Roche's Point	29.870
Pembroke	29.868
Silly	29.894
Jersey	29.904
Hurst Castle	29.907
Dover	29.909
LONDON	29.911
Oxford	29.910
Cambridge	29.900
Yarmouth	29.886



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30.2 ins. to 30.4 ins. in a large anticyclone covering the greater part of our Islands, the North Sea, Denmark, Scandinavia, and Finland.
 Lowest, 29.8 ins. to 29.9 ins. over the Iberian Peninsula.
 Gradient slight generally. Barometer falling a little over Southern and Southwestern Europe, and rather more decidedly in England, still rising elsewhere.

TEMPERATURE

Highest, 59° at Lisbon and Nice, 55° at Biarritz, 50° at Genoa, 49° at Lyons and Seilly.
 Lowest, 27° at Helsingfors, 28° at Haparanda and Rensselaersborg, 30° at Kain and Stockholm, 32° at Narvik.
 It has fallen since yesterday except over Southern Europe, the extreme north and northwest of our Islands, and in Norway.

WIND

Very light and variable at the extreme western and northern stations.
 Light to moderate from the NE^W over the North Sea, England and the Channel.
 E^W over the Bay of Biscay, SE^W in Spain, Variable in France and Germany.

WEATHER

Still raining in Germany and rather so on our extreme eastern coast, gloomy and haze over the central and southern part of England, fine and bright in the west and north.
 Rain is falling at Lyons and Christiansund. fog is prevalent over Western Germany and Central France.

SEA

Rather rough at Shields, moderate on our northeast and east coasts as a whole, slight or smooth elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The anticyclonic system seems to be spreading over the whole of Northwestern Europe with fair weather, low temperatures and local fogs.
 A depression appears to be approaching Northern Europe from the NW^W, and will probably cause unsettled weather in Sweden, Lapland and Finland, but is not likely to affect the weather in our Islands.

FORECASTS

For the 24 hours ending at NOON on 26th OCT^r 1889.

DISTRICTS.

FORECASTS.

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

Calms and Variable airs; cold, fair, local fog or haze.
 NE^W breezes, light, becoming fine.
 Same as N°5
 Same as N°2
 NE^W breezes, moderate to light; fine, fog in night and morning.

DISTRICTS.

FORECASTS

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

Varying NE^W airs; fair generally.
 Same as N°5
 E^W and SE^W airs; fine, cold inland at night, local fogs.

WARNINGS

NONE ISSUED.

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

YESTERDAY'S 2 P.M. REPORTS.

	Bar:	Ther:		Wind		Wea:	Sea			Bar:	Ther:		Wind		Wea:	Sea.
		D	W	D	F						D	W	D	F		
Skudesnaes ...	30.26	45	36	ESE	2	b	2		Holyhead ...	30.11	49	46	NE	2	o f	2
Sumburgh Head ...	30.18	49	46	2	0	bc	2		Valencia ...	30.14	55	48	NE	2	bc m	1
Stornoway ...	30.13	51	47	SW	3	bc	3		Scilly ...	30.02	54	50	NE	4	bc	3
Aberdeen ...	30.21	47	43	E	2	b	4		Jersey ...	30.05	?	?	SW	3	b	3
Shields ...	30.15	48	45	E	3	o	6		Dungeness ...	30.03	52	50	2	0	c	1
Ardrossan ...	30.17	50	45	NE	2	cm	1		London ...	30.08	50	47	NE	2	om	*
Malin Head ...	30.14	51	45	SE	2	c	0		Yarmouth ...	30.01	52	49	NNE	3	bc v	4
Mullaghmore ...	30.16	54	48	2	0	b	0		Rochefort ...	30.07	66	60	ESE	2	b	2
Belmullet ...	30.17	53	50	SW	2	o	*									

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

The reports for yesterday morning showed that the highest pressures, 30.4 in: and upwards, were found in an anticyclone lying over Finland, but that a long band of high readings, 30.1 in: and upwards, extended from Northern Europe across Scandinavia and the North Sea to Scotland and Ireland. Another large area with readings above 30.1 in: was reported over South Germany, Italy, Turkey, and the adjacent parts of the Mediterranean. The lowest readings, 29.6 in: and less, were found in an elongated depression lying over the south of Russia, but a shallow area, with readings below 29.8 in:, was reported over Morocco, while a rather elongated disturbance, with readings below 29.9 in: was reported over Holland and North Germany. The wind was NE^{ly} over the greater part of Scandinavia, Northern Russia, the Baltic, Denmark, the North Sea and England, as well as over the Iberian Peninsula, but calm or light from the Sth in the northern parts of Scotland and Ireland. Over Northern Germany southerly breezes were reported, and over Eastern Germany, Austria, and the south of Russia moderate to strong W^{ly} breezes, while in France the wind was variable and in Algeria moderate from S. or SE. Rain was falling in the east and southeast of England as well as in Denmark, North Germany, Central Russia and some parts of Spain, but elsewhere the weather was mostly fair. Temperature had risen several degrees over northern and central Russia, as well as in Algeria, but fallen elsewhere; readings ranged from 75° and upwards at some of the Algerian stations and 65° and upwards over the Mediterranean to a little below 32° over Central Ireland and to several degrees below the freezing point over Finland. The highest individual readings were 78° at La Galle, 77° at Algiers, 72° at Malta, 70° at Boudiri, 69° at Lagiani and faa, and 66° at Palermo, Oran, and Annale; the lowest were 18° at Uleaborg, 21° at Petersburg, 21° at Kuopio, 28° at Helsingfors, 29° at Archangel, 30° at Parnassow, 32° at Hango, and 33° at Rode and Haparanda.

In the course of the day the barometer rose in all parts of Northwestern Europe, but no important change was observed in the wind or weather.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

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

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

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

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

DAILY WEATHER REPORT.

for *Saturday, 26th October, 1889.*
Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.

STATIONS.		YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
		Barometer at 3 rd P. and Sea Level.	Temp. in Shade.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Weather.	Sea. (0 to 9.)	SHADE TEMP.		Amount of Rainfall.	
				Direc.	Force. (0 to 12.)		Reading at 3 rd P. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Direc.	Force. (0 to 12.)			Max.	Min.		
SCANDINAVIA.	Haparanda ...	30.27	26	N	2	b	30.35	+ 22	22	21	- 6	NW	2	0	*	28			
	Hernösand ...	30.37	36	N	2	o	30.53	+ 17	33	30	+ 6	NE	2	0	*	45	25		
	Stockholm ...	30.39	32	Z	0	b	30.40	+ 05	31	30	+ 1	Z	0	0	*	37	28		
	Wisby ...	30.31	34	NNE	4	b	30.34	+ 11	37	33	+ 3	N	4	0	*	37	30		
	Bodö ...	30.43	25	N	2	o	30.53	+ 41	34	30	- 3	ENE	1	0	1	37	30	0.08	
	Christiansund	30.43	44	SW	3	o	30.48	+ 14	45	42	+ 3	ESE	1	0	1	45	41		
	Skudesnaes ...	30.47	40	Z	0	o	30.52	+ 12	42	37	+ 3	ESE	1	0	2	?	39		
	Christiania Fjord (Færder)	30.45	34	N	2	b	30.48	+ 10	35	32	0	NW	3	0	2	36	34		
	Skagen (The Seaw)	30.36	37	ENE	1	o	30.46	+ 17	37	30	- 1	N	1	0	0	?	36		
	Fanö ...	30.38	36	NE	4	o	30.45	+ 23	37	35	0	NE	4	0	*	41	36		
BRITISH ISLANDS.	Sumburgh Head	30.41	44	Z	0	c	30.43	+ 09	45	42	+ 1	Z	0	0	2	49	40		
	Stornoway ...	30.31	44	Z	0	b	30.36	+ 09	35	34	- 4	Z	0	0	2	51	31		
	Wick ...	30.40	47	NW	2	b	30.44	+ 09	44	42	- 1	W	1	0	1	48	38	0.03	
	Nairn ...	30.37	37	Z	0	b	30.41	+ 07	34	32	+ 4	Z	0	0	1	46	27		
	Aberdeen ...	30.42	42	SE	2	b	30.43	+ 07	39	38	0	W	1	0	3	47	37	0.03	
	Leith ...	30.36	41	E	1	c	30.38	+ 06	41	40	- 2	SE	1	0	*	49	37	0.05	
	Shields ...	30.34	46	ENE	3	r	30.35	+ 06	43	42	0	E	4	0	5	48	42	0.12	
	Spurn Head ...	30.26	47	ENE	5	c	30.28	+ 08	49	47	+ 1	ENE	5	0	4	50	44	0.05	
	York ...	30.31	46	N	1	o	30.31	+ 04	42	41	+ 2	N	1	0	*	48	38	0.01	
	Loughborough	30.26	46	WNW	1	o	30.25	- 00	41	40	0	NE	2	0	*	53	39	0.03	
GERMANY.	Ardrossan ...	30.33	43	NE	2	o	30.35	+ 05	37	35	- 3	NNE	2	0	1	48	36		
	Malin Head ...	30.29	46	SSE	3	c	30.30	+ 04	44	41	+ 3	SSE	3	0	1	50	41		
	Mullaghmore ...	30.28	47	E	3	c	30.27	+ 01	45	43	+ 3	E	5	0	4	50	41		
	Belmullet ...	30.28	47	ESE	2	b	30.26	- 00	39	38	- 3	E	1	0	*	55	39		
	Donaghadee ...	30.32	48	E	3	b	30.33	+ 04	45	43	- 2	E	4	0	2	50	43	0.09	
	Barrow-in-Furness	30.29	46	NE	2	o	30.28	+ 02	40	38	- 2	NE	2	0	*	50	38		
	Liverpool (Bidston)	30.29	45	ENE	3	r	30.29	+ 02	41	39	- 2	ENE	2	0	2	48	40	0.03	
	Holyhead ...	30.26	46	ENE	2	b	30.25	- 00	44	42	+ 1	E	3	0	2	50	43		
	Parsonstown ...	30.25	45	Z	0	o	30.23	- 02	39	38	+ 11	Z	0	0	*	51	28		
	Valencia ...	30.22	47	ENE	1	b	30.19	- 03	41	40	+ 1	NNE	1	0	1	52	37		
FRANCE AND NETHERLANDS.	Roche's Point...	30.23	45	E	2	b	30.16	- 03	45	44	+ 4	ENE	2	0	3	51	40	0.10	
	Pembroke (St. Ann's Hd.)	30.20	49	E	2	b	30.16	- 04	44	43	+ 2	E	4	0	3	50	42		
	Scilly ...	30.09	52	E	5	o	30.02	- 08	50	48	+ 1	ENE	6	0	5	52	48	0.04	
	Prawle Point ...	30.15	50	ENE	5	o	30.05	- 10	48	46	+ 1	ENE	6	0	4	56	45		
	Jersey (St. Aubin's)	30.16	54	ENE	3	o	30.01	- 10	51	49	+ 1	ENE	6	0	4	56	49		
	Hurst Castle ...	30.18	49	NE	4	m	30.12	- 06	49	48	+ 4	ENE	3	0	2	52	44		
	Dungeness ...	30.16	48	NE	2	b	30.13	- 02	49	47	+ 6	E	5	0	4	53	42		
	London ...	30.21	48	NE	1	b	30.16	- 03	46	44	+ 4	NE	3	0	*	52	41		
	Oxford ...	30.24	44	NE	1	c	30.21	- 02	48	41	0	NE	3	0	*	54	40		
	Cambridge ...	30.25	46	N	1	r	30.22	- 00	43	42	+ 3	N	1	0	*	53	35	0.04	
PENINSULA.	Yarmouth ...	30.20	48	ENE	5	b	30.20	+ 06	48	47	0	ENE	6	0	5	50	46	0.29	
	Cuxhaven ...	30.26	44	ENE	4	b	30.38	+ 23	43	39	0	ENE	4	0	*	44	40	0.02	
	Berlin ...	30.25	32	ENE	2	r	30.36	+ 24	40	37	- 4	ENE	2	0	*	48	37	0.16	
	Wiesbaden ...	*	*	*	*	*	30.16	+ 02	45	42	+ 8	SW	1	0	*	54	37		
	Munich ...	30.16	45	Z	0	c	30.15	+ 01	40	40	+ 1	E	4	0	*	50	37	0.04	
	The Helder ...	30.25	46	NE	2	c	30.28	+ 02	44	42	+ 4	E	4	0	4	48	43		
	Brussels (9 a.m.)	*	*	*	*	*	30.17	+ 02	44	43	+ 4	E	3	0	*	53	41		
	Cape Gris Nez	?	49	NE	3	b	?	?	43	41	- 6	E	4	0	3	55	43		
	Paris ...	30.15	45	NE	1	o	30.02	- 12	42	41	+ 4	NE	2	0	*	37	37		
	Brest ...	?	51	SE	2	r	?	?	50	48	+ 2	E	5	0	3	39	46	0.16	
FRANCE AND NETHERLANDS.	Lorient ...	30.01	54	ENE	4	o	29.83	- 21	50	47	0	ENE	5	0	4	37	48	0.39	
	Rochefort ...	29.98	58	ENE	4	q	29.85	- 17	52	52	+ 3	E	4	0	2	66	46	0.04	
	Belfort ...	30.08	48	E	1	b	30.01	- 05	45	39	+ 4	E	1	0	*	55	32		
	Lyons ...	30.07	54	NNE	1	o	29.99	- 10	47	47	- 2	NW	1	0	*	58	46		
	Nice ...	29.98	60	S	3	c	30.02	+ 08	55	52	- 4	ENE	4	0	1	70	52	0.16	
	Perpignan ...	29.99	57	S	2	o	29.81	- 19	60	59	+ 4	S	4	0	*	61	55	0.04	
PENINSULA.	Biarritz ...	29.86	60	E	3	o	29.73	- 18	57	53	- 2	ESE	3	0	1	66	55	0.32	
	Corunna ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		
Lisbon ...	29.82	59	NW	2	r	29.88	+ 09	57	54	- 2	N	4	0	?	68	55	0.32		

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, 26th October

1889.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP

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

Changes since previous morning are stated in words.

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

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

→ = forces 5 to 7; → = forces 1 to 4.

☉ = dead calm.

SEA DISTURBANCE—Where considerable, is shown thus:

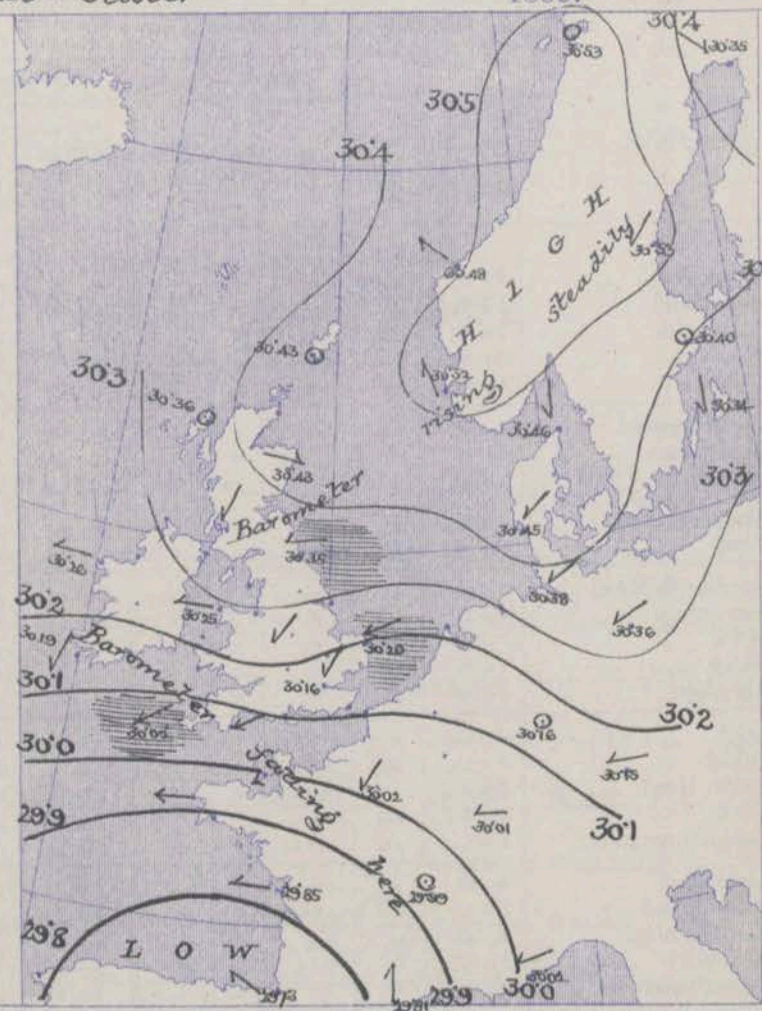
☼ = Rough. ☼ = High.

MEAN HEIGHT OF THE BAROMETER

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

During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS.
Sumburgh Head	29.708
Stornoway	29.735
Wick	29.745
Nairn	29.761
Aberdeen	29.774
Leith	29.804
Shields	29.835
York	29.872
Loughborough	29.891
Ardrossan	29.813
Donaghadee	29.832
Holyhead	29.853
Liverpool	29.861
Parsonstown	29.881
Valencia	29.873
Roche's Point	29.870
Pembroke	29.868
Scilly	29.894
Jersey	29.904
Hurst Castle	29.907
Dover	29.909
LONDON	29.911
Oxford	29.910
Cambridge	29.900
Yarmouth	29.886



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.

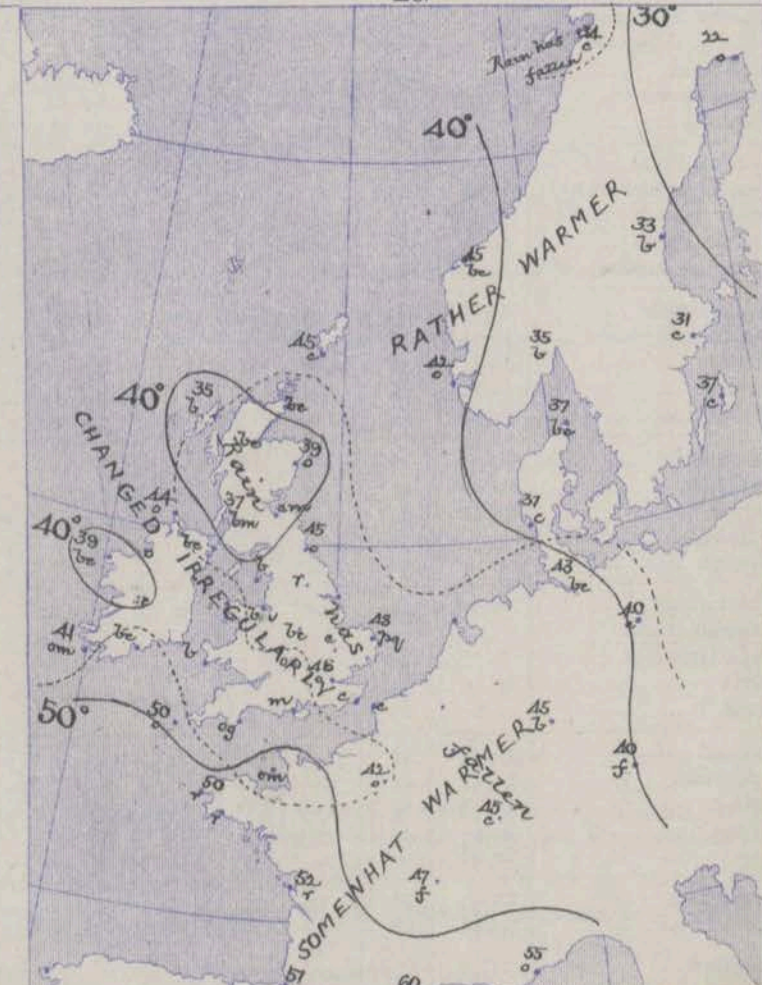
RAINFALL—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of October.)

STATIONS.	TEMPERATURE.				RAINFALL (Inches.)
	Daily Max.	Daily Min.	at 8 a.m.		
			Dry.	Wet.	
Sumburgh Head.....	49.7	41.6	46.0	44.3	4.33
Stornoway	50.5	39.5	45.3	44.1	4.94
Wick.....	51.6	40.1	46.1	44.3	2.94
Nairn	51.6	40.6	44.5	42.5	2.38
Aberdeen	52.3	41.0	45.5	43.5	2.88
Leith.....	54.7	41.5	46.5	44.7	1.94
Shields.....	53.0	42.8	47.1	45.4	2.46
York.....	51.8	41.0	45.9	44.5	2.64
Loughborough	55.3	41.4	46.4	45.0	2.98
Ardrossan	53.5	43.6	47.6	45.6	4.31
Donaghadee.....	53.2	43.3	47.7	46.5	3.35
Holyhead.....	54.5	47.0	50.2	48.2	4.53
Liverpool	53.6	44.6	47.8	45.8	3.02
Parsonstown	54.7	41.1	46.4	44.7	3.27
Valencia	56.0	46.5	51.3	49.1	6.09
Roche's Point	55.8	45.9	50.2	48.4	4.17
Pembroke.....	54.8	48.0	51.2	49.1	4.13
Scilly	56.6	50.3	53.8	51.7	3.84
Jersey	58.1	49.2	53.6	51.1	4.34
Hurst Castle	57.1	46.0	51.4	49.6	3.24
Dover	55.8	47.0	50.7	48.7	3.28
LONDON	56.6	45.2	48.0	46.4	2.74
Oxford	55.3	42.5	46.7	45.3	2.72
Cambridge	56.4	41.2	46.4	45.4	2.36
Yarmouth	54.3	44.8	49.2	47.9	2.97

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



GENERAL SITUATION AT 8 A.M.

PRESSURE	<p>Highest, 30.3 in. to 30.5 in. in the anticyclone lying over Scandinavia, the North Sea, and the northern part of Great Britain.</p> <p>Lowest, 29.8 in. and less in a depression lying over Spain, the southwest of France, and southern part of the Bay of Biscay.</p> <p>Baromet. were moderate in the south, slight in the north.</p> <p>Baromet. was falling a little at the southern stations, rising slightly in the north.</p>
TEMPERATURE	<p>Highest, 60° at Perpignan, 57° at Lisbon and Biarritz, 50° at Kelly, and 49° at Ouzages.</p> <p>Lowest, 22° at Haparanda, 31° at Stockholm, 34° at Kain, 39° at Aberdeen, and 41° in London.</p> <p>Its changes during the past 24 hours have been very irregular.</p>
WIND	<p>Calm or very light and variable at our northern stations. E^{ly} to NE^{ly} over Ireland, England and the Bay of Biscay, and blow strongly on our southern and southern coasts.</p> <p>At Lisbon it was N^{ly} and at Perpignan S^{ly}.</p>
WEATHER	<p>Fine and bright over the western and most of the northern part of our area, dull and somewhat rainy in the south.</p> <p>Slight rain fell over the northeastern part of Great Britain yesterday.</p>
SEA	<p>Rather rough in the south and east, moderate to slight in most other places, very smooth in far north.</p>

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The depression in the south seems likely to produce further showers over the southern and eastern part of our Islands accompanied by strong E^{ly} breezes, but in the north no important change is indicated.

FORECASTS

For the 24 hours ending at NOON on 27th OCTOBER 1889.

DISTRICTS.	FORECASTS.	DISTRICTS.	FORECASTS
0 { SCOTLAND NORTH	Very light winds, fair as a whole.	6 { SCOTLAND WEST	Same as Nos 0 and 1
1 { SCOTLAND EAST		7 { ENGLAND N.W.	E ^{ly} winds, moderate, fair.
2 { ENGLAND N.E.	E ^{ly} winds freshening, squally, some showers.	8 { ENGLAND S.W.	Same as No 5
3 { ENGLAND EAST	Same as No 5	9 { IRELAND NORTH	E ^{ly} breezes, moderate or fresh, fair as a whole
4 { MIDLAND COUNTIES	Same as No 2	0 { IRELAND SOUTH	
5 { ENGLAND SOUTH	E ^{ly} winds, strong, squally, showery, 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.

	Bar:	Ther:		Wind		Wea:	Sea		Bar.	Ther:		Wind		Wea:	Sea.
		D	W	D	F					D	W	D	F		
Skudesnaes ...	30.44	47	39	20	0	b	3		Holyhead ...	30.26	49	43	2	3	2
Sumburgh Head ...	30.38	48	43	20	0	bc	1		Valencia ...	30.21	51	48	11	bc m	1
Stornoway ...	30.30	51	47	sw	3	b	3		Scilly ...	30.11	51	49	sw	5	4
Aberdeen ...	30.40	46	40	ese	2	cp	4		Jersey ...	30.11	55	52	ene	3	3
Shields ...	30.32	47	43	E	3	c	5		Dungeness ...	30.16	53	48	ene	3	2
Ardrossan ...	30.32	48	46	NE	2	c	1		London ...	30.20	52	47	ene	2	bc m
Malin Head ...	30.28	49	45	ese	3	c	1		Yarmouth ...	30.18	50	48	ene	5	cg q
Mullaghmore ...	30.27	49	47	E	3	bc	2		Rochefort ...	30.01	65	61	a	2	2
Belmullet ...	30.27	54	49	sw	1	b	2								

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

The reports for yesterday morning showed that pressure was highest, 30.3 in: and upwards, in a long band extending from Northern Russia to Scotland, the highest readings of all, 30.4 in: and upwards, being reported at Skudesnaes. The lowest reading, 29.7 in: and less, was found in a depression, the centre of which lay near Kharkov, but another disturbance, with readings below 29.8 in: was lying off the southwest of Spain. The wind was light or moderate from the NEst or Est over the greater part of Northern and Western Europe, but in the extreme north of Russia, the west of Norway, and the north of Scotland it was light from the Sst or SWst. Over the south of Russia the wind was NWst, and over Central Europe light and variable, while over Spain it was chiefly SEst. The weather was fine in the west and north of our Islands, as well as in Sweden, the south of Austria, and the extreme south of Russia. Elsewhere, however, the sky was mostly cloudy or overcast, with rain and fog at several of the English, French, Spanish and German stations. Temperature had risen slightly in Scandinavia, Finland, and the north of Scotland, as well as in Algeria and the south of France, but fallen elsewhere — several degrees over the central and southern parts of Russia; readings ranged from 40° and upwards in Algeria and 60° and upwards over the Adriatic and Mediterranean to several degrees below the freezing point over Northern and Central Russia. The highest individual readings were 80° at La Galla, 72° at Komarov and Oran, 70° at Sumale, 69° at Algiers, 68° at St. Louis, 66° at Barcelona, 64° at Sanguinane, 63° at Linaia (the Italian reports had not arrived); the lowest were 20° at Archangel, St. Petersburg, and Moscow, 21° at Riga, 22° at Libau, 23° at Kuopio, 25° at Mennel, 27° at Helsingfors, and 28° at Haparanda and Krasnoyarsk.

In the course of the day the depression off the southwest of Spain moved slowly northwards and occasioned a slight fall of the barometer in the west of France. No important change was observed in the winds or weather.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

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

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

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

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

DAILY WEATHER REPORT.

for Sunday 27th OCTOBER 1889.
Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.

STATIONS.	YESTERDAY EVENING.						8 A.M. TO DAY.										PAST 24 HOURS		
	Barometer at 32° F. and Sea Level.	Temp. in Shade.	WIND.			Barometer Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	SHADE TEMP.			WIND.			Sea. (0 to 9.)	SHADE TEMP.				
			Dir.	Force. (0 to 12.)	Weather.			Dry.	Wet.	Difference from 8 a.m. yesterday.	Dir.	Force. (0 to 12.)	Weather.		Max.	Min.	Amount of Rainfall.		
SCANDINAVIA.																			
Haparanda ...	30.46	24	NW	2	b	30.40	+ .05	20	20	- 2	Z	0	b	*	34	18	—		
Hernösand ...	30.58	24	Z	0	r	30.49	- .04	22	21	- 11	Z	0	b	*	43	22	—		
Stockholm ...	30.59	34	Z	0	b	30.60	+ .20	34	32	+ 3	Z	0	c	*	41	28	—		
Wisby ...	30.48	36	N	4	b	30.56	+ .22	36	34	- 1	E	2	b	*	41	30	—		
Bodö ...	30.52	31	E	2	b	30.38	- .15	32	28	- 2	E	2	0	1	34	28	—		
Christiansund	30.51	40	SW	1	b	30.43	- .05	39	34	- 6	ESE	2	b	2	46	34	—		
Skudesnaes ...	30.55	36	Z	0	b	30.47	- .05	44	38	+ 2	E	4	0	4	50	36	—		
Christiania Fjord (Fæder)	30.58	42	N	2	b	30.55	+ .07	40	36	+ 5	ESE	4	0	3	42	39	—		
Skagen (The Scaw)	30.51	41	ESE	2	b	30.47	+ .01	40	38	+ 3	SE	3	0	3	41	37	—		
Fanö ...	30.47	34	NE	4	0	30.35	- .10	39	37	+ 2	E	3	c	*	43	34	—		
Sumburgh Head	30.43	43	Z	0	0	30.33	- .10	42	40	- 3	SSE	1	0	3	47	40	0.02		
Stornoway ...	30.25	40	Z	0	c	30.23	- .13	42	40	+ 8	SW	2	0	2	48	32	—		
Wick ...	30.40	45	SE	2	0	30.27	- .17	43	42	- 1	SE	3	0	2	47	40	0.03		
Nairn ...	30.38	39	Z	0	c	30.26	- .15	35	34	+ 1	ESE	1	b	1	46	33	—		
Aberdeen ...	30.42	42	ESE	3	0	30.27	- .16	43	40	+ 4	E	4	ogp	4	45	39	0.10		
Leith ...	30.32	42	E	1	c	30.20	- .18	43	41	+ 2	E	3	r	*	45	39	0.08		
Shields ...	30.31	47	E	5	0	30.07	- .28	46	43	+ 1	ENE	5	0	5	48	43	0.06		
Spurn Head ...	30.20	46	ENE	4	c	29.91	- .27	46	44	- 3	ENE	4	0	6	50	44	—		
York ...	30.24	44	N	3	c	29.99	- .32	44	41	+ 2	NNW	3	0	*	49	41	0.17		
Loughborough	30.17	44	ENE	4	b	29.88	- .37	42	40	+ 1	NE	4	ogp	*	50	41	—		
Ardrossan ...	30.30	44	NE	2	om	30.19	- .16	46	44	+ 9	NE	2	0	1	46	36	—		
Malin Head ...	30.28	44	SE	2	0	30.17	- .13	45	42	+ 1	E	4	b	3	47	41	0.28		
Mullaghmore ...	30.26	46	E	4	om	30.18	- .09	45	42	0	NE	5	c	3	48	41	—		
Belmullet ...	30.26	46	E	2	0	30.18	- .08	46	42	+ 7	ENE	1	b	*	48	38	0.02		
Donaghadee ...	30.27	48	E	4	c	30.14	- .19	45	43	0	NE	5	c	3	48	44	0.03		
Barrow-in-Furness	30.22	46	ENE	2	c	29.98	- .30	44	42	+ 4	NE	3	c	*	48	39	—		
Liverpool (Bidston)	30.20	45	E	4	0	29.98	- .31	42	40	+ 1	NE	3	0	3	48	41	—		
Holyhead ...	30.16	47	ENE	4	ogm	29.99	- .26	46	43	+ 2	NE	5	ogm	5	49	44	—		
Parsonstown ...	30.19	42	Z	0	b	30.08	- .15	37	36	- 2	Z	0	c	*	48	36	0.02		
Valencia...	30.17	47	NNE	2	b	30.10	- .09	45	43	+ 4	NNE	4	b	4	52	40	—		
Roche's Point...	30.12	46	E	3	b	30.01	- .15	43	40	- 2	NNE	3	b	4	55	40	—		
Pembroke (St. Ann's Hd.)	30.07	47	NE	4	b	29.85	- .31	43	42	- 1	NE	4	b	3	50	43	—		
Scilly ...	29.97	51	NE	4	ow	29.71	- .31	30	46	0	NNE	8	0	6	57	48	—		
Prawle Point...	29.90	50	ENE	4	0	29.62	- .43	41	41	- 7	NNE	7	r	6	50	41	0.29		
Jersey (St. Aubin's)	29.82	53	NNE	6	om	29.46	- .55	53	52	+ 2	E	4	omr	3	54	48	0.53		
Hurst Castle ...	29.95	50	NE	6	c	29.59	- .53	46	46	- 3	NE	8	pm	4	52	45	0.47		
Dungeness ...	29.98	51	E	7	0	29.64	- .49	47	46	- 2	E	7	ow	4	52	45	0.35		
London ...	30.08	48	NE	5	0	29.69	- .47	44	44	- 2	ENE	4	r	*	52	44	0.41		
Oxford ...	30.07	44	NE	4	c	29.75	- .46	40	40	- 3	N	6	ogp	*	51	40	0.35		
Cambridge ...	30.13	42	N	2	b	29.79	- .43	43	43	0	NE	2	r	*	49	40	0.42		
Yarmouth ...	30.15	46	E	7	cq	29.82	- .38	45	44	- 3	E	9	ogp	8	48	43	0.47		
Cuxhaven ...	30.41	39	ENE	6	b	30.26	- .12	36	34	- 7	E	6	c	*	43	34	—		
Berlin ...	30.45	37	E	2	c	30.38	+ .02	29	27	- 11	E	5	c	*	43	28	—		
Wiesbaden ...	*	*	*	*	*	30.00	- .16	45	42	0	NE	2	0	*	52	43	0.12		
Munich ...	30.12	44	NE	6	0	30.01	- .14	39	37	- 1	E	6	0	*	48	37	0.04		
FRANCE AND NETHERLANDS.																			
The Helder ...	30.24	42	E	5	b	29.95	- .33	36	35	- 8	E	5	r	4	45	37	0.08		
Brussels (9 a.m.)	*	*	*	*	*	29.78	- .39	46	45	+ 2	ESE	3	c	*	49	41	0.20		
Cape Gris Nez	?	46	E	6	0	?	?	43	42	0	ESE	7	0	6	55	39	0.32		
Paris ...	29.83	48	NE	3	0	29.69	- .33	55	52	+ 13	S	3	b	*	?	42	0.08		
Brest ...	?	50	ENE	7	r	?	?	50	49	0	E	5	r	4	57	45	0.59		
Lorient ...	29.71	49	E	5	r	29.49	- .34	50	50	0	Z	0	r	2	54	46	1.18		
Rochefort ...	29.70	52	E	4	r	29.67	- .18	58	55	+ 6	SW	6	b	3	?	48	1.84		
Belfort ...	29.97	44	E	1	r	29.88	- .13	43	37	- 2	E	1	r	*	59	43	0.08		
Lyons ...	29.81	49	N	1	0	29.79	- .20	52	56	+ 12	NNW	1	0	*	65	46	0.04		
Nice ...	29.93	63	ENE	5	0	29.88	- .14	62	59	+ 7	ESE	2	c	4	68	55	—		
Perpignan ...	29.72	62	SE	3	a	29.77	- .04	48	48	- 12	Z	0	b	*	70	48	0.24		
Biarritz ...	29.66	59	NNW	6	r	29.71	- .02	54	50	- 3	SE	4	0	2	61	52	—		
PENINSULA.																			
Corunna ...	*	*	*	*	*	29.82	- .03	54	52	- 2	NNW	6	0	6	59	48	—		
Lisbon ...	29.95	55	NW	4	b	29.96	+ .08	53	50	- 4	WSW	2	b	2	63	52	—		

For Explanation of Columns, see bottom of p. 4

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

WEATHER CHARTS

for 8 a.m. on

Sunday, 27th October,

1889.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP

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

Changes since previous morning are stated in words.

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

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

→ = forces 5 to 7; → = forces 1 to 4.

☉ = dead calm.

SEA DISTURBANCE—Where considerable, is shown thus:

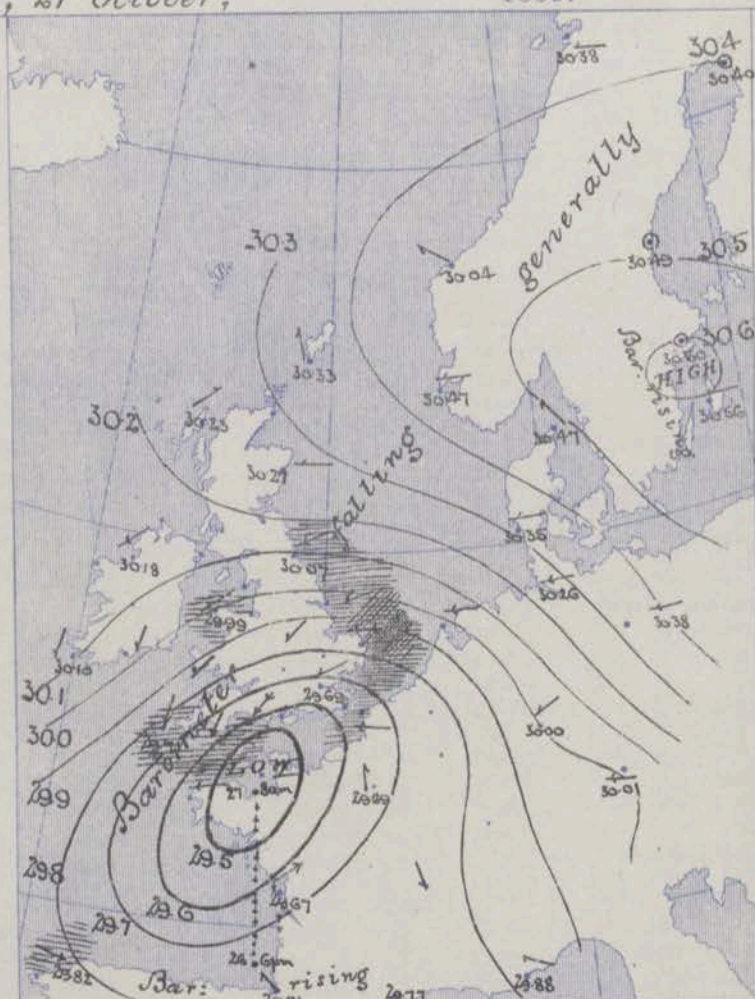
— Rough. — High.

MEAN HEIGHT OF THE BAROMETER

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

During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS.
Sumburgh Head	29.708
Stornoway	29.735
Wick	29.745
Nairn	29.761
Aberdeen	29.774
Leith	29.804
Shields	29.835
York	29.872
Loughborough	29.891
Ardrossan	29.813
Donaghadee	29.832
Holyhead	29.853
Liverpool	29.861
Parsonstown	29.881
Valencia	29.873
Roche's Point	29.870
Pembroke	29.868
Scilly	29.894
Jersey	29.901
Hurst Castle	29.907
Dover	29.909
LONDON	29.911
Oxford	29.910
Cambridge	29.900
Yarmouth	29.886



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.

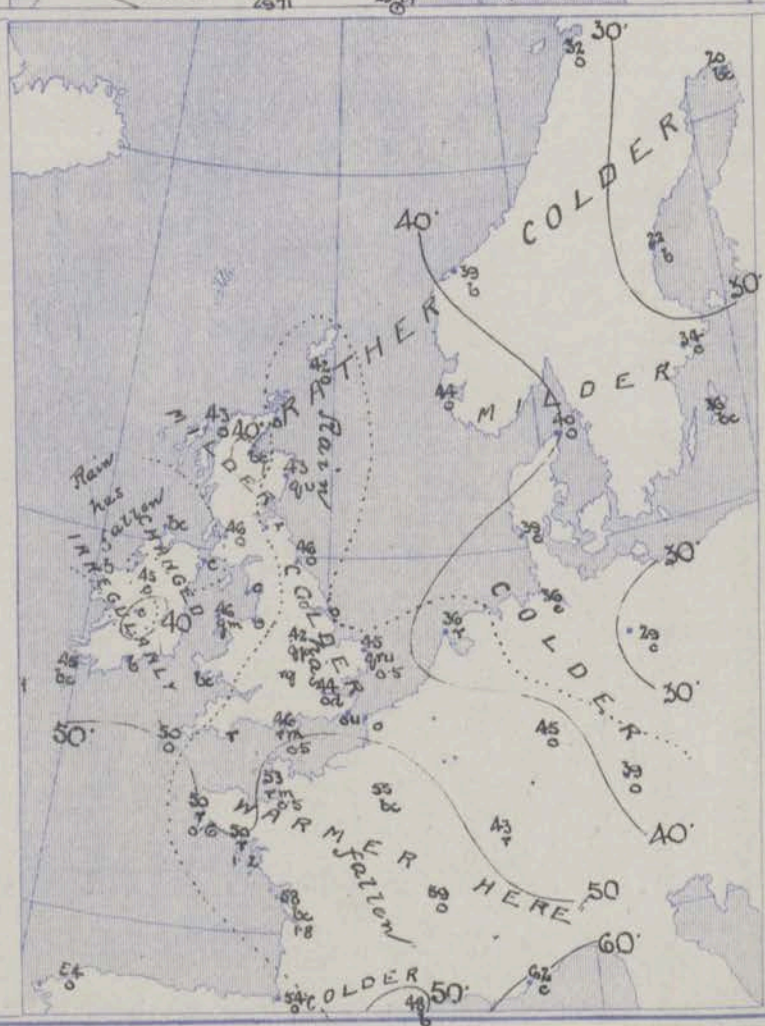
WEATHER is shown by Letters of the Beaufort Scale.

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 October.)

STATIONS.	TEMPERATURE.				RAINFALL (Inches.)
	Daily Max.	Daily Min.	at 8 a.m.		
			Dry.	Wet.	
Sumburgh Head.....	49.7	41.6	46.0	44.3	4.33
Stornoway.....	50.5	39.5	45.3	44.1	4.94
Wick.....	51.6	40.1	46.1	44.3	2.94
Nairn.....	51.6	40.0	44.5	42.5	2.38
Aberdeen.....	52.3	41.0	45.5	43.5	2.88
Leith.....	54.7	41.5	46.5	44.7	1.91
Shields.....	53.0	42.8	47.1	45.1	2.46
York.....	54.8	41.0	45.9	44.5	2.64
Loughborough.....	55.3	41.4	46.4	45.0	2.98
Ardrossan.....	53.5	43.6	47.6	45.6	4.31
Donaghadee.....	53.2	43.3	47.7	46.5	3.35
Holyhead.....	54.5	47.0	50.2	48.2	4.53
Liverpool.....	53.6	44.6	47.8	46.8	3.62
Parsonstown.....	54.7	41.1	46.4	44.7	3.27
Valencia.....	56.6	46.5	51.3	49.1	6.09
Roche's Point.....	55.8	45.9	50.2	48.4	4.17
Pembroke.....	54.8	48.0	51.2	49.1	4.13
Scilly.....	50.6	50.3	53.8	51.7	3.84
Jersey.....	58.1	49.2	53.6	51.1	4.34
Hurst Castle.....	57.1	46.0	51.4	49.6	3.24
Dover.....	55.8	47.0	50.7	48.7	3.28
LONDON.....	56.6	43.2	48.0	46.4	2.74
Oxford.....	55.3	42.5	46.7	45.3	2.72
Cambridge.....	56.4	41.2	46.4	45.4	2.36
Yarmouth.....	54.3	44.8	49.2	47.9	2.07

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



GENERAL SITUATION AT 8 A.M.

PRESSURE	<p>Highest, 30.5 in. to 30.6 in. in an anticyclone lying over the Baltic and the south of Sweden.</p> <p>Lowest, 29.5 in. and less, in a depression lying over the northwest of France.</p> <p>Gradients steep over England, the Netherlands and Western Germany, but slight elsewhere.</p> <p>Barometer rising in Spain and the south of France, but falling elsewhere—quickly in the south of England.</p>
TEMPERATURE	<p>Highest, 62° at Nice, 59° at Lyons, 58° at Rochefort, 55° at Paris, 54° at Barmatz, 53° at Jersey and 50° at Portland, Lowest.</p> <p>Lowest, 20° at Haparanda, 21° at Helsingfors, 23° at Berlin, 31° at Riga, 34° at Stockholm and 35° at Kain.</p>
WIND	<p>E over the greater part of our Islands, the North Sea, the Netherlands, and Germany, but SE in the extreme north of Scotland.</p> <p>Strong to a gale over the Channel and east of England, strong at some of the German stations.</p> <p>Moderate to strong from the S.W. or S.W. in France, and from W. in Spain.</p>
WEATHER	<p>Fine in Ireland, Scandinavia and the central parts of Scotland and France.</p> <p>Dull elsewhere with heavy rain in the south of England and north of France.</p> <p>Since yesterday morning 0.6 in. of rain has fallen at Brest 0.9 in. at Barmatz, 1.2 in. at Jersey and 1.3 in. at Rochefort.</p>
SEA	<p>Very high at Yarmouth and rough on our east and south coasts generally.</p>

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

FORECASTS

For the 24 hours ending at NOON on 28th OCT^r 1889.

DISTRICTS.

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

FORECASTS.

ISSUED

NONE

DISTRICTS.

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

FORECASTS

ISSUED

NONE

WARNINGS

NORTH CONE hoisted yesterday in districts 2, 3, 5 and 8, and this morning in district 1.

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

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

YESTERDAY'S 2 P.M. REPORTS.

	Bar:	Ther:		Wind		Wea:	Sea		Bar:	Ther:		Wind		Wea:	Sea
		D	W	D	F					D	W	D	F		
Skudesnaes ...	30.54	50	41	Z	0	bc	2	Holyhead ...	30.20	48	45	ENE	4	bc	3
Sumburgh Head ...	30.45	45	40	SSE	1	o	3	Valencia ...	30.17	51	48	NE	3	bcw	3
Stornoway ...	30.35	48	43	SW	3	bc	3	Scilly ...	29.97	51	47	NE	6	o	5
Aberdeen ...	30.42	45	40	SE	3	o	4	Jersey ...	29.88	52	49	ENE	6	o	4
Shields ...	30.39	45	44	E	5	r	5	Dungeness ...	30.02	52	48	E	7	bc	6
Ardrossan ...	30.32	45	43	NE	2	o	1	London ...	30.09	51	48	ENE	5	o	2
Malin Head ...	30.29	47	43	SE	3	b	2	Yarmouth ...	30.19	47	46	E	7	cg	6
Mullaghmore ...	30.27	47	45	E	5	omv	3	Rocheport ...	29.78	54	53	ENE	4	r	2
Belmullet ...	30.26	48	45	ESE	1	o	2								

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

The reports for yesterday morning showed that pressure was highest, 30.5 ins: and more, in an anticyclone lying over the greater part of Scandinavia and lowest, 29.8 ins: and less, in a large but shallow depression lying over the southwest of France and the northeast of Spain. An ill defined depression, with similar readings, was apparently lying to the northward of Algiers. The wind was light from the N^W over Russia as well as in Portugal, but NE⁴ or E⁷ over the greater part of Western and Central Europe; in the Channel and southeast of England it blew strongly. In Algeria S³ or SW² breezes were general, with a gale at Algiers, while in Italy and the south of Austria the wind was light from the Wnd. The weather was fine in the west and north of our Islands as well as in Scandinavia, Denmark, Western Germany, Portugal, and the south of Italy. Elsewhere, however, the sky was mostly cloudy or overcast, with rain in the west of France and north of Italy, and snow at Helsingfors. Temperature had fallen a few degrees in Germany, and the Central and Southern parts of Russia, but risen elsewhere; readings ranged from a little above 70° on the southern shore of the Mediterranean to many degrees below the freezing point over Russia. The highest individual readings were 75° at Malta, 72° at Aumale, 71° at La Galle, 70° at Algiers, 68° at Cagliari and Brindisi, and 67° at Genoa, Naples, Tunis, and Ispah; the lowest were 14° at Moscow, 20° at Uleaborg and Kiga, 21° at Mirel, 22° at Haparanda, 25° at St. Petersburg, 26° at Archangel, and 29° at Kuopio, Helsingfors, and Warsaw.

In the course of the day, the depression over the northeast of Spain moved steadily northwards, occasioning heavy rain at the French stations and a fresh to strong gale from the E^W or NE^W over the Channel and southeast of England. Rainy weather extended to the south and east of England at night.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

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

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

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

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

DAILY WEATHER REPORT.

for *Monday, 28th October, 1889.*
Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.

STATIONS.		YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
		Barometer at 3 p.m. and Sea Level.	Temp. in Shade.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Sea. (0 to 2.)	SHADE TEMP.				
				Dir.	Force. (0 to 12.)		Reading at 3 p.m. 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 ...	30.36	21	W	0	b	30.19	- 2.1	33	32	+ 13	Z	0	b	1	?	?		
	Hernösand ...	30.43	23	W	0	b	30.27	- 2.2	32	30	+ 10	SW	6	0	1	41	18		
	Stockholm ...	30.49	32	Z	0	b	30.36	- 1.4	39	35	+ 5	SSE	2	bc	1	?	30		
	Wisby ...	30.56	34	E	4	0	30.36	- 2.0	37	36	+ 1	S	4	0	1	39	30		
	Bodö ...	30.24	41	E	2	0	30.04	- 3.4	40	37	+ 8	SE	1	c	1	41	?		
	Christiansund	30.26	39	ESE	2	b	30.04	- 3.9	38	36	- 1	ESE	1	b	3	43	37		
	Skudesnaes ...	30.26	43	ESE	4	0	30.02	- 4.5	43	39	- 1	E	2	0	2	46	41		
	Christiania Fjord (Fjorder)	30.41	38	ESE	4	0	30.18	- 3.7	40	37	0	ENE	3	0	3	?	37		
	Skagen (The Scaw)	30.29	42	SE	4	0	30.09	- 3.8	42	40	+ 2	SSE	4	0	3	43	39		
	Fanö ...	30.05	39	E	6	0	29.93	- 4.2	39	38	0	SE	4	0	1	43	39	0.12	
BRITISH ISLANDS.	Sumburgh Head	30.17	43	SSE	1	0	29.93	- 4.0	44	42	+ 2	SSE	2	c	4	43	39	0.04	
	Stornoway ...	30.10	38	N	2	b	29.90	- 3.3	41	40	- 2	SW	4	c	4	48	28		
	Wick ...	30.11	40	NW	2	c	29.92	- 3.5	34	33	- 9	N	1	b	3	44	32	0.05	
	Nairn ...	30.10	43	Z	0	c	29.95	- 3.1	35	34	0	SW	1	b	1	47	34	0.05	
	Aberdeen ...	30.08	45	E	4	og	29.93	- 3.4	41	40	- 2	WNW	3	c	5	47	40	0.12	
	Leith ...	30.01	44	E	2	c	29.91	- 2.9	44	42	+ 1	N	2	cm	1	47	42	0.04	
	Shields ...	29.91	45	ENE	5	r	29.87	- 2.0	47	47	+ 1	N	3	0	5	47	43	0.13	
	Sp. n Head ...	29.76	47	ENE	4	r	29.80	- 1.1	50	50	+ 4	NNE	2	f	4	50	42	0.26	
	York ...	29.83	45	N	1	r	29.85	- 1.4	45	45	+ 1	N	1	m	1	46	43	0.43	
	Loughborough	29.75	44	NW	2	r	29.83	- 0.5	46	46	+ 4	NW	2	og	1	46	42	0.68	
GERMANY.	Ardrossan ...	30.02	42	NE	1	b	29.94	- 2.5	41	39	- 5	NW	1	0	1	46	38		
	Malin Head ...	30.06	46	N	4	b	29.96	- 2.1	45	41	0	N	2	b	2	46	44		
	Mullaghmore ...	30.08	45	NNE	5	c	29.99	- 1.9	43	40	- 2	N	2	b	2	50	42		
	Belmullet ...	30.13	44	NNE	2	b	30.01	- 1.7	?	?	?	SW	1	b	1	49	46	0.03	
	Donaghadee ...	29.99	47	NE	7	0	29.95	- 1.9	46	45	+ 1	NE	6	c	5	48	44		
	Barrow-in-Furness	29.84	45	NE	4	0	29.84	- 1.4	46	44	+ 2	NE	3	0	1	46	43	0.04	
	Liverpool (Bidston)	29.83	43	NNE	4	0	29.85	- 1.3	45	44	+ 3	NNE	1	0	2	46	42	0.11	
	Holyhead ...	29.85	48	NE	5	og	29.85	- 1.4	43	42	+ 2	NE	5	og	5	49	46	0.01	
	Parsonstown ...	30.00	42	NW	1	b	29.97	- 1.1	33	31	- 4	Z	0	b	1	48	32		
	Valencia ...	30.05	48	N	4	bc	30.00	- 1.0	45	43	0	NNE	2	b	2	50	42		
FRANCE AND NETHERLANDS.	Roche's Point...	29.94	46	NNE	5	b	29.93	- 0.8	42	39	- 1	N	5	b	4	51	40		
	Pembroke (St. Ann's Hd.)	29.75	46	NE	5	c	29.77	- 0.8	47	47	+ 4	NNE	4	gm	2	48	43	0.07	
	Scilly ...	29.66	50	N	8	0	29.70	- 0.1	52	49	+ 2	NNE	7	0	6	52	47	0.03	
	Prawle Point ...	29.61	45	NNE	4	0	29.70	+ 0.8	53	52	+ 12	ENE	2	og	2	53	40	0.10	
	Jersey (St. Aubin's)	29.57	56	S	3	cm	29.70	+ 2.4	54	52	+ 1	ESE	4	og	3	56	50	0.04	
	Hurst Castle ...	29.61	55	SW	5	c	29.74	+ 1.3	52	51	+ 6	ENE	2	b	3	55	46	0.43	
	Dungeness ...	29.69	57	S	4	c	29.71	+ 0.7	54	53	+ 7	ENE	2	r	1	58	46	0.35	
	London ...	29.69	54	SSE	2	cp	29.76	+ 0.7	47	47	+ 3	Z	0	f	1	55	44	0.18	
	Oxford ...	29.69	52	SSE	2	n	29.79	+ 0.4	45	45	+ 5	NNE	2	og	1	53	40	0.53	
	Cambridge ...	29.76	48	NNE	1	0	29.79	- 0.0	44	44	+ 1	N	1	om	1	52	41	0.12	
PENINSULA.	Yarmouth ...	29.75	51	ESE	5	c	29.77	- 0.5	51	50	+ 6	ESE	2	rm	4	52	44	0.14	
	Cuxhaven ...	30.05	38	ESE	6	bc	29.91	- 3.5	38	37	+ 2	SE	4	0	1	40	?		
	Berlin ...	30.17	36	ESE	5	b	30.01	- 3.7	37	35	+ 8	ESE	4	c	1	37	28		
	Wiesbaden ...	*	*	*	*	*	29.94	- 0.6	42	41	- 3	NE	1	b	1	44	41	0.08	
	Munich ...	29.92	40	NE	1	c	29.99	- 0.2	40	40	+ 1	S	3	0	1	48	36		
	The Helder ...	29.86	43	ESE	1	b	29.83	- 1.2	43	42	+ 7	E	1	r	1	43	?	0.20	
	Brussels (9 a.m.)	*	*	*	*	*	29.76	- 0.2	51	50	+ 5	NE	1	b	1	54	?	0.16	
	Cape Gris Nez	?	54	SSE	3	b	?	?	51	50	+ 8	ESE	2	r	2	63	43	0.55	
	Paris ...	29.76	55	E	1	0	29.78	+ 0.9	63	62	- 2	SW	3	0	1	64	52	0.35	
	Brest ...	?	48	E	5	r	?	?	51	49	+ 1	E	1	m	2	57	46	0.16	
PENINSULA.	Lorient ...	29.55	53	E	3	r	29.64	+ 1.3	52	51	+ 2	WNW	1	0	2	55	46	0.20	
	Rochefort ...	29.73	56	S	4	b	29.82	+ 1.5	56	53	- 2	SW	5	r	3	61	48	0.08	
	Belfort ...	29.91	43	E	1	r	29.88	- 0.0	43	37	0	E	1	0	1	61	34	0.16	
	Lyons ...	29.82	55	ENE	1	0	29.92	+ 1.3	54	51	- 5	W	1	0	1	60	?	0.35	
	Nice ...	29.87	64	ENE	6	r	29.97	+ 0.9	59	59	- 3	SW	2	c	2	68	57	0.16	
	Perpignan ...	29.71	61	S	3	b	29.92	+ 1.5	46	44	- 2	SW	1	bc	1	71	44		
	Biarritz ...	29.73	59	SW	4	bc	29.86	+ 1.5	54	50	0	SW	3	b	2	64	62		
	Corunna ...	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		
	Lisbon ...	29.95	55	NNE	2	b	29.94	- 0.2	50	47	- 2	NNE	4	0	1	61	50		

For Explanation of Columns, see bottom of p 4

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

WEATHER CHARTS

for 8 a.m. on

Monday, 28th October,

1889.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP

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

Changes since previous morning are stated in words.

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

→ forces above 10; → forces 8 to 10;

→ forces 5 to 7; → forces 1 to 4.

⊙ = dead calm.

SEA DISTURBANCE—Where considerable, is shown thus:

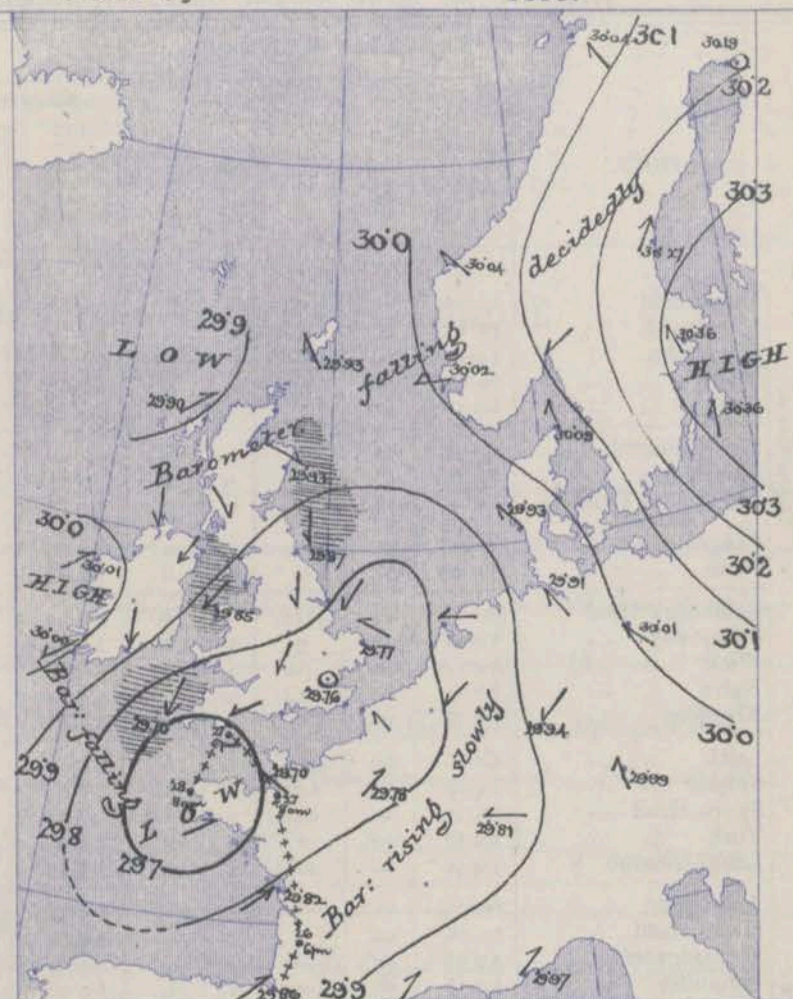
⊞ = Rough. ⊞ = High.

MEAN HEIGHT OF THE BAROMETER

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

During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS.
Sumburgh Head	29.708
Stornoway	29.735
Wick	29.745
Nairn	29.761
Aberdeen	29.774
Leith	29.804
Shields	29.835
York	29.872
Loughborough	29.891
Ardrossan	29.813
Donaghadee	29.832
Holyhead	29.853
Liverpool	29.864
Parsonstown	29.881
Valencia	29.873
Roche's Point	29.870
Pembroke	29.868
Seilly	29.894
Jersey	29.904
Hurst Castle	29.907
Dover	29.909
LONDON	29.911
Oxford	29.910
Cambridge	29.900
Yarmouth	29.886



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.

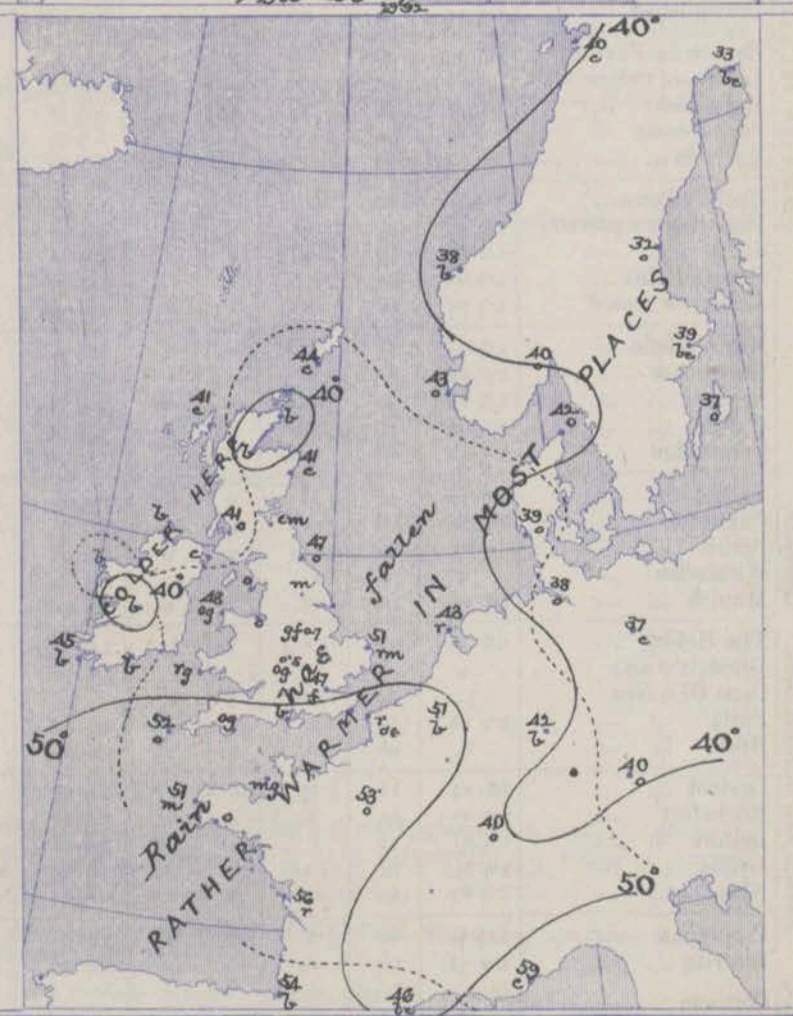
WEATHER is shown by Letters of the Beaufort Scale.

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 October.)

STATIONS.	TEMPERATURE.				RAINFALL. (Inches.)
	Daily Max.	Daily Min.	at 8 a.m. Dry.	Wet.	
Sumburgh Head	49.7	41.6	46.0	44.3	4.33
Stornoway	50.5	39.5	45.3	44.1	4.94
Wick	51.6	40.1	46.1	44.3	2.94
Nairn	51.6	40.6	44.5	42.5	2.38
Aberdeen	52.3	41.0	45.5	43.5	2.88
Leith	54.7	41.5	46.5	44.7	1.94
Shields	53.0	42.8	47.1	45.4	2.46
York	54.8	41.0	45.9	44.5	2.64
Loughborough	55.3	41.4	46.4	45.0	2.98
Ardrossan	53.5	43.6	47.6	45.6	4.31
Donaghadee	53.2	43.3	47.7	46.5	3.35
Holyhead	54.5	47.0	50.2	48.2	4.53
Liverpool	53.6	44.6	47.8	46.8	3.62
Parsonstown	54.7	41.1	46.4	44.7	3.27
Valencia	56.6	46.5	51.3	49.1	6.09
Roche's Point	55.8	45.9	50.2	48.4	4.17
Pembroke	54.8	48.6	51.2	49.1	4.13
Seilly	56.6	50.3	53.8	51.7	3.84
Jersey	58.1	49.2	53.6	51.1	4.34
Hurst Castle	57.1	46.0	51.4	49.6	3.24
Dover	55.8	47.0	50.7	48.7	3.28
LONDON	56.6	48.2	48.0	46.4	2.74
Oxford	55.3	42.5	48.7	45.3	2.72
Cambridge	56.4	41.2	46.4	45.4	2.36
Yarmouth	54.3	44.8	49.2	47.9	2.97

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



GENERAL SITUATION AT 8 A.M.

PRESSURE	<p>Highest, 30.00 in. to 30.36 in. over Scandinavia, 30.0 in. and more, over extreme west of Ireland.</p> <p>Lowest, 29.90 in. at Stromsund, 29.7 in. and less, in a depression lying near Lohant.</p> <p>Gradients vary extremely both in direction and steepness.</p> <p>Barometer changing little in the south, falling decidedly in the north and northwest.</p>
TEMPERATURE	<p>Highest, 55° at Nice, 56° at Roshfort, 54° at Binnity, and 52° to 54° at our own south coast stations and Jersey.</p> <p>Lowest, 32° at Helsingand, 33° at Haparanda and Pernarstom, 34° at Miek, 35° at Kuiv, and 36° at Christiansund.</p> <p>It has fallen decidedly in Ireland, risen over Sweden, the Baltic, and Germany, and changed irregularly elsewhere.</p>
WIND	<p>Light SE. on eastern shores of North Sea — SW in north of Scotland.</p> <p>N. to NE. light to moderate, over England and Ireland.</p> <p>SW over France — S to SE over Germany — N at Lisbon.</p> <p>The gales experienced yesterday have completely died down.</p>
WEATHER	<p>Fine in Scotland and Ireland — Dull, gloomy and foggy over England, France, and the North Sea, with rain in places.</p> <p>Rainfall has ceased over the midland counties, where it was heavy yesterday.</p>
SEA	<p>Rather rough at several of our eastern and western stations, moderate or slight in most other places, smooth in the Bay of Biscay.</p>

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

Due to the sudden change in movement of the depression near Lohant the danger of any further gale from NE prevailing on our coasts at present has disappeared. The signals have consequently been all lowered. The weather will probably become finer over England during the day, but fog is likely to be formed again inland at night, with falling temperature.

FORECASTS

For the 24 hours ending at NOON on 29th OCT^r 1889.

DISTRICTS.	FORECASTS.	DISTRICTS.	FORECASTS
0 SCOTLAND NORTH	SW ⁷ winds, freshening; showery.	6 SCOTLAND WEST	Same as N° 0.
1 SCOTLAND EAST	Variable and SW ⁷ breezes, light; fair as a whole.	7 ENGLAND N.W.	
2 ENGLAND N.E.		8 ENGLAND S.W.	
3 ENGLAND EAST	Calms and Variable airs; foggy, damp.	9 IRELAND NORTH	Wind falling light and shifting to the SW ⁷ ; fine to unsettled.
4 MIDLAND COUNTIES		10 IRELAND SOUTH	
5 ENGLAND SOUTH			
		WARNINGS	Signals all lowered this morning.

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

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

YESTERDAY'S 2 P.M. REPORTS.

	Bar.	Ther.		Wind		Wea.	Sea		Bar.	Ther.		Wind		Wea.	Sea.
		D	W	D	F					D	W	D	F		
Skudesnaes ...	30.36	44	41	ESE	6	0	4		Holyhead ...	29.68	48	44	NE	5	5
Sumburgh Head ...									Valencia ...						
Stornoway ...	30.15	47	42	SW	2	C	2		Scilly ...						
Aberdeen ...									Jersey ...	29.53	53	52	SE	4	3
Shields ...									Dungeness ...	29.66	58	55	S	4	4
Ardrossan ...									London ...						
Malin Head ...	30.11	46	42	NNE	4	0	2		Yarmouth ...						
Mullaghmore ...									Rochefort ...	29.73	59	56	SW	5	3
Belmullet ...	30.14	48	45	NW	2	6	*								

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

The reports for yesterday morning showed that pressure was highest, 30.5 ins. to 30.6 ins. in an anticyclone which extended from the central and southern parts of Sweden to Poland, and lowest, 29.5 ins. and less, in a well defined and rather deep depression which had travelled northwards from Spain to Brittany. Over England, the Netherlands and North Germany the gradients (for E winds) were steep. The wind was E³ over the greater part of our Islands, the North Sea, and central Europe, and over the Channel and east of England it blew with the force of a fresh to strong gale. In Spain however, the wind was W² and in France SW² or S², while in Russia and Italy it was light from the NW² or N². At the Algerian stations S² or SE² breezes were reported. The weather was fine in Ireland, as well as in the north of Scandinavia, the greater part of Russia, central France and the south of Spain. Elsewhere, however, the sky was cloudy or overcast with heavy rain in the south and east of England and the North of France, and snow at Moscow. Temperature had risen a few degrees in the extreme west and north of our Islands, and also over Italy, central France and the Baltic Provinces but fallen elsewhere; readings ranged from 70° and upwards over Tunis, the south of Italy and the neighbouring parts of the Mediterranean to several degrees below the freezing point over Lapland, Finland and central Russia. The highest individual readings were 77° at La Caille, 75° at Spas, 73° at Cagliari, 70° at Naples and Palermo, 68° at Rome, and 67° at Sanguinaire and Leina; the lowest were 19° at Tharkow, 20° at Haparanda, 21° at St Petersburg and Moscow, 22° at Hernösand, Umeå and Helsingfors, 23° at Warsaw and Kiev, and 25° at Kuopio and Lemberg.

In the course of the day the depression over Brittany moved slowly northwards to the S coast of Devonshire. In the south and southeast of England the wind veered to the S² and moderated, but on our west coasts the NE² breezes increased to the force of a moderate gale.

SUMMARY OF CHANGES IN THE WEATHER OVER THE BRITISH ISLANDS AND THEIR NEIGHBOURHOOD FROM THE 20TH TO THE 26TH OCTOBER 1889

The complex distribution of pressure which prevailed over western and northwestern Europe (including the British Islands) at the beginning of the week, and the wet, thundery, unsettled weather which was observed in consequence, disappeared very slowly as the week advanced—the low pressure area which lay off our southwestern coasts after undergoing great modification in form, having moved eastwards over the Channel and our southern counties to Germany. As the above changes took place the anticyclonic system in the north stretched westward over Scotland and Ireland, and then spreading southwards caused light NE² and E² winds to become prevalent over the Kingdom generally, while fine weather set in at all our northwestern and western stations. In the east some rain continued to fall from day to day, even when it had ceased elsewhere, but was small in amount, and on Thursday evening some slight falls of snow were reported on our northeast coast. Temperature, which was very uniform at first fell greatly during the night over the inland parts of Ireland and Scotland, as the anticyclone became general, a decided frost being experienced in those regions early on the 24th and 25th, and a very slight one (on the grass) in some parts of England on the latter date.

At the close of the week, however, a large depression had appeared over Spain, and, spreading northwards, was causing E² gales to set in on our eastern and southern coasts, with rain. In the North the weather remained quiet, but night frosts were no longer reported in Ireland owing to the setting in of a definite breeze from the E².

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, 29th October, 1889.*
 Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.

STATIONS.	YESTERDAY EVENING.						8 A.M. TO-DAY.										PAST 24 HOURS		
	Barometer at 32° F. and Sea Level.	Temp. in Shade.	WIND.			Weather.	BAROMETER.		SHADE TEMP.			WIND.			Sea. (0 to 3.)	SHADE TEMP.			
			Direc.	Force. (0 to 12.)	Reading at 32° F. and Sea Level.		Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Direc.	Force. (0 to 12.)	Weather.	* Max.		Min.	Amount of Rainfall.		
SCANDINAVIA.	Haparanda ...	30.02	33	SW	2	0	29.91	- .25	31	31	- .2	Z	0	0	*	37	18	-	
	Hernösand ...	30.10	38	SSW	4	0	29.87	- .40	38	37	+ .6	Z	0	0	*	41	19	0.04	
	Stockholm ...	30.12	41	SE	4	0	29.89	- .47	41	40	+ .2	Z	0	0	*	43	32	0.20	
	Wisby ...	30.12	42	SSW	6	0	29.95	- .41	43	41	+ .6	Z	4	0	*	45	32	0.08	
	Bodö ...	29.88	35	E	2	0	29.71	- .33	34	30	- .6	Z	2	0	*	37	34	-	
	Christiansund	29.84	42	SSW	2	bc	29.68	- .36	44	40	+ .6	SSW	2	0	4	45	?	-	
	Skudesnaes ...	29.88	46	SSW	6	0	29.79	- .23	46	43	+ .3	SSW	6	0	4	46	?	-	
	Christiania Fjord (Fierder)	29.97	40	SSW	2	m	29.82	- .36	39	38	- .1	NW	3	0	2	41	37	0.20	
	Skagen (The Scaw)	29.89	44	S	3	0	29.77	- .32	45	45	+ .3	SSW	1	0	1	45	?	0.08	
	Fanö ...	29.82	40	SE	2	0	29.82	- .11	46	46	+ .7	W	4	0	*	50	39	0.08	
BRITISH ISLANDS.	Sumburgh Head	29.76	43	Z	0	bc	29.58	- .35	46	44	+ .2	SSW	2	0	4	48	42	0.05	
	Stornoway ...	29.74	48	SW	5	0	29.43	- .47	49	49	+ .8	S	7	0	6	49	39	0.15	
	Wick ...	29.80	42	SW	2	0	29.67	- .35	46	43	+ .12	S	1	0	1	49	32	0.03	
	Nairn ...	29.78	42	Z	0	0	29.59	- .36	44	42	+ .9	Z	0	0	1	47	34	0.01	
	Aberdeen ...	29.84	38	WSW	1	bm	29.69	- .24	39	38	- .2	S	2	0	4	47	33	0.06	
	Leith ...	29.85	42	W	1	0	29.75	- .16	42	41	- .2	NW	1	0	*	47	39	0.02	
	Shields ...	29.85	47	N	2	0	29.82	- .05	47	46	0	WSW	1	0	3	49	44	-	
	Spurn Head ...	29.82	49	NNE	2	0	29.86	+ .06	50	48	0	SSW	3	0	3	51	47	0.28	
	York ...	29.85	48	N	1	0	29.85	0.00	47	47	+ .2	S	1	0	*	50	44	-	
	Loughborough	29.86	48	NW	1	0	29.88	+ .05	49	49	+ .3	SSW	1	0	*	49	46	0.02	
GERMANY.	Ardrossan ...	29.86	41	Z	0	bc	29.72	- .32	47	46	+ .6	S	4	0	3	49	38	0.01	
	Malin Head ...	29.85	45	SSW	2	0	29.60	- .36	44	44	- .1	S	5	0	3	50	43	0.02	
	Mullaghmore ...	29.88	43	SW	1	bc	29.65	- .34	47	46	+ .4	SSW	6	0	5	55	42	0.11	
	Belmullet ...	29.87	48	SW	3	0	29.63	- .38	52	52	+ .12	SW	5	0	*	52	40	0.13	
	Donaghadee ...	29.89	44	N	2	bc	29.78	- .17	42	41	- .4	SW	3	0	2	49	40	-	
	Barrow-in-Furness	29.83	47	NE	2	0	29.79	- .05	49	48	+ .3	SE	1	0	*	50	45	-	
	Liverpool (Bidston)	29.86	46	S	1	0	29.85	0.00	46	46	+ .1	SSW	1	0	1	49	44	-	
	Holyhead ...	29.85	50	NE	3	0	29.83	- .02	48	47	0	Z	0	0	50	47	-		
	Parsonstown ...	29.92	39	Z	0	0	29.80	- .17	40	38	+ .7	SW	1	0	*	49	31	-	
	Valencia ...	29.93	46	NW	1	bc	29.80	- .20	53	51	+ .8	S	5	0	5	53	41	-	
FRANCE AND NETHERLANDS.	Roche's Point...	29.90	47	NW	5	bc	29.88	- .05	45	44	+ .3	SE	1	0	3	51	38	-	
	Pembroke (St. Ann's Hd.)	29.82	50	NE	2	0	29.86	+ .09	51	51	+ .4	N	1	0	1	53	47	0.10	
	Silly ...	29.76	54	N	2	om	29.88	+ .18	51	49	- .1	NW	4	0	4	54	49	0.01	
	Prawle Point...	29.81	54	E	2	0	29.88	+ .18	52	52	- .1	E	1	0	1	54	52	-	
	Jersey (St. Aubin's)	29.80	56	SE	3	0	29.89	+ .19	54	52	0	S	2	0	2	58	52	0.02	
	Hurst Castle ...	29.83	55	ENE	1	0	29.90	+ .16	52	51	0	ENE	1	0	1	56	49	0.05	
	Dungeness ...	29.83	55	NW	2	0	29.92	+ .21	54	51	0	SSW	4	0	3	55	53	0.25	
	London ...	29.88	51	NNE	1	0	29.91	+ .15	46	45	- .1	Z	0	0	*	55	43	0.01	
	Oxford ...	29.87	49	Z	0	0	29.90	+ .11	49	48	+ .4	SSW	1	0	*	50	45	-	
	Cambridge ...	29.86	50	Z	0	0	29.91	+ .12	48	48	+ .4	S	1	0	*	52	43	0.01	
GERMANY.	Yarmouth ...	29.81	51	Z	0	0	29.90	+ .13	51	50	0	SSW	1	0	3	51	48	0.15	
	Cuxhaven ...	29.87	49	SSW	2	bc	29.92	+ .01	49	49	+ .11	SW	3	0	*	50	?	-	
	Berlin ...	30.00	46	SE	3	0	30.08	+ .07	44	44	+ .7	S	2	0	*	46	?	-	
	Wiesbaden ...	*	*	*	*	*	30.08	+ .14	45	44	+ .3	NE	1	0	*	50	?	-	
	Munich ...	30.07	47	Z	0	0	30.15	+ .16	42	42	+ .2	W	1	0	*	55	?	0.04	
	The Helder ...	29.77	51	SSW	2	0	29.97	+ .14	48	48	+ .5	SSW	1	0	1	52	43	0.20	
	Brussels (9 a.m.)	*	*	*	*	*	30.02	+ .26	48	47	- .3	SSW	1	0	*	58	46	-	
	Cape Gris Nez	*	54	W	5	0	?	?	47	43	- .4	S	3	0	2	68	46	0.51	
	Paris ...	29.94	52	S	1	0	30.01	+ .23	39	39	- .14	S	1	0	*	59	38	0.12	
	Brest ...	?	54	S	1	0	?	?	52	51	+ .1	Z	0	0	2	57	46	0.04	
FRANCE AND NETHERLANDS.	Lorient ...	29.76	53	Z	0	bc	29.88	+ .24	49	49	- .3	SSW	2	0	2	59	48	0.12	
	Rochefort ...	29.90	55	SW	6	0	30.00	+ .18	55	54	- .1	NW	4	0	2	59	50	0.75	
	Belfort ...	29.96	45	N	1	0	30.04	+ .16	43	38	0	NW	1	0	*	57	35	-	
	Lyons ...	29.97	57	SW	2	0	30.05	+ .13	50	50	- .4	NW	1	0	*	63	50	0.08	
	Nice ...	30.04	60	NE	3	0	30.02	+ .05	56	54	- .3	NE	4	0	2	66	54	0.08	
	Perpignan ...	29.92	56	Z	0	0	30.01	+ .09	46	45	0	SSW	1	0	*	62	44	-	
	Biarritz ...	29.95	59	NW	3	0	30.01	+ .15	51	49	- .3	SE	1	0	2	61	48	-	
	Corunna ...	*	*	*	*	*	?	?	49	48	- .1	NNE	4	0	2	?	?	0.04	
	Lisbon ...	29.93	55	NNE	2	0	29.93	- .01	49	48	- .1	NNE	4	0	2	?	?	0.04	
	Peninsular	*	*	*	*	*	?	?	?	?	?	?	?	?	?	?	?	?	

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, 30.1 in. and upwards over South Germany.
Lowest, 29.5 in. and less, in a depression lying off the northwest of Scotland.
Gradients rather steep in the extreme northwest of our Islands, but slight elsewhere.
Barometer rising over France, Germany and the south of our Islands, but falling elsewhere — briskly in the north.

TEMPERATURE

Highest, 56° at Nice, 55° at Rochefort, 54° at Dungeness and Jersey, 53° at Valencia, and 52° at Blmullet, Brest Point and Hunt Castle.
Lowest, 31° at Haparanda, 34° at Bodø, 38° at Haparanda, 39° at Haparanda, Aberdeen and Paris and 40° at Harrogate.

WIND

Strong from S. or SW. on our extreme western and northern coasts; light from the SE. in the Shetlands and west of Norway.
Light from the SW. in the east of England, the Netherlands, and Central France.
Variable on our southwest coasts, as well as over the southern parts of France and Germany; calm in Sweden.

WEATHER

Cloudy generally with fog at many of the English stations, as well as at Stockholm, Haparanda and Haparanda.
Rain is falling in the extreme northwest of our Islands, and also in some parts of Central France.
Slight rain fell yesterday in many parts of the United Kingdom.

SEA

Rough at Stromsund and rather rough off the west of Ireland, but moderate to smooth elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The passage of depressions along our extreme western and northwestern coasts seems likely to continue for the present and increasing S. winds are probable in all the more western and northern parts of the Kingdom. In the south the wind is likely to remain light or moderate in force for the present. The depression of Sunday continues to fall gradually over the northwest of France.

FORECASTS

For the 24 hours ending at NOON on 30th OCTOBER 1889.

DISTRICTS.

FORECASTS.

- | | | |
|---|------------------|--|
| 0 | SCOTLAND NORTH | S. and SW. winds, increasing in force; squally, some rain. |
| 1 | SCOTLAND EAST | S. winds, freshening; foggy at first; then cloudy with some rain. |
| 2 | ENGLAND N.E. | |
| 3 | ENGLAND EAST | Light breezes, chiefly S.; fair generally, but a good deal of fog or mist locally. |
| 4 | MIDLAND COUNTIES | |
| 5 | ENGLAND SOUTH | |

DISTRICTS.

FORECASTS

- | | | |
|----------|---------------|--|
| 6 | SCOTLAND WEST | Same as No 0. |
| 7 | ENGLAND N.W. | Same as Nos 1 and 2. |
| 8 | ENGLAND S.W. | Variable breezes, finally SW.; fair generally, but some fog or mist. |
| 9 | IRELAND NORTH | Same as No 0. |
| 10 | IRELAND SOUTH | |
| WARNINGS | | NONE ISSUED. |

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

YESTERDAY'S 2 P.M. REPORTS.

	Bar:	Ther:		Wind		Wea:	Sea		Bar:	Ther:		Wind		Wea:	Sea.
		D	W	D	F					D	W	D	F		
Skudesnaes ...	29.93	45	40	SE	4	0	2	Holyhead ...	29.83	49	47	NE	4	om	4
Sumburgh Head ...	29.81	46	42	SSW	1	c	4	Valencia ...	29.95	51	47	N.W	2	b	2
Stornoway ...	29.80	48	46	SW	4	0	4	Scilly ...	29.73	53	52	N.W	4	om	5
Aberdeen ...	29.86	46	44	W	2	c	4	Jersey ...	29.76	58	54	SE	3	b	4
Shields ...	29.84	49	46	N.E	3	0	4	Dungeness ...	29.75	55	52	N.W	3	r	2
Ardrossan ...	29.85	49	47	SE	0	bc	0	London ...	29.79	54	52	SE	0	odf	7
Malin Head ...	29.88	50	45	SW	1	b	1	Yarmouth ...	29.76	51	51	NE	3	om	4
Mullaghmore ...	29.92	51	46	SE	0	b	0	Rochefort ...	29.89	56	54	SSW	5	c	3
Belmullet ...	29.93	51	49	WSW	1	c	*								

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

The reports for yesterday morning showed that pressure was as high as 30.3 ins to 30.6 ins: over Russia and Poland, and 30.0 ins and more over the coast of Ireland, Algeria, and Central Spain, but that it decreased to 29.9 ins: and less off the northwest of Scotland, and to 29.7 ins: and less in a depression lying over Brittany and the mouth of the English Channel. The wind was consequently S¹ or SE¹ over Scandinavia, the Baltic, Germany, and Austria, and SW¹, light to moderate, in France, but was NE¹ to N¹ over Ireland and England, and blew strongly at Scilly. In the Hebrides and Shetlands, however, there was a breeze setting in from the S¹ and W¹. The weather was fine generally, in Scotland, Ireland and over Spain, fair (but dull) in several places over the Mediterranean, dull, wet, and foggy over England, France, and Germany, where the rainfalls in the preceding twenty-four hours had been considerable. Thunder and lightning occurred over France. Temperature was changing irregularly; a strong frost prevailed over Russia, Poland, and the eastern part of North Germany, and in several parts of Scotland and Ireland the thermometer was as low as 33° to 35°. In the south, however, readings were much higher. The highest morning values were 75° at Malta, 73° at Sfax, 71° at Kenna, 70° at Brindisi, 69° at Naples, 67° at Cagliari; less than 60° in the south of France, and not much above 50° over the Channel and south coast of England. The lowest were 21° at Moscow and Kharkov, 23° at Kiev, 24° at St. Petersburg and Uleaborg, 25° at Riga, 27° at Memel and Warsaw, 33° at Larne and 34° at Wick.

During the day the depression over the southern part of England and Brittany filled up, and pressure continued to give way steadily in the west and north of the British Isles, as well as over Norway, and S¹ to SW¹ winds became general in those regions.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

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

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

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

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

DAILY WEATHER REPORT.

for WEDNESDAY 30TH OCTOBER 1889.

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

STATIONS.		YESTERDAY EVENING.					8 A.M. TO DAY.										PAST 24 HOURS.		
		Barometer at 32° F. and Sea Level.	Temp. in Shade.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Weather.	Sea. (0 to 2).	SHADE TEMP.		Amount of Rainfall.	
				Dir.	Force. (0 to 12.)		Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Dir.	Force. (0 to 12.)			Max.	Min.		
SCANDINAVIA.	Haparanda ...	29.79	36	SW	2	0	29.71	-1.20	36	36	+5	S	1	P	*	37	25	0.00	
	Hernösand ...	29.76	35	2	0	P	29.79	-0.08	33	32	-5	X	0	O	*	45	?	0.12	
	Stockholm ...	29.80	46	2	0	P	29.91	+0.02	43	42	+2	SW	2	C	*	52	37	0.12	
	Wisby ...	29.87	49	S	6	0	30.00	+0.05	46	45	+3	SW	4	C	*	50	37	0.04	
	Bodö ...	29.65	38	E	2	0	29.65	-0.06	38	37	+4	E	2	C	1	?	32	-	
	Christiansund	29.61	46	SW	2	0	29.57	-1.11	45	42	+1	SW	2	C	5	46	?	-	
	Skudesnaes ...	29.75	48	SW	6	P	29.72	-0.07	51	49	+5	SW	6	O	5	?	46	0.16	
	Christiania Fjord (Færder)	29.84	44	W	5	0	29.84	+0.02	48	48	+9	W	4	M	3	?	?	0.04	
	Skagen (The Scaw)	29.88	46	SW	3	0	29.89	+0.12	47	46	+2	SW	3	O	2	?	41	0.04	
	Fanö ...	29.96	46	S	4	C	29.94	+0.12	44	44	-2	S	4	C	*	52	43	-	
BRITISH ISLANDS.	Sumburgh Head	29.44	49	SW	3	0	29.36	-2.22	49	48	+3	S	1	C	4	50	45	0.04	
	Stornoway ...	29.45	50	SW	5	0	29.17	-2.26	52	52	+3	SW	6	P	6	53	45	0.15	
	Wick ...	29.51	48	SW	4	0	29.30	-2.27	50	48	+4	SW	6	O	3	50	44	0.03	
	Nairn ...	29.50	50	2	0	C	29.36	-2.23	46	43	+2	2	0	C	1	53	43	0.01	
	Aberdeen ...	29.62	46	SW	3	C	29.46	-2.23	51	49	+12	S	2	O	4	51	39	0.04	
	Leith ...	29.66	46	W	2	C	29.49	-2.26	54	50	+12	W	5	C	*	53	42	-	
	Shields ...	29.75	51	SW	3	0	29.67	-1.08	50	48	+3	SW	3	O	2	53	45	-	
	Spurn Head ...	29.84	50	SW	3	C	29.83	-0.03	46	45	-4	S	4	C	4	53	43	-	
	York ...	29.84	51	S	1	0	29.79	-0.06	45	43	-2	S	3	O	*	53	42	-	
	Loughborough	29.88	50	SE	1	0	29.87	-0.01	45	44	-4	S	2	C	*	58	41	-	
GERMANY.	Ardrossan ...	29.67	51	SW	4	C	29.48	-2.24	53	51	+6	S	5	O	4	53	38	0.10	
	Malin Head ...	29.62	49	SW	4	0	29.33	-2.29	51	50	+7	S	6	O	4	53	44	0.01	
	Mullaghmore ...	29.67	49	W	5	O	29.37	-2.30	53	52	+6	SW	6	O	5	54	46	0.11	
	Belmullet ...	29.68	49	W	2	0	29.36	-2.32	51	50	-1	SW	5	P	*	53	48	0.06	
	Donaghadee ...	29.71	50	SW	3	0	29.52	-2.26	52	50	+10	SW	5	O	3	52	41	0.03	
	Barrow-in-Furness	29.77	51	SW	4	C	29.67	-1.12	51	49	+2	SW	5	C	*	53	48	0.03	
	Liverpool (Bidston)	29.84	50	SW	4	C	29.75	-1.10	52	49	+6	SW	2	C	3	54	46	-	
	Holyhead ...	29.80	52	SW	4	O	29.67	-1.16	54	51	+6	SW	6	O	6	54	48	0.04	
	Parsonstown ...	29.74	52	2	0	P	29.52	-2.28	54	52	+14	SW	2	O	*	54	39	0.11	
	Valencia ...	29.78	54	SW	5	O	29.56	-2.24	52	51	-1	SW	5	O	5	53	52	0.20	
FRANCE AND NETHERLANDS.	Roche's Point...	29.82	53	SW	4	P	29.63	-2.25	53	53	+8	SW	6	P	5	53	45	0.15	
	Pembroke (St. Ann's Hd.)	29.88	51	SW	4	C	29.76	-1.10	54	53	+3	S	6	C	5	54	50	0.01	
	Scilly ...	29.92	51	SW	4	C	29.83	-0.09	54	53	+3	SW	6	C	6	54	50	-	
	Prawle Point ...	29.93	51	SW	2	C	29.92	+0.04	54	51	+2	SW	4	C	3	58	46	-	
	Jersey (St. Aubin's)	29.96	53	S	2	C	30.01	+0.12	52	50	-2	SW	3	C	3	58	49	0.42	
	Hurst Castle ...	29.93	54	SW	2	C	29.96	+0.06	53	51	+1	W	3	C	1	58	48	-	
	Dungeness ...	29.93	54	SW	4	C	29.96	+0.04	54	52	0	W	2	C	1	54	51	0.01	
	London ...	29.92	51	SW	2	C	29.95	+0.04	48	47	+2	SW	2	C	*	56	45	0.02	
	Oxford ...	29.92	49	SW	1	C	29.92	+0.02	44	43	-5	SW	3	C	*	56	41	-	
	Cambridge ...	29.93	51	S	1	O	29.92	+0.01	47	46	-1	S	1	C	*	55	44	-	
PENINSULA.	Yarmouth ...	29.91	52	SW	2	C	29.91	+0.01	50	49	-1	SW	3	C	3	54	46	0.01	
	Cuxhaven ...	30.00	45	?	1	C	30.02	+0.10	42	42	-7	SW	1	M	*	54	42	-	
	Berlin ...	30.11	48	2	0	C	30.08	0.00	45	44	+1	SE	2	O	*	54	43	-	
	Wiesbaden ...	*	*	*	*	*	30.10	+0.02	51	50	+6	2	O	*	55	?	0.12		
	Munich ...	30.08	46	W	2	0	30.20	+0.05	43	43	+1	SW	2	C	*	48	41	0.04	
	The Helder ...	29.97	47	S	?	?	29.96	-0.01	45	44	-3	S	1	C	1	54	45	-	
	Brussels (0 a.m.)	*	*	*	*	*	30.04	+0.02	48	47	0	SW	3	O	*	61	47	-	
	Cape Gris Nez	?	54	SW	3	C	?	?	50	49	+3	S	3	P	3	53	46	0.00	
	Paris ...	30.03	50	S	1	C	30.09	+0.08	48	47	+5	S	1	O	*	62	?	-	
	Brest ...	?	53	N	3	C	?	?	54	51	+2	W	3	C	4	57	46	0.00	
PENINSULA.	Lorient ...	29.98	54	WNW	1	O	30.01	+0.13	50	49	+1	N	1	C	2	57	48	-	
	Rochefort ...	30.08	55	WNW	4	C	30.12	+0.12	55	51	0	WNW	3	C	2	63	48	0.12	
	Belfort ...	30.08	48	WNW	1	P	30.12	+0.08	48	41	+5	WNW	1	C	*	?	?	0.67	
	Lyons ...	30.07	53	ENE	1	C	30.15	+0.10	48	47	-2	WNW	1	C	*	57	48	0.32	
	Nice ...	30.03	61	ENE	2	C	30.09	+0.07	55	53	-1	ENE	4	C	2	68	54	-	
PENINSULA.	Perpignan ...	30.05	52	2	0	C	30.08	+0.07	45	45	-1	SW	1	O	*	64	43	-	
	Biarritz ...	30.06	57	N	3	O	30.09	+0.08	49	47	-2	SE	3	C	2	63	46	-	
PENINSULA.	Corunna ...	29.98	55	NW	5	C	30.05	+0.12	56	53	+7	NW	5	C	2	64	54	-	
	Lisbon ...	29.98	55	NW	5	C	30.05	+0.12	56	53	+7	NW	5	C	2	64	54	-	

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

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

WEATHER CHARTS

for 8 a.m. on Wednesday, 30th October

1889.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP

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

Changes since previous morning are stated in words.

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

their barbs and feathers refer to force thus—

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

⊙ = dead calm.

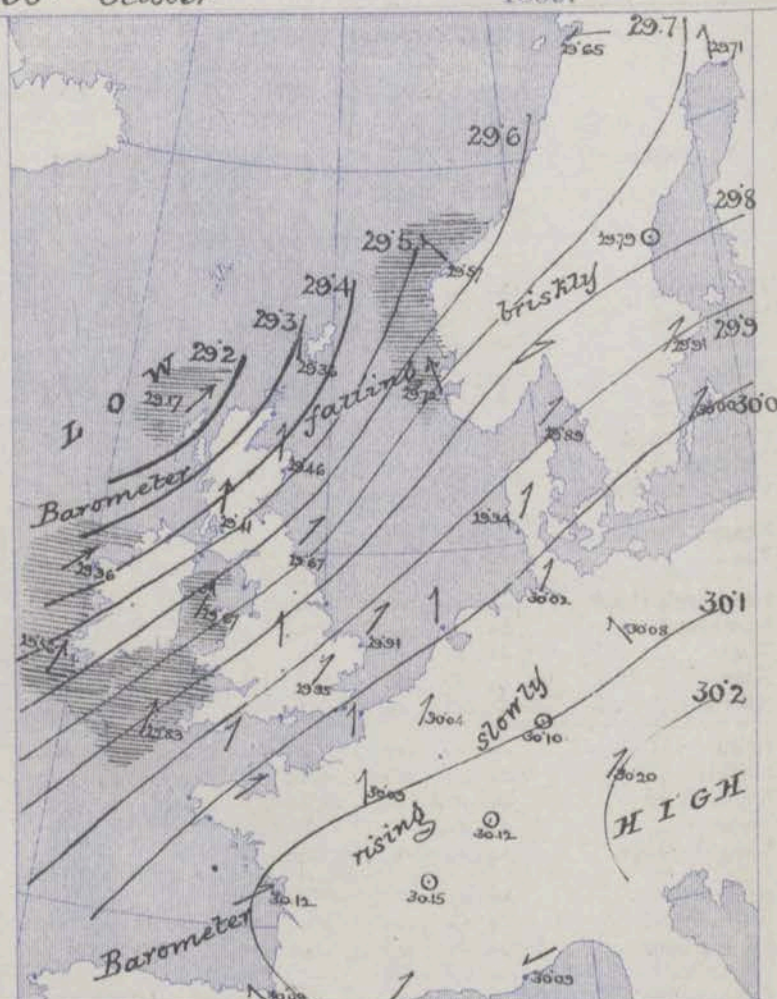
SEA DISTURBANCE—Where considerable, is shewn thus:

⊞ = Rough. ⊞ = High.

MEAN HEIGHT OF THE BAROMETER

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

STATIONS.	MEAN READINGS.
Sumburgh Head	29.708
Stornoway	29.735
Wick	29.745
Nairn	29.761
Aberdeen	29.774
Leith	29.804
Shields	29.835
York	29.872
Loughborough	29.891
Ardrossan	29.813
Donsghadee	29.832
Holyhead	29.853
Liverpool	29.864
Parsonstown	29.881
Valencia	29.873
Roche's Point	29.870
Pembroke	29.868
Seilly	29.894
Jersey	29.904
Hurst Castle	29.907
Dover	29.909
LONDON	29.911
Oxford	29.910
Cambridge	29.900
Yarmouth	29.886



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.

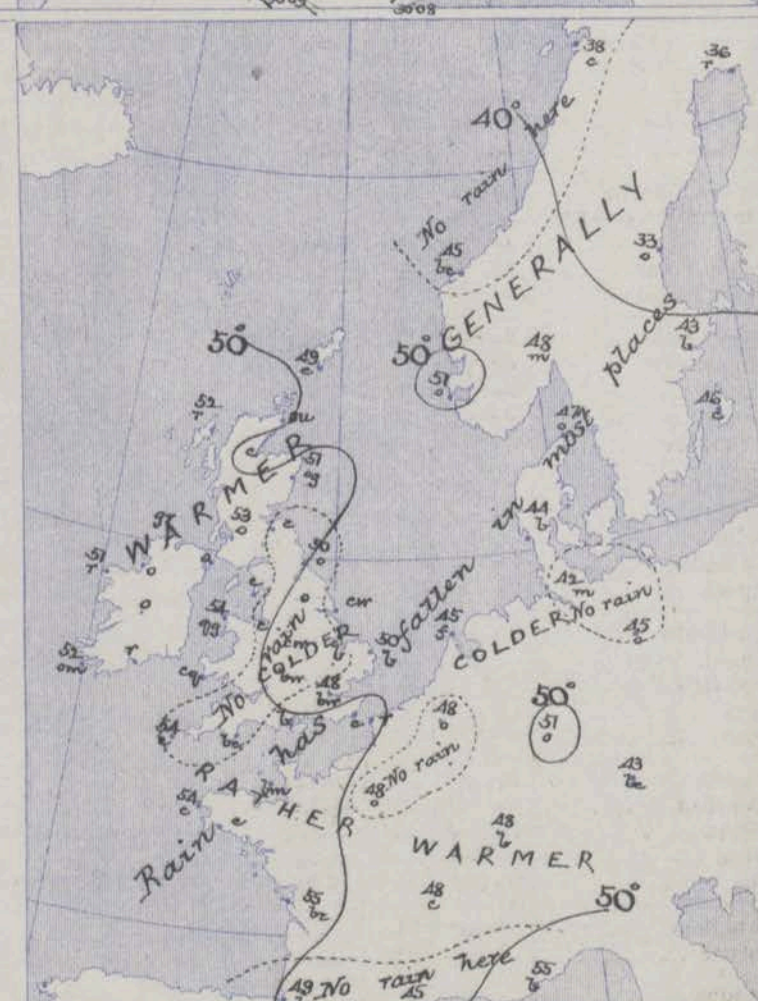
RAINFALL—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of October.)

STATIONS.	TEMPERATURE.				RAINFALL (Inches.)
	Daily Max.	Daily Min.	at 8 a.m.		
			Dry.	Wet.	
Sumburgh Head.....	49.7	41.6	46.0	44.3	4.33
Stornoway.....	50.5	39.5	45.3	44.1	4.94
Wick.....	51.6	40.1	46.1	44.3	2.94
Nairn.....	51.6	40.6	44.5	42.5	2.38
Aberdeen.....	52.3	41.0	45.5	43.5	2.88
Leith.....	54.7	41.5	46.5	44.7	1.94
Shields.....	53.0	42.8	47.1	45.4	2.46
York.....	54.8	41.0	45.9	44.5	2.64
Loughborough.....	55.3	41.4	46.4	45.0	2.98
Ardrossan.....	53.5	43.6	47.0	45.6	4.31
Donsghadee.....	53.2	43.3	47.7	46.5	3.35
Holyhead.....	54.5	47.0	50.2	48.2	4.53
Liverpool.....	53.6	44.6	47.8	45.8	3.62
Parsonstown.....	54.7	41.1	46.4	44.7	3.27
Valencia.....	56.6	46.5	51.3	49.1	6.09
Roche's Point.....	55.8	45.9	50.2	48.4	4.17
Pembroke.....	54.8	48.0	51.2	49.1	4.13
Seilly.....	56.6	50.3	53.8	51.7	3.84
Jersey.....	58.1	49.2	53.6	51.1	4.34
Hurst Castle.....	57.1	46.0	51.4	49.6	3.24
Dover.....	55.8	47.0	50.7	48.7	3.28
LONDON.....	56.6	43.2	48.0	46.4	2.74
Oxford.....	55.3	42.5	46.7	45.3	2.72
Cambridge.....	56.4	41.2	46.4	45.4	2.36
Yarmouth.....	54.3	44.8	49.2	47.9	2.97

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



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30.20 in: at Bremen, 30.1 in: and upwards, over all the more southern parts of Germany and France.
Lowest, 29.2 in: and less, in a depression lying off the northwest of Scotland.

Gradients rather steep over our Islands and the North Sea, but slight elsewhere.

Barometer falling briskly on our north and northwest coasts, but rising at our southeastern and many of the Continental stations.

TEMPERATURE

Highest, 56° at Dublin, 55° at Rochefort and Aix, and 54° at Leth, Holyhead, Parsonstown, Pembroke, Lelly, Brouelabint, Dungeness and Brest.
Lowest, 33° at Helsingfors, 36° at Haparanda, 38° at Rode, 42° at Copenhagen, 43° at Stockholm and Munich, and 44° at Oxford.

During yesterday the thermometer rose to between 55° and 58° over the central and southern parts of England.

WIND

Chiefly S^W or SW^W but SE^W in the coast of Norway, and E^W in the south of France.

Strong in force on all our eastern and extreme northern coasts, but light or moderate elsewhere.

WEATHER

Quell at most of our eastern and northern stations, with rain in some part of Ireland, and the west of Scotland, as well as at Haparanda.
Fair or fine in nearly all other localities, dull over the Netherlands and northern part of Germany and France.
Slight rain fell yesterday in many parts of the United Kingdom, and a lunar halo was seen at Traill's Point.

SEA

Rough or rather so on all our west and northwest coasts, as well as off the west of Norway, but moderate or slight elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

At Valencia the barometric fall is reported to have been checked since 4 am., and the depression off the northwest of Scotland is therefore in all probability travelling northwards. Other disturbances are, however, likely to approach our western coast shortly, and strong winds from the southward and southward will probably continue in the west and north generally, with some extension of cloudy rainy weather.

FORECASTS

For the 24 hours ending at NOON on 31ST OCT^R 1889.

DISTRICTS.

FORECASTS.

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

SW^W winds, strong, squally, some rain.
S^W and SW^W winds, freshening considerably, squally, some showers.
SW^W winds, freshening; fair at first, doubtful later, possibly some rain.

DISTRICTS.

FORECASTS

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

S^W and SW^W winds, fresh or strong; squally, some showers.
SW^W to S^W winds, strong; squally, some rain.

WARNINGS

NONE ISSUED.

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

YESTERDAY'S 2 P.M. REPORTS.

	Bar.		Ther.		Wind		Wea.	Sea.		Bar.		Ther.		Wind		Wea.	Sea.
	D	W	D	F	D	F				D	W	D	F	D	F		
Skudesnaes ...	29.77	46	45	SE	6	P	4			Holyhead ...	29.81	52	49	SW	3	C	2
Sumburgh Head ...	29.47	48	46	S	3	O	4			Valencia ...	29.78	53	54	SW	5	cmd	5
Stornoway ...	29.43	53	52	SW	6	C	5			Scilly ...	29.51	53	49	WNW	4	C	3
Aberdeen ...	29.63	45	42	SW	4	CGP	4			Jersey ...	29.92	58	55	S	3	cm	3
Shields ...	29.75	53	49	SW	3	O	3			Dungeness ...	29.92	53	51	SW	4	C	3
Ardrossan ...	29.67	49	48	SW	4	P	3			London ...	29.91	56	54	SW	1	cm	*
Malin Head ...	29.57	50	49	S	5	O	3			Yarmouth ...	29.90	54	52	SW	2	C	3
Mullaghmore ...	29.63	52	52	SW	5	Od	4			Rochefort ...	30.04	59	55	WNW	5	P	2
Belmullet ...	29.67	51	50	W	3	cm	*										

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

The reports for yesterday morning showed that pressure had still further increased (to between 30.3 ins. and nearly 30.8 ins.) over Russia, and that it was increasing over France also, but had fallen rather decidedly in the west and north of the British Islands, as well as over Scandinavia and the Baltic. Depressions were evidently passing in a northeasterly direction outside our extreme northwestern coasts, and were spreading more and more over the British Islands; the systems, however, were not deep, the gradients being somewhat steep at our northern and northwestern stations only. The wind had become S to SW over the northern and northwestern parts of Europe and the British Islands and blew strongly at our southern and northwestern stations, as well as on many parts of the Baltic coasts, while over the central, southern and eastern countries it was extremely variable, and as a rule, light. The weather varied greatly in all countries, but was more unsettled in the northwest and north than elsewhere, where it was dull, foggy and damp, with rain in places. Over the Continent clear skies alternated with fog, and with rain, and at Langunair a thunderstorm was prevalent. Temperatures had risen over the United Kingdom (most in the northwest) as well as over Scandinavia, the Baltic and Germany, fallen over France. The highest morning values were 81° at Palermo, 72° at Cagliari, 70° at Rostock and Rone, 69° at Loughorn and 68° at Lerina; and went above 50° on our southwestern and southern coasts generally; the lowest were 20° at Krasnairff and Moscow, 21° at Kharkov, 22° at Kiev, 30° at Kaspia and Memel, 31° at Napavanda, 32° at Warsaw; over Central France and Spain the readings were below 50°, and were as low as 41° at Madrid and 39° at Paris.

Throughout the day, mild damp SW winds were prevalent over our Islands, and were strong in the west and north.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

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

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

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

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

DAILY WEATHER REPORT.

for *Thursday, 31st October,* 1889.
 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.		
	Barometer at 32° F. and Sea Level.	Temp. in Shade.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Sea. (0 to 9.)	SHADE TEMP.		Amount of Rainfall.		
			Dir.	Force. (0 to 12.)		Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Dir.	Force. (0 to 12.)		Weather.	Max.		Min.	
SCANDINAVIA.																		
Haparanda ...																		
Hernösand ...	29.87	35	W	0	b	29.93	+ .14	35	35	+ 2	W	0	*					
Stockholm ...	29.94	45	SSW	2	b	29.97	+ .06	45	44	+ 2	W	0	*	39	30	-		
Wisby ...	30.01	47	SSW	4	o	29.98	+ .01	46	?	0	SSW	4	*	57	41	-		
Bodö ...	29.67	40	E	2	b	29.65	- .02	43	38	+ 5	E	6	*	50	45	-		
Christiansund	29.51	50	SE	6	o	29.52	- .05	52	46	+ 7	SE	4	bc	52	?	-		
Skudesnaes ...	29.69	51	SSW	8	o	29.65	- .04	51	50	0	SSW	8	bc	52	50	-		
Christiania Fjord (Fæder)	29.85	48	SSW	3	c	29.86	+ .02	48	47	0	SSW	3	e	48	46	-		
Skagen (The Scaw)	29.89	47	SW	1	b	29.88	- .01	47	46	0	SSW	1	bc	48	46	-		
Fanö ...	29.89	48	SSW	4	o	29.84	- .10	46	45	+ 2	SSW	4	bc	52	46	-		
Sumburgh Head	29.25	51	SSW	3	r	29.44	+ .08	46	44	- 3	W	3	bc	59	43	0.59		
Stornoway ...	29.22	44	SW	3	o	29.41	+ .24	47	45	- 5	SW	5	bc	51	40	0.50		
Wick ...	29.25	50	SW	2	o	29.52	+ .22	43	41	- 7	SW	2	bc	54	39	0.10		
Nairn ...	29.27	48	WSW	2	r	29.54	+ .18	42	39	- 4	SSW	2	b	57	37	0.04		
Aberdeen ...	29.33	52	SSW	6	oggp	29.62	+ .16	37	36	- 14	SW	1	bm	53	36	0.06		
Leith ...	29.35	49	W	4	c	29.66	+ .17	46	42	- 8	W	4	b	57	41	0.10		
Shields ...	29.48	52	S	4	o	29.73	+ .06	42	41	- 8	SW	3	bc	54	46	0.11		
Spurn Head ...	29.65	52	S	6	bc	29.77	- .06	46	44	0	W	4	b	54	45	0.06		
York ...	29.61	53	S	3	o	29.79	- .00	43	41	- 2	SW	1	b	54	42	0.06		
Loughborough	29.68	53	SSW	5	o	29.87	- .00	41	40	- 4	WSW	2	b	55	40	0.14		
Ardrossan ...	29.36	47	WSW	5	r	29.66	+ .18	49	47	- 4	SW	4	bc	53	44	0.54		
Malin Head ...	29.35	44	SW	4	og	29.60	+ .27	47	45	- 4	SSW	5	bm	53	42	0.36		
Mullaghmore ...	29.41	44	SW	4	bc	29.68	+ .31	46	44	- 7	SW	4	bc	54	43	0.27		
Belmullet ...	29.42	46	W	4	c	29.67	+ .31	51	49	0	WSW	4	o	52	45	0.43		
Donaghadee ...	29.42	45	NW	4	r	29.75	+ .23	41	40	- 11	SSW	4	b	54	40	0.25		
Barrow-in-Furness	29.46	51	SE	4	o	29.77	+ .10	47	44	- 4	W	4	bc	54	45	0.31		
Liverpool (Bidston)	29.51	55	SSW	3	o	29.84	+ .09	45	42	- 7	W	5	b	56	44	0.31		
Holyhead ...	29.46	53	SW	6	rqr	29.85	+ .18	47	45	- 7	WSW	3	b	54	45	0.56		
Parsonstown ...	29.52	43	W	0	c	29.83	+ .31	42	41	- 12	SW	1	bc	56	37	0.15		
Valencia ...	29.63	46	W	4	bcq	29.89	+ .33	52	49	0	SW	5	c	54	44	0.41		
Roche's Point...	29.60	53	W	3	c	29.92	+ .29	46	44	- 7	W	2	b	55	41	0.25		
Pembroke (St. Ann's Hd.)	29.52	53	W	6	r	29.93	+ .17	50	48	- 4	WSW	5	b	55	47	0.17		
Scilly ...	29.64	55	SW	6	o	30.02	+ .19	52	47	- 2	W	5	b	56	47	0.23		
Prawle Point ...	29.73	53	S	7	r	30.03	+ .11	47	44	- 7	W	2	b	58	42	0.21		
Jersey (St. Aubin's)	29.90	55	SSW	4	bc	30.05	+ .04	51	46	- 1	WNW	3	bm	59	49	0.37		
Hurst Castle ...	29.80	56	SW	6	c	29.99	+ .03	46	45	- 7	W	5	b	57	44	0.24		
Dungeness ...	29.87	55	WSW	6	c	29.91	- .05	47	45	- 7	WNW	5	c	57	44	0.18		
London ...	29.81	51	S	2	c	29.94	- .01	43	42	- 5	SSW	2	bc	57	41	0.21		
Oxford ...	29.69	52	S	5	o	29.94	+ .02	40	39	- 4	W	3	b	56	40	0.13		
Cambridge ...	29.76	50	S	3	b	29.90	- .02	44	43	- 3	SW	3	b	57	41	0.08		
Yarmouth ...	29.81	51	SSW	3	b	29.81	- .10	46	45	- 4	W	4	ogp	55	45	0.03		
Cuxhaven ...	29.98	47	SW	1	b	29.90	- .12	46	45	+ 4	SSW	2	bc	55	?	-		
Berlin ...	30.04	49	SW	2	o	30.02	- .06	40	39	- 5	SSW	1	b	52	39	-		
Wiesbaden ...	30.00	*	*	*	*	30.00	- .10	45	45	- 6	SSW	0	b	57	41	-		
Munich ...	30.10	46	NE	2	b	30.01	- .19	44	44	+ 1	W	1	bc	55	39	-		
FRANCE AND NETHERLANDS.																		
The Helder ...	30.06	50	S	1	bc	?	?	49	47	+ 4	SW	1	b	59	?	-		
Brussels (9 a.m.)	*	*	*	*	*	29.87	- .17	48	47	0	SSW	3	b	54	47	0.04		
Cape Gris Nez	?	54	SW	5	b	?	?	49	46	- 1	WNW	6	c	55	48	0.12		
Paris ...	30.02	50	S	1	o	29.99	- .10	47	46	- 1	SW	1	bc	59	43	-		
Brest ...	?	56	WSW	6	o	?	?	52	49	- 2	NW	4	bc	57	46	0.12		
Lorient ...	29.95	55	SW	4	c	30.10	+ .09	50	47	0	NW	3	b	57	48	0.16		
Rochefort ...	30.08	55	WSW	3	bc	30.10	- .02	55	53	0	WNW	4	bc	?	49	-		
Belfort ...	30.02	50	SW	1	b	30.02	- .10	50	41	+ 2	NW	1	c	59	40	-		
Lyons ...	30.06	51	WNW	1	o	30.06	- .09	49	49	+ 1	N	1	r	59	48	0.04		
Nice ...	30.02	57	E	4	r	29.96	- .13	56	53	+ 1	SSW	4	c	66	54	1.93		
Perpignan ...	29.98	62	W	0	r	30.06	- .02	58	50	+ 13	NW	3	b	69	?	-		
Biarritz ...	30.02	58	WNW	3	c	30.14	+ .05	58	54	+ 9	W	4	bc	63	?	-		
PENINSULA.																		
Corunna ...	30.14	55	N	3	b	30.24	+ .16	53	51	- 3	N	1	c	63	52	-		
Lisbon ...	30.14	55	N	3	b	30.24	+ .16	53	51	- 3	N	1	c	63	52	-		

For Explanation of Columns, see bottom of p. 4

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

WEATHER CHARTS

for 8 a.m. on Thursday 31st October

1889.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP

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

Changes since previous morning are stated in words.

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

their barbs and feathers refer to force thus—

→ forces above 10; → forces 8 to 10;

→ forces 5 to 7; → forces 1 to 4.

⊙ = dead calm.

SEA DISTURBANCE—Where considerable, is shown thus:

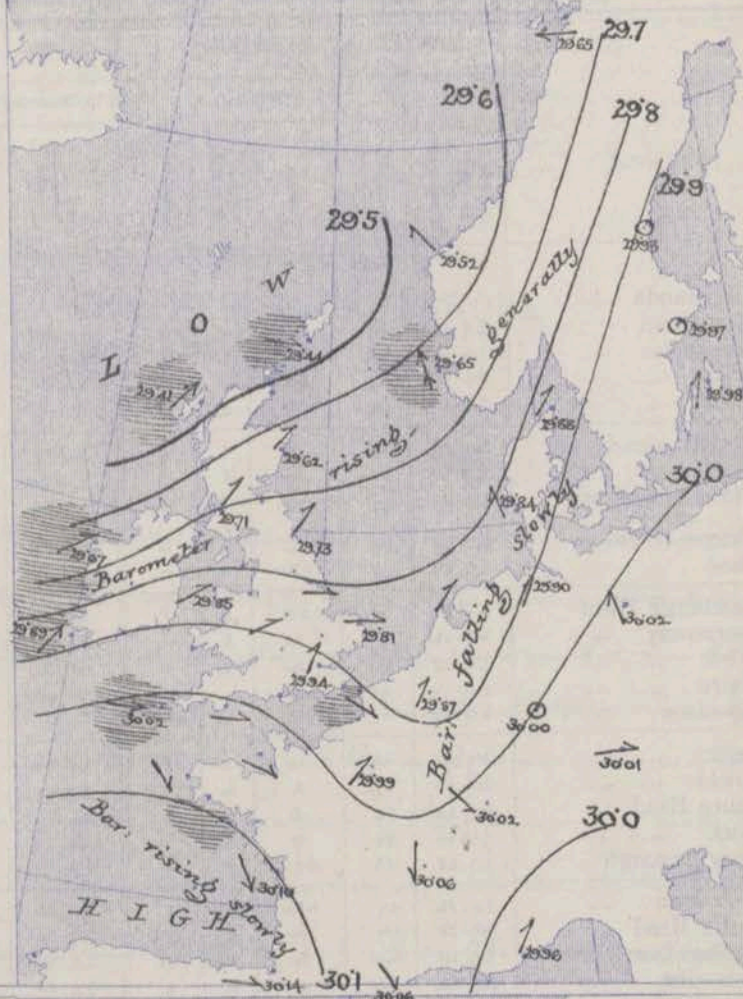
☼ = Rough. ☼ = High.

MEAN HEIGHT OF THE BAROMETER

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

During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS.
Sumburgh Head	29.708
Stornoway	29.735
Wick	29.745
Nairn	29.761
Aberdeen	29.774
Leith	29.804
Shields	29.835
York	29.872
Loughborough	29.891
Ardrossan	29.813
Donaghadee	29.832
Holyhead	29.853
Liverpool	29.864
Parsonstown	29.881
Valencia	29.873
Roche's Point	29.870
Pembroke	29.868
Scilly	29.894
Jersey	29.904
Hurst Castle	29.907
Dover	29.909
LONDON	29.911
Oxford	29.910
Cambridge	29.930
Yarmouth	29.886



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.

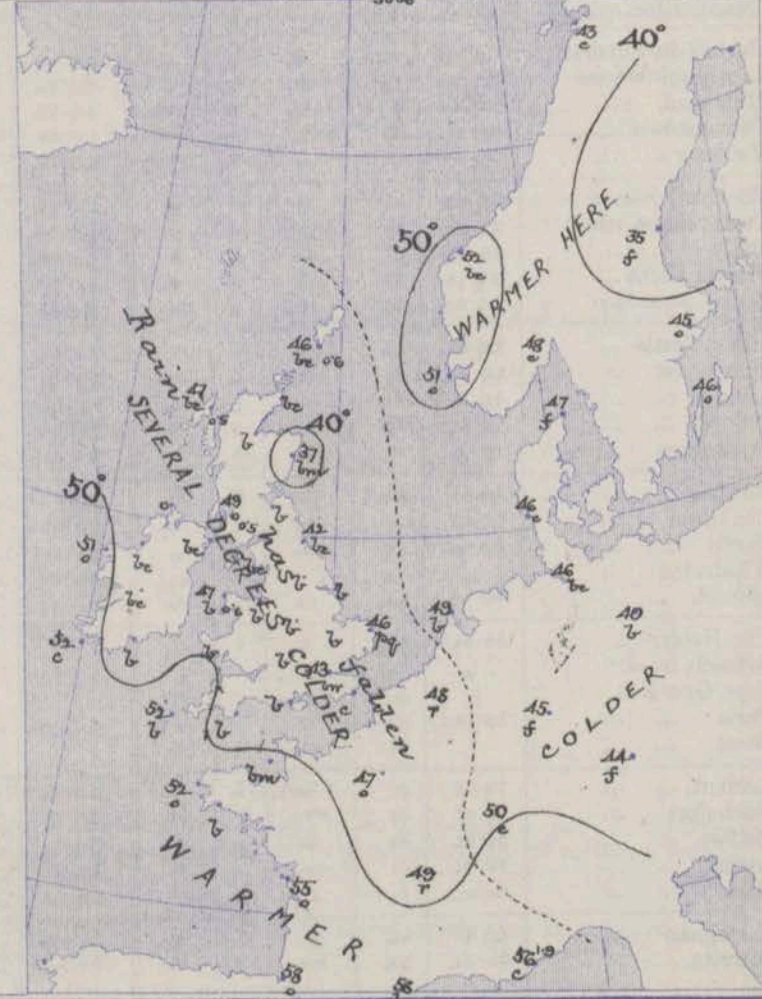
RAINFALL—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of October.)

STATIONS.	TEMPERATURE.				RAINFALL (Inches.)
	Daily Max.	Daily Min.	at 8 a.m.		
			Dry.	Wet.	
Sumburgh Head.....	49.7	41.6	46.0	44.3	4.33
Stornoway	50.5	39.5	45.3	44.1	4.94
Wick.....	51.6	40.1	46.1	44.3	2.94
Nairn	51.6	40.6	44.5	42.5	2.38
Aberdeen	52.3	41.0	45.5	43.5	2.88
Leith.....	54.7	41.5	46.5	44.7	1.94
Shields	53.0	42.8	47.1	45.4	2.46
York	54.8	41.0	45.0	44.5	2.64
Loughborough	55.3	41.4	46.4	45.0	2.98
Ardrossan	53.5	43.6	47.6	45.6	4.31
Donaghadee.....	53.2	43.3	47.7	46.5	3.35
Holyhead.....	54.5	47.0	50.2	48.2	1.53
Liverpool	53.6	44.6	47.8	45.8	3.02
Parsonstown	54.7	41.1	46.4	44.7	3.27
Valencia	56.6	46.5	51.3	49.1	6.09
Roche's Point.....	55.8	45.9	50.2	48.4	4.17
Pembroke.....	54.8	48.0	51.2	49.1	4.13
Scilly	50.6	50.3	53.8	51.7	3.84
Jersey	58.1	49.2	53.6	51.1	4.34
Hurst Castle	57.1	46.0	51.4	49.6	3.24
Dover	55.8	47.0	50.7	48.7	3.28
LONDON	56.6	43.2	48.0	46.4	2.74
Oxford	55.3	42.5	46.7	45.3	2.72
Cambridge	56.4	41.2	46.4	45.4	2.36
Yarmouth	54.3	44.8	49.2	47.9	2.97

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



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30.21 in. at Lisbon, 30.1 in. and upwards over the whole of the Iberian Peninsula and the Bay of Biscay.
Lowest, 29.5 in. and less, in a large area lying to the N.W. and N.E. of Scotland.

Gradients moderate over Scandinavia and the west of Scotland, but slight elsewhere.

Barometer rising at all but the Scandinavian, Danish, and eastern French stations.

TEMPERATURE

Highest, 58° at Biarritz and Cognac, 56° at Nice, 55° at Rochefort, 52° at Valencia, Seville, and Brest, and 51° at Bournemouth and Jersey.

Lowest, 35° at Hunsand, 37° at Aberdeen, 40° at Oxford and Berlin, 41° at Loughborough and Donaghadee, and 42° at Havre, Shields, and Parnassus.

During yesterday the thermometer rose to between 55° and 59° in many parts of Great Britain.

WIND

Fresh from the S.W. on our east and northwest coasts and from W. in the east and south.

Moderate from the N.W. in the west of France; strong from S.E. or E. in the west of Norway.

A moderate gale from the S.W. was experienced in the Channel last night.

WEATHER

Fair in nearly all parts of the United Kingdom, but cloudy at many of the Continental stations.

Fog prevail at Hunsand, Slagen, Wiesbaden, and Munich, and rain at Brussels and Lyons.

Rain fell during yesterday over the whole of our Island and France, the largest amount being 1.9 in. at Nice, and 0.6 in. at Loughborough and Holyhead.

SEA

Rough at Valencia and rather rough on nearly all the more exposed parts of our eastern and extreme northern coasts.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

Although the barometer is at present rising, in the event the wind is backing to the S.W. again, with an unsettled appearance at Valencia. It is probable, therefore, that in the course of the ensuing 24 hours a new depression will advance from the Atlantic to our extreme northwest coast, and occasion rough unsettled weather in the west and north generally.

FORECASTS

For the 24 hours ending at NOON on 1st NOVEMBER, 1889.

DISTRICTS.

FORECASTS.

0 SCOTLAND

NORTH

1 SCOTLAND

EAST

2 ENGLAND

N.E.

3 ENGLAND

EAST

4 MIDLAND

COUNTIES

5 ENGLAND

SOUTH

SW² to S² winds, freshening; fine to unsettled and some rain.

Same as No 5

W² winds, moderate, to SW²; fresh or strong; fine at first, unsettled later with some rain.

DISTRICTS.

FORECASTS

6 SCOTLAND

WEST

7 ENGLAND

N.W.

8 ENGLAND

S.W.

9 IRELAND

NORTH

10 IRELAND

SOUTH

Same as Nos 0 and 1.

Same as No 5

SW² winds, increasing in force, fair to squally 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	F				D	W	D	F	D	F		
Skudesnaes ...	29.1	51	44	SSC	5	0 f	5		Holyhead ...	29.53	53	52	SW	7	0 m g c	6	
Sumburgh Head ...	29.24	52	50	S	3	7	5		Valencia ...	29.56	46	45	W	4	7 m	4	
Stornoway ...	29.18	45	44	SW	4	0	4		Scilly ...	29.69	45	55	SEW	6	0 d	6	
Aberdeen ...	29.36	51	49	SE	6	0 g g p	5		Jersey ...	29.96	58	54	SW	3	6	3	
Shields ...	29.56	53	49	S	4	0	2		Dungeness ...	29.91	56	54	WSEW	5	0	3	
Ardrossan ...	29.38	53	52	S	6	0	5		London ...	29.88	58	53	SEW	4	0	2	
Malin Head ...	29.31	47	47	W	4	0	3		Yarmouth ...	29.87	54	51	SEW	4	6	3	
Mullaghmore ...	29.37	47	45	WSEW	6	0 r	4		Rochefort ...	30.13	61	57	WSEW	3	0	2	
Belmullet ...	29.39	46	43	WSEW	2	0	2										

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

The reports for yesterday morning showed that the high pressure area over Russia had moved decidedly to the SE^{ad} and decreased in height, and that readings varied from between 30.3 ins. and 30.6 ins. over central and southern Russia, and from 30.1 ins. and more in the northwest of Spain to 29.2 ins. and less, off our extreme northwestern coast (the gradient being steepest over the British Isles) and to 29.9 ins. and less, in a shallow depression, the centre of which lay between Algeria and the Balearic Islands. The wind was consequently SW¹ and S¹, light to strong, over the British Islands and North Sea, S¹ to SE⁴ over Scandinavia, the Baltic and Germany, while it was E¹ to SE¹ on the northern shores of the Mediterranean, and SW¹ over a considerable portion of the Algerian coast. The weather was changeable generally, but chiefly in our Islands, where it was rainy at the eastern stations, and temporarily bright in the south and east, fog prevailed in Austria and the Baltic Provinces, thunder and lightning at Trieste. Temperature had risen fast not only over the United Kingdom and France, but over Russia, where the change during the 24 hours varied from eight to twenty degrees. The highest morning values were 74° at Palermo, 73° at Malta, 70° at Algiers and Cagliari, 68° at Brindisi and Leghorn, 67° at Naples, Rome and Lima, and 66° at Sanguinari; it was above 50° over nearly the whole of our Islands but below that value over France. The lowest readings were 28° at Moscow, 33° at Lileborg and Hermand, 34° at Louismunde, 36° at Haparanda and Kuopio, 37° at Jemage, 38° at Gascow and Bodö, 39° at Memel.

Over the east and south of England the weather was fine for many hours, and temperature rose to between 55° and 59°; rain fell subsequently all over the British Islands and France, and the S¹ wind blew strongly in many places.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

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

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

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

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

ADDITIONS AND CORRECTIONS TO THE

1. REPORTS RECEIVED TOO LATE FOR INSERTION DAILY.

DATE.	STATIONS.	YESTERDAY EVENING.						8 A.M. TO-DAY.										PAST 24 HOURS.		
		Barometer at 32° F. and Sea Level.	Temp. in Shade.	WIND.		Weather.	BAROMETER.		SHADE TEMP.			WIND.		Weather.	Sea (0 to 8.)	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.			
1	Corunna	*	*	*	*	*	30.03	-.04	59	58	0	NW	2	0	4	66	55	-		
2	Corunna	*	*	*	*	*	30.02	-.01	53	52	-6	ESE	2	0	4	66	50	0.04		
-	disbon	29.98	60	N	6	b	29.99	-.01	58	53	+1	NW	5	b	?	63	55	-		
3	Brussels	*	*	*	*	*	29.92	+0.08	46	-	-1	SW	2	0	*	55	45	-		
-	Corunna	*	*	*	*	*	30.15	+0.13	54	52	+1	E	1	f	3	66	46	-		
4	Corunna	*	*	*	*	*	29.99	-.16	54	54	0	N	5	0	6	64	50	0.43		
5	The Helder	29.75	52	SSW	1	r	29.76	+0.04	50	48	+2	S	2	0	3	55	48	0.08		
-	Corunna	*	*	*	*	*	29.96	-.03	58	-	+4	E	1	b	7	63	45	-		
7	Belmullet	29.40	52	S	5	0	29.28	-.41	51	47	-1	NW	10	c	*	57	45	1.18		
-	Corunna	*	*	*	*	*	30.16	+0.06	62	59	+5	SW	2	0	4	63	54	-		
8	Corunna	*	*	*	*	*	30.09	-.07	59	-	-3	WSW	1	c	7	68	54	0.08		
9	Corunna	*	*	*	*	*	29.75	-.34	60	57	+1	SW	3	0	6	68	55	0.35		
-	disbon	30.10	64	NW	3	c	29.97	-.21	62	60	+2	W	4	0	?	70	?	-		
10	Brussels	*	*	*	*	*	29.40	-.02	49	-	0	WSW	1	r	*	57	48	0.39		
-	Corunna	*	*	*	*	*	29.65	-.10	55	53	-5	SW	6	0	7	63	48	0.51		
11	Belfort	29.49	47	S	1	bc	29.60	.00	43	42	-3	SSW	1	c	*	60	41	0.24		
-	dyons	29.66	52	SSW	2	b	29.65	+0.03	49	47	0	SSW	3	r	*	57	?	0.51		
-	Corunna	*	*	*	*	*	29.66	+0.01	54	51	-1	SSW	6	0	6	61	48	0.20		
12	Corunna	*	*	*	*	*	30.01	+0.35	55	53	+1	N	2	bc	6	61	48	0.20		
14	Christianiafjord	29.89	53	SSW	3	bc	29.88	+0.26	49	48	-2	NZ	3	0	2	54	48	-		
-	Brussels	*	*	*	*	*	29.90	+0.06	43	-	-2	N	1	c	*	56	42	-		
-	Corunna	*	*	*	*	*	30.09	+0.07	67	55	+1	SSW	3	0	4	63	39	-		
15	Corunna	*	*	*	*	*	30.04	-.05	63	60	+6	SSW	2	0	2	66	54	-		
16	Corunna	*	*	*	*	*	30.00	-.04	60	59	-3	N	3	b	3	70	59	0.39		
17	Wisby	30.19	42	NW	4	b	30.19	+0.11	44	42	-5	ESE	4	bc	*	50	41	-		
-	Corunna	*	*	*	*	*	30.17	+0.17	51	48	-9	ESE	3	c	4	64	46	-		
18	Corunna	*	*	*	*	*	29.76	-.41	61	60	+10	SW	5	r	4	63	?	0.59		
19	Corunna	*	*	*	*	*	29.77	+0.01	54	51	-7	WSW	3	0	4	68	48	0.16		
20	Belfort	29.67	47	SW	2	bc	29.56	+0.02	43	-	+1	SW	1	0	*	61	39	-		
21	Corunna	*	*	*	*	*	29.31	-.18	53	53	-6	NNE	5	0	6	59	50	1.10		
22	Corunna	*	*	*	*	*	29.65	+0.34	53	51	0	SW	2	c	5	57	50	0.39		
23	Belfort	29.63	44	NW	1	o	29.84	+0.49	43	-	+4	NW	1	c	*	55	39	0.71		
-	Corunna	*	*	*	*	*	29.86	+0.21	54	53	+1	NW	1	r	4	61	50	0.12		
24	Corunna	*	*	*	*	*	29.93	+0.07	51	50	-3	ESE	1	r	4	64	46	0.08		
25	The Helder	29.99	49	NW	2	r	30.10	+0.23	47	-	-1	ESE	3	c	4	50	?	0.20		
-	Corunna	*	*	*	*	*	29.89	-.04	55	55	+4	S	1	r	4	57	50	0.12		
28	Corunna	*	*	*	*	*	29.93	+0.11	53	51	-1	NW	4	0	5	54	46	0.12		
29	Corunna	*	*	*	*	*	30.04	+0.11	49	48	-4	E	1	0	?	?	?	0.04		
30	Corunna	*	*	*	*	*	30.11	+0.07	42	41	-7	E	3	b	4	59	39	-		
31	Corunna	*	*	*	*	*	30.19	+0.08	54	53	+12	ESE	2	0	4	61	41	-		

