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METEOROLOGICAL OFFICE,

LONDON.

DAILY WEATHER REPORTS.

1ST JULY–31ST DECEMBER,

1890.

Soc. Reg. Lond.

12.8.91

DAILY WEATHER REPORT.

July to December. 1890.

1865 f. 91. Judd & Co Ltd Lith. 73 & 75, Farringdon Rd & Doctors Commons

DAILY WEATHER REPORT.

for Tuesday, 1st July, 1890.

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

	STATIONS.	YESTERDAY EVENING. Barom: Reading at 32° F. and Sea Level.	Temp. Dry.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	8 A.M. TO DAY. Barometer. Reading at 32° F. and Sea Level.	Barometer. Difference from 8 a.m. yesterday.	Shade Temp. Dry.	Shade Temp. Wet.	Shade Temp. Difference from 8 a.m. yesterday.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	Sea. (0 to 8.)	PAST 24 HOURS. Shade Temp. Max.	Shade Temp. Min.	Amount of Rainfall.
SCANDINAVIA.	Haparanda ...	29.29	56	SSE	2	0	29.30	-.06	58	56	+4	S	2	0	*	59	48	0.04
	Hernösand ...	29.41	57	NW	4	c	29.53	+.15	56	51	-2	NW	6	bc	*	68	50	-
	Stockholm ...	29.60	54	WSW	4	c	29.63		61	54		WSW	2	b	*	66	50	-
	Wisby	29.69	58	WSW	4	b	29.66	+.01	59	54	+2	NNW	2	bc	*	64	52	-
	Bodö	29.37	50	S	4	r	?	?	52	50	-1	WSW	2	0	?	?	48	0.43
	Christiansund	29.71	54	NNW	3	bc	29.49	-.14	53	47	0	NNW	9	c	3	54	50	-
	Skudesnaes ...	29.63	54	NNW	4	b	29.62	-.05	56	51	+2	E	2	b	2	57	46	-
	Christiania Fjord (Færder)	29.62	57	SSW	4	b	29.63	+.07	59	53	+3	ENE	2	b	2	61	55	-
	Skagen (The Scaw)	29.63	55	2	0	b	29.60	+.01	59	56	+5	SE	1	b	1	66	52	-
	Fanö	29.56	57	SSE	4	c	29.43	-.31	55	53	-4	NE	4	r	*	63	54	0.04
BRITISH ISLANDS.	Sumburgh Head	29.63	53	ESE	3	bc	29.69	+.11	54	49	+1	NE	5	bc	5	56	47	-
	Stornoway ...	29.42	60	E	6	bc	29.72	+.45	54	53	-1	E	5	bc	4	62	48	-
	Wick	29.52	53	ESE	4	0	29.69	+.26	53	52	-1	NE	4	0	3	59	46	0.04
	Nairn	29.40	59	E	3	c	29.68	+.33	54	52	-3	ENE	3	c	3	63	51	-
	Aberdeen ...	29.45	54	ENE	4	cq	29.64	+.20	52	49	-2	NNE	5	oqp	5	58	51	0.01
	Leith	29.30	54	E	4	r	29.56	+.23	50	50	-4	E	4	r	*	61	48	0.17
	Shields	29.22	53	SE	7	r	29.38	-.03	54	53	0	NNE	6	r	5	57	51	0.56
	Spurn Head ...	29.11	57	SE	4	c	29.22	-.20	57	55	+2	ESE	2	c	3	57	48	0.33
	York	29.13	55	E	1	r	29.26	-.13	55	54	+2	NNE	2	r	*	56	52	0.76
	Loughborough	29.14	60	WSW	2	c	29.24	-.15	51	50	-1	WNW	1	rq	*	62	48	0.65
	Ardrossan ...	29.22	54	NE	4	r	29.55	+.33	53	48	-1	NE	3	0	2	58	52	0.64
	Malin Head ...	29.29	53	SSE	4	or	29.60	+.46	55	53	+5	NNE	4	0	2	55	50	0.08
	Mullaghmore ...	29.22	56	WNW	5	c	29.62	+.47	59	55	+5	NNW	5	bc	3	59	52	-
	Belmullet ...	29.29	56	NNW	3	b	29.67	+.54	56	52	+3	NNW	2	b	*	56	49	0.22
	Donaghadee ...	29.14	57	E	2	bc	29.53	+.38	53	52	+2	NE	5	0	4	64	50	0.30
	Liverpool (Bidston)	29.13	59	NW	2	bc	29.29	+.03	57	54	+4	NNE	5	0	4	59	51	0.34
	Holyhead ...	29.15	56	WSW	2	b	29.37	+.19	56	54	+1	NNE	6	cq	6	62	53	0.05
	Parsonstown ...	29.21	53	WSW	2	0	? 29.56	+.36	56	55	+1	NNW	2	c	*	60	50	0.23
	Valencia	29.36	55	NW	5	cqp	29.70	+.45	58	55	+3	NNW	4	bcqp	4	58	51	0.25
	Roche's Point ...	29.22	57	NNW	6	bc	29.55	+.28	57	52	+2	NNW	5	b	4	59	51	0.15
	Pembroke (St. Ann's Hd.)	29.16	55	W	5	bc	29.36	+.10	55	55	+1	NNW	7	qp	6	58	52	0.03
	Scilly	29.32	57	W	6	c	29.46	-.01	57	55	0	WNW	6	cq	4	57	51	0.20
	Prawle Point ...	29.24	55	WSW	6	bc	29.85	+.01	55	53	0	WNW	3	oq	3	59	49	0.09
	Jersey (St. Aubin's)	29.38	56	W	7	bc	29.39	-.09	55	55	0	WNW	7	bcqpm	5	62	51	0.46
	Hurst Castle ...	29.32	58	WSW	7	bc	29.30	-.07	56	55	0	WNW	4	c	4	63	50	0.18
	Dungeness ...	29.20	58	WSW	6	c	29.24	-.29	55	52	+1	WSW	4	c	3	59	51	0.50
	London	29.18	62	WSW	3	bc	29.26	-.18	54	51	+1	W	2	cp	*	64	48	0.22
	Oxford	29.18	55	SW	3	b	29.26	-.10	55	51	+3	W	1	0	*	63	50	0.24
	Cambridge ...	29.15	59	S	1	c	29.25	+.18	53	54	+5	S	1	b	*	62	44	0.33
	Yarmouth ...	29.19	57	S	6	r	29.24	-.30	57	54	+1	S	2	bc	3	57	48	0.29
GERMANY & HOLLAND.	Cuxhaven ...	29.63	55	W	3	r	29.43	-.40	55	55	-1	SSE	2	r	*	65	55	0.16
	Berlin	29.68	64	SE	2	c	29.51	-.39	63	58	+7	SSE	5	c	*	73	55	-
	Wiesbaden ...	*	*	*	*	*	29.54	-.35	59	54	+4	SW	5	c	*	66	54	0.20
	Munich	29.70	56	E	4	0	29.70	-.27	62	58	+8	SW	2	c	*	64	54	0.16
	The Helder ...	29.82	55	SE	3	r	29.83	-.35	57	54	0	SSW	2	c	2	63	54	0.59
FRANCE AND BELGIUM.	Brussels (9 a.m.)	*	*	*	*	*	29.39	-.33	55	50	0	SSW	2	c	*	62	49	0.39
	Cape Gris Nez	?	?	WSW	6	0	?	?	53	50	-1	WSW	5	0	6	59	50	0.41
	Paris	29.43	55	WSW	2	r	29.42	-.36	55	52	-1	SW	4	bc	*	58	48	0.79
	Brest	29.47	54	W	6	r	29.51	-.02	57	55	-2	NNW	5	c	6	66	50	0.08
	Lorient	29.54	57	W	6	c	29.54	-.06	54	52	-4	WNW	6	bc	5	59	52	0.39
	Rochefort ...	29.75	62	W	6	c	29.73	-.19	51	51	-10	W	7	r	*	64	50	1.50
	Belfort	? 29.75	62	NW	1	0	? 29.75		56	49		NW	1	c	*	71	50	0.20
	Lyons	29.70	62	E	3	r	29.72	-.21	58	50	-2	SSW	2	bc	*	69	54	-
	Nice	29.76	67	E	5	c	29.72	-.04	64	58	-1	WSW	2	c	3	77	59	-
	Perpignan ...	29.80	73	NE	2	b	29.83	-.15	61	57	-3	NW	3	0	*	76	59	0.04
	Biarritz																	
PENINSULA.	Corunna	*	*	*	*	*												
	Lisbon	30.12	64	NNW	4	0	30.08	-.04	63	59	+2	N	4	c	2	70	61	-

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

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

WEATHER CHARTS

for 8 a.m. on Tuesday, 1st July 1890.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP.

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

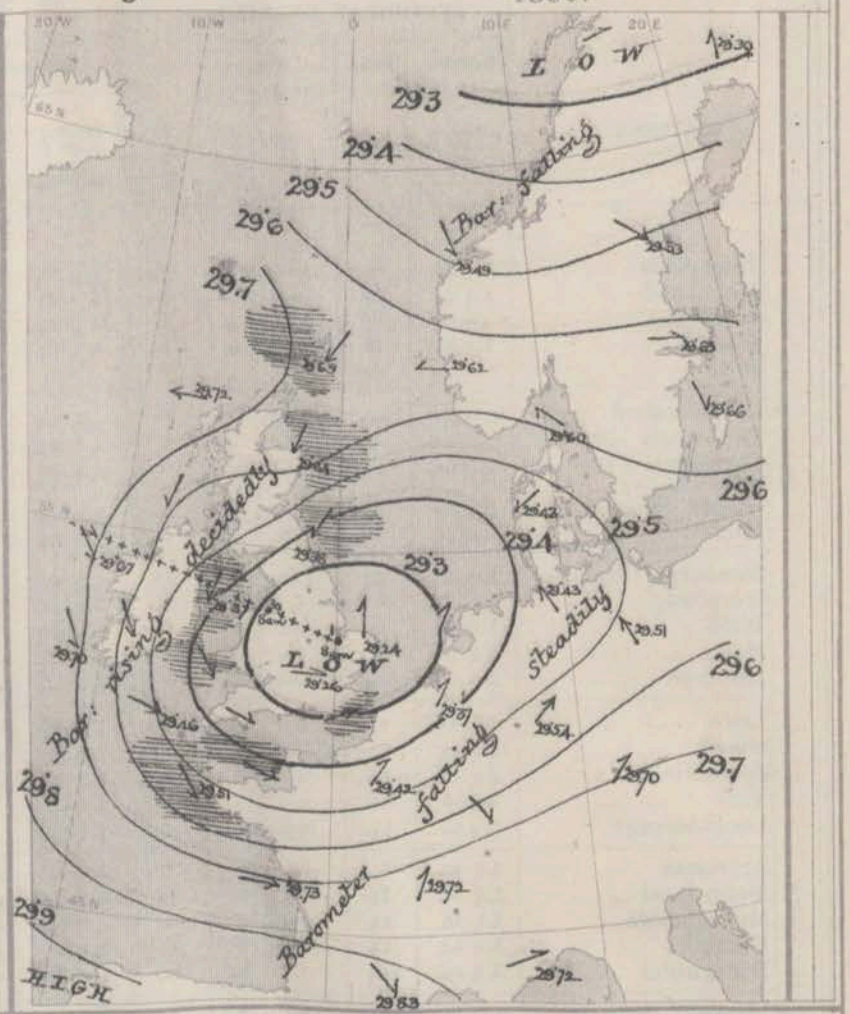
WIND - Arrows shew the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—
= forces above 10; = forces 8 to 10;
= forces 5 to 7; = forces 1 to 4.
= dead calm.

SEA DISTURBANCE—Where considerable, is shewn thus:
= Rough. = High.

MEAN HEIGHT OF THE BAROMETER

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

STATIONS.	MEAN READINGS.
	Ins.
Sumburgh Head	29·704
Stornoway	29·797
Wick	29·810
Nairn	29·821
Aberdeen	29·831
Leith	29·850
Shields	29·876
York	29·910
Loughborough	29·936
Ardrossan	29·862
Donaghadee	29·881
Holyhead	29·918
Liverpool	29·913
Parsonstown	29·921
Valencia	29·939
Roche's Point	29·938
Pembroke	29·942
Scilly	29·984
Jersey	30·009
Hurst Castle	29·974
Dover	29·970
LONDON	29·967
Oxford	29·953
Cambridge	29·947
Yarmouth	29·943



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.

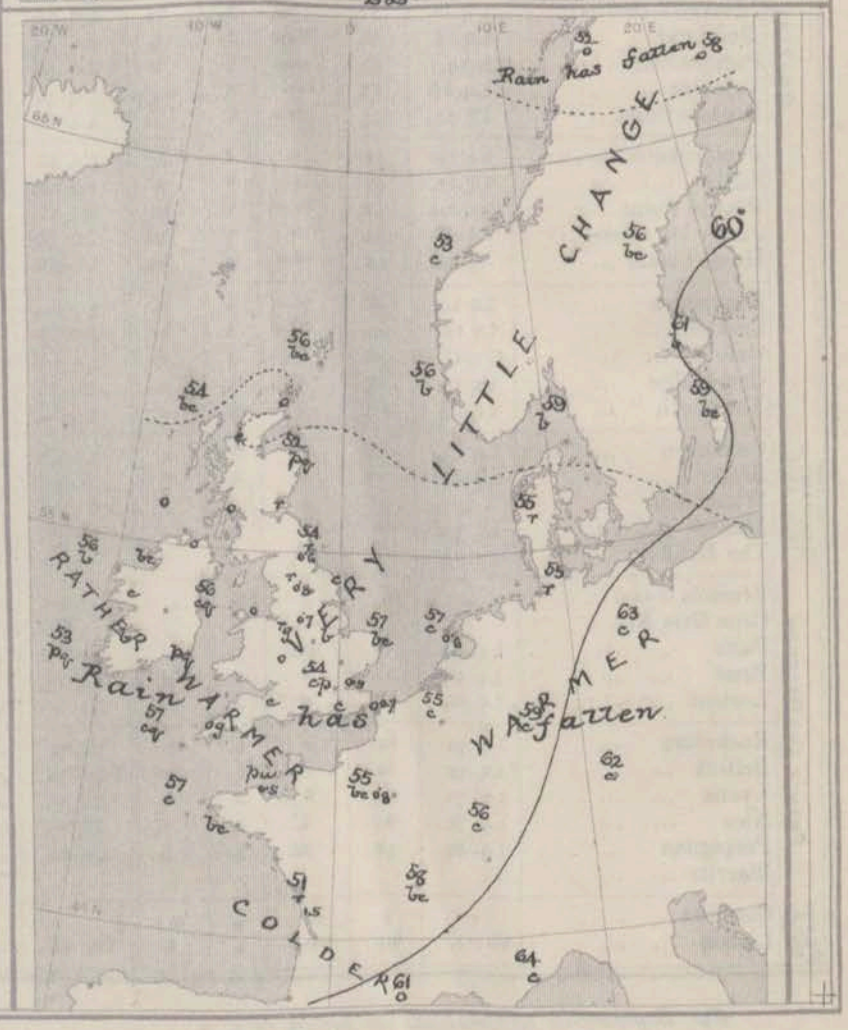
RAINFALL—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0·5 in. or more are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of July.)

STATIONS.	TEMPERATURE. Daily Max.	Daily Min.	at 8 a.m. Dry.	at 8 a.m. Wet.	RAINFALL. (Inches.)
Sumburgh Head	57·8	48·3	53·6	52·0	2·09
Stornoway	60·2	49·5	56·0	54·0	3·02
Wick	62·2	49·2	56·1	53·8	2·25
Nairn	64·7	51·4	57·2	53·6	2·57
Aberdeen	64·4	51·1	58·0	54·4	2·74
Leith	67·1	51·7	58·6	55·3	2·84
Shields	64·4	52·9	58·6	55·4	2·63
York	68·5	52·1	59·4	56·2	2·57
Loughborough	72·1	53·0	62·0	58·2	2·34
Ardrossan	63·9	53·2	57·5	54·8	2·91
Donaghadee	63·1	51·6	57·4	55·6	2·67
Holyhead	63·9	54·7	58·2	55·9	2·32
Liverpool	66·1	54·4	59·6	55·9	2·99
Parsonstown	66·4	51·9	58·3	54·8	3·01
Valencia	64·1	53·6	58·7	56·3	3·91
Roche's Point	66·7	53·3	58·7	55·8	3·16
Pembroke	62·9	55·0	58·1	55·9	2·31
Scilly	64·5	56·3	60·1	58·0	2·29
Jersey	68·8	56·3	62·2	59·2	2·21
Hurst Castle	67·9	55·7	61·3	58·8	2·15
Dover	67·2	56·9	62·6	58·8	1·82
LONDON	73·0	54·1	62·3	58·1	2·17
Oxford	69·9	53·7	60·2	56·8	2·51
Cambridge	72·3	52·4	61·4	57·9	2·30
Yarmouth	66·8	55·2	61·2	58·1	2·68

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



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 29·9 ins: to 30·1 ins: over the Iberian Peninsula; 29·7 ins: and more, in the south of France, in the Hebrides, and off the west of Ireland.
Lowest, 29·3 ins: and less, over Lapland, and also in a depression lying over England.
Gradients moderate to rather steep — the steepest being over our southwestern districts.
Barometer rising decidedly in the northwest and west, slightly in the south, falling in the east and southeast.

TEMPERATURE

Highest, 64° at Nice, 63° at Lisbon and Berlin, 62° at Munich, and 61° at Perpignan and Stockholm.
Lowest, 50° at Leith, 51° at Loughborough and Rockfoft, 52° at Aberdeen, and 54° in London.
It did not rise above 64° at any of our own stations yesterday and went down to 44° at Cambridge and 48° in London and several other places during the night.

WIND

Moderate to fresh from NE. in Scotland, from the N.ward on our western coasts (strong at Kimbrooke), and from the W.ward in the Channel.
Over England it is light and variable, while over the Bay of Biscay there is a strong breeze from between NW. and W.

WEATHER

Dull and rainy over the northwestern and northern parts of England and in the east of Scotland, cloudy and showery in the southeast and east. In the extreme west, however, it is improving decidedly.
The rainfall for the previous 24 hours has been heavy at many of our more northern stations and in France.

SEA

Rough or rather so on most exposed parts of our coasts and on the west coast of France, slight at our eastern stations.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

Showery weather and local thunderstorms are likely to prevail over England today, but the finer weather in the west seems likely to become more general tomorrow.

FORECASTS

For the 24 hours ending at NOON on 2nd JULY 1890.

DISTRICTS.	FORECASTS.	DISTRICTS.	FORECASTS.
0 SCOTLAND NORTH	NE.ly to N.ly winds, moderate; fair.	6 SCOTLAND WEST	N.ly breezes, moderate to light; showery to fair. Very cold tonight.
1 SCOTLAND EAST	NE.ly to N.ly winds, fresh; rainy to fair. Very cold tonight.	7 ENGLAND N.W.	
2 ENGLAND N.E.		8 ENGLAND S.W.	
3 ENGLAND EAST	Varying winds, finally N.ly; rainy and thundery at times, then finer. Very cold tonight.	9 IRELAND NORTH	N.ly breezes, moderate to light; fair generally.
4 MIDLAND COUNTIES		10 IRELAND SOUTH	
5 ENGLAND SOUTH		WARNINGS	NONE ISSUED.

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

YESTERDAY'S 2 P.M. REPORTS.

	BAR:	THER: D.	THER: W.	WIND D.	WIND F.	WEA	SEA
Skudesnaes ...	29.66	57	49	WNW	4	b	3
Sumburgh Head	29.61	55	52	ESE	3	bc	5
Stornoway	29.34	59	58	SE	6	o	6
Aberdeen	29.43	58	55	E	4	bcq	4
Shields	29.26	53	52	SE	7	r	5
Ardrossan	29.19	56	53	E	2	r	1
Malin Head ...	29.15	53	52	NNE	4	o	2
Mullaghmore ...	29.16	58	53	WNW	3	c	2
Belmullet	29.21	51	49	NNW	2	o	*
Holyhead	29.16	60	55	SSW	2	b	3
Valencia	29.28	57	52	WNW	6	cqp	5
Scilly	29.34	57	55	WSW	5	rq	4
Jersey	29.39	61	57	WNW	6	bc	5
Dungeness	29.27	57	56	SSW	6	r	5
London	29.19	63	60	SSW	4	cp	*
Yarmouth	29.31	56	55	SSE	7	rqy	5
Rochefort	29.69	62	61	WSW	6	r	?

GENERAL REMARKS ON THE WEATHER OVER EUROPE

DURING THE PAST 24 HOURS.

Weather fine over the greater part of Eastern and Southern Europe, as well as over Denmark, the south of Scandinavia, and the extreme southwest of our Islands. Dull elsewhere with heavy rain over the greater part of England, France, and the north of Ireland, as well as at Haparanda and St Petersburg. Weather improving somewhat later in the west and south of England, but remaining rainy in the east, with a thunderstorm at Cambridge.

Temperature highest 79° at Brindisi, 78° at Hyeres, 77° at Tunis, and 76° at Oran; above 70° in most parts of Southern and Eastern Europe. Lowest 51° at Malin Hd., 51° at Donaghadee, 52° at Loughborough, Liverpool, and Oxford, and 53° at Boss. Christiansund, Sumburgh Hd., Belmullet, York, Cambridge, and in London. Daily maxima below 60° in many parts of the United Kingdom, but thermometer exceeding 70° in central and southern parts of France.

Wind fresh from the SWerd or Werd in the west and southwest of our Islands and the west of France, moderate to strong from the SEerd in the north and east of the United Kingdom. Light from the Swerd over the Netherlands and also in Finland, NW3 in the west of Norway, and W3 over Denmark and the Baltic. SE3 at most of the Italian stations and NE3 in Spain, but variable in Algeria and also in the south of Russia, subsequently veering to NW in Ireland.

Barometer highest, 30.1 in. and upwards, in an anticyclone lying to the southwestward of the Iberian Peninsula, 30.0 in. and upwards in another system lying over the central and southern parts of Russia. Lowest, 29.2 in. and less, in a depression lying over the northwest of our Islands; 29.4 in. and less, in another disturbance lying over the Gulf of Bothnia and the north of Sweden. Depression in northwest subsequently moving slowly southeastwards over our Islands, and barometer beginning to rise in the extreme 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 Wednesday, 23rd July, 1890.

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

	STATIONS.	YESTERDAY EVENING. Barom: Reading at 32° F. and Sea Level.	Temp. Dry.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	8 A.M. TO DAY. Barometer. Reading at 32° F. and Sea Level.	Barometer. Difference from 8 a.m. yesterday.	Shade Temp. Dry.	Shade Temp. Wet.	Shade Temp. Difference from 8 a.m. yesterday.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	Sea. (0 to 6.)	PAST 24 HOURS. Shade Temp. Max.	Shade Temp. Min.	Amount of Rainfall.
SCANDINAVIA.	Haparanda ...	29.41	54	SW	2	c	† 29.41	+ .11	57	57	− 1	SSW	2	0	*	61	50	0.28
	Hernösand ...	29.56	56	SW	2	c	† 29.50	− .05	57	52	+ 1	S	0	c	*	68	50	-
	Stockholm ...	29.57	56	SSE	2	0	† 29.47	− .16	58	50	− 6	NNE	2	0	*	70	50	0.04
	Wisby	29.48	55	SE	2	0	† 29.45	− .21	57	54	− 2	NW	2	c	*	64	50	0.32
	Bodö	29.49	57	N	1	bc	29.50	?	53	49	+ 1	WSW	2	c	1	59	50	-
	Christiansund	29.63	53	WNW	4	0	29.55	+ .06	54	50	+ 1	WNW	4	f	3	58	52	-
	Skudesnaes ...	29.58	58	NW	6	c	29.54	− .08	55	51	− 1	NW	6	c	3	63	50	-
	Christiania Fjord (Fæstet)	29.52	64	WNW	3	bc	29.51	− .12	61	55	+ 2	S	0	bc	1	64	57	-
	Skagen (The Skaw)	29.50	57	NE	1	c	29.49	− .11	59	54	0	S	0	c	0	64	50	-
	Fanö	29.49	53	ENE	4	b	29.50	+ .07	53	52	− 2	NNE	2	c	*	59	50	0.16
BRITISH ISLANDS.	Sumburgh Head	29.73	51	NE	2	0	29.68	− .01	50	49	− 4	N	1	0	3	56	46	-
	Stornoway ...	29.75	54	E	5	c	29.73	+ .01	53	52	− 1	E	3	c	3	59	49	-
	Wick	29.74	54	N	2	0	29.71	+ .02	53	50	0	N	1	0	1	59	42	-
	Nairn	29.75	55	E	1	0	29.72	+ .04	54	50	0	S	0	c	1	60	45	-
	Aberdeen ...	29.72	54	N	3	c	29.73	+ .09	52	48	0	N	2	0	3	58	47	0.01
	Leith	29.70	51	E	2	0	29.74	+ .18	53	50	+ 3	SE	1	0	*	56	45	0.03
	Shields	29.65	54	NNW	4	0	29.75	+ .39	52	50	− 2	WNW	2	c	4	56	48	0.08
	Spurn Head ...	29.49	58	NNE	5	c	29.74	+ .32	55	53	− 2	NW	4	0	3	62	54	-
	York	29.58	59	NNE	3	0	29.77	+ .51	52	51	− 3	NW	1	0	*	60	47	0.11
	Loughborough	29.51	59	WNW	1	0	29.79	+ .55	56	53	+ 5	WNW	2	0m	*	64	51	0.20
	Ardrossan ...	29.68	60	NW	1	c	29.71	+ .16	54	51	+ 1	W	2	c	1	62	? 53	-
	Malin Head ...	29.73	60	NW	2	b	29.73	+ .13	55	53	0	NW	2	0r	1	60	53	-
	Mullaghmore ...	29.75	60	WNW	4	8	29.77	+ .15	55	53	− 4	WNW	4	0	2	63	52	0.09
	Belmullet ...	29.80	58	NNW	3	c	29.81	+ .14	55	52	− 1	NNW	2	0	*	61	53	-
	Donaghadee ...	29.71	58	NNE	3	bc	29.75	+ .22	55	54	+ 2	SSW	2	c	1	59	50	0.05
	Liverpool (Bidston)	29.61	56	N	4	0	29.77	+ .48	55	52	− 2	W	2	0	3	63	51	0.04
	Holyhead ...	29.66	56	N	5	bc	29.78	+ .41	55	53	− 1	WSW	1	rgm	1	58	50	0.01
	Parsonstown ...	29.75	61	S	0	r	29.80	+ .24	55	54	− 1	S	0	0	*	67	50	0.06
	Valencia	29.88	57	NNW	3	0m	29.88	+ .18	56	53	− 2	NW	2	0m	2	62	52	-
	Roche's Point ...	29.77	62	NNW	5	b	29.86	+ .31	55	52	− 2	NW	3	c	3	63	51	-
	Pembroke (St. Ann's Hd.)	29.66	57	NNW	6	b	29.81	+ .45	55	55	0	W	1	0gm	2	59	50	-
	Scilly	29.74	59	WNW	5	c	29.86	+ .40	56	55	− 1	W	4	0	3	59	54	-
	Prawle Point ...	29.59	61	NW	4	bc	29.85	+ .50	55	54	0	WNW	2	c	2	63	50	0.01
	Jersey (St. Aubin's)	29.55	58	WNW	6	0m	29.86	+ .47	58	56	0	WNW	5	cm	5	60	55	0.15
	Hurst Castle ...	29.51	64	NNW	4	c	29.81	+ .51	61	58	+ 5	N	1	m	3	65	56	0.02
	Dungeness ...	29.44	58	W	3	c	29.75	+ .51	59	55	+ 4	NNW	4	c	3	60	49	0.18
	London	29.49	56	NW	1	org	29.79	+ .53	58	54	+ 4	NNW	2	c	*	66	53	0.25
	Oxford	29.56	58	NNW	2	0	29.80	+ .54	57	54	+ 2	NW	1	0	*	67	51	-
	Cambridge ...	29.48	62	E	1	c	29.78	+ .53	57	54	− 1	W	1	0	*	67	50	-
	Yarmouth ...	29.46	61	E	1	bv	29.70	+ .46	58	55	+ 1	NNW	3	bc	3	61	53	0.04
GERMANY & HOLLAND.	Cuxhaven ...	29.47	59	SW	2	b	29.51	+ .08	56	55	+ 1	W	3	r	*	64	?	0.04
	Berlin	29.53	67	S	1	0	29.60	+ .09	58	55	− 5	SW	5	bc	*	73	52	0.04
	Wiesbaden ...	*	*	*	*	*	29.74	+ .20	57	54	− 2	SW	4	c	*	63	50	0.32
	Munich	29.76	52	SW	4	b	29.90	+ .20	57	52	− 5	SW	6	c	*	64	46	1.06
	The Helder ...	29.48	58	NNW	1	bc	29.55	+ .22	57	55	0	WNW	1	c	1	? 64	55	0.08
FRANCE AND BELGIUM.	Brussels (9 a.m.)	*	*	*	*	*	29.72	+ .35	56	53	+ 1	WSW	2	0	*	63	48	0.08
	Cape Gris Nez	?	59	W	3	bc	?	?	56	54	+ 3	N	3	c	3	61	52	-
	Paris	29.56	51	S	1	0	29.82	+ .40	53	53	− 2	SSE	1	0	*	65	47	0.32
	Brest	29.76	59	NW	4	0	29.93	+ .42	57	56	0	NW	3	0	4	68	50	-
	Lorient	29.73	56	WNW	5	0	29.96	+ .42	54	53	0	NNW	4	0	4	57	52	-
	Rochefort ...	29.67	59	W	6	0	30.04	+ .31	60	59	+ 9	WNW	6	0	*	64	51	0.04
	Belfort	? 29.73	64	NW	1	r	29.64	+ .09	54	47	− 2	NW	1	r	*	69	49	0.24
	Lyons	29.77	61	W	2	c	29.96	+ .24	56	51	− 2	SSW	2	0	*	71	?	0.04
	Nice	29.65	68	ESE	5	b	29.60	+ .08	66	60	+ 2	ENE	1	b	1	75	59	-
	Perpignan ...	29.87	68	NW	4	0	30.02	+ .19	64	55	+ 3	W	4	b	*	70	59	-
	Biarritz	30.00	63	NNW	6	c	30.12	+ .15	62	59	− 2	NNW	4	r	5	66	57	0.24
PENINSULA.	Corunna	*	*	*	*	*												
	Lisbon	30.06	62	NNW	5	bc	30.09	+ .01	61	54	− 2	NNE	4	b	3	70	57	-

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, 2nd July,* 1890.

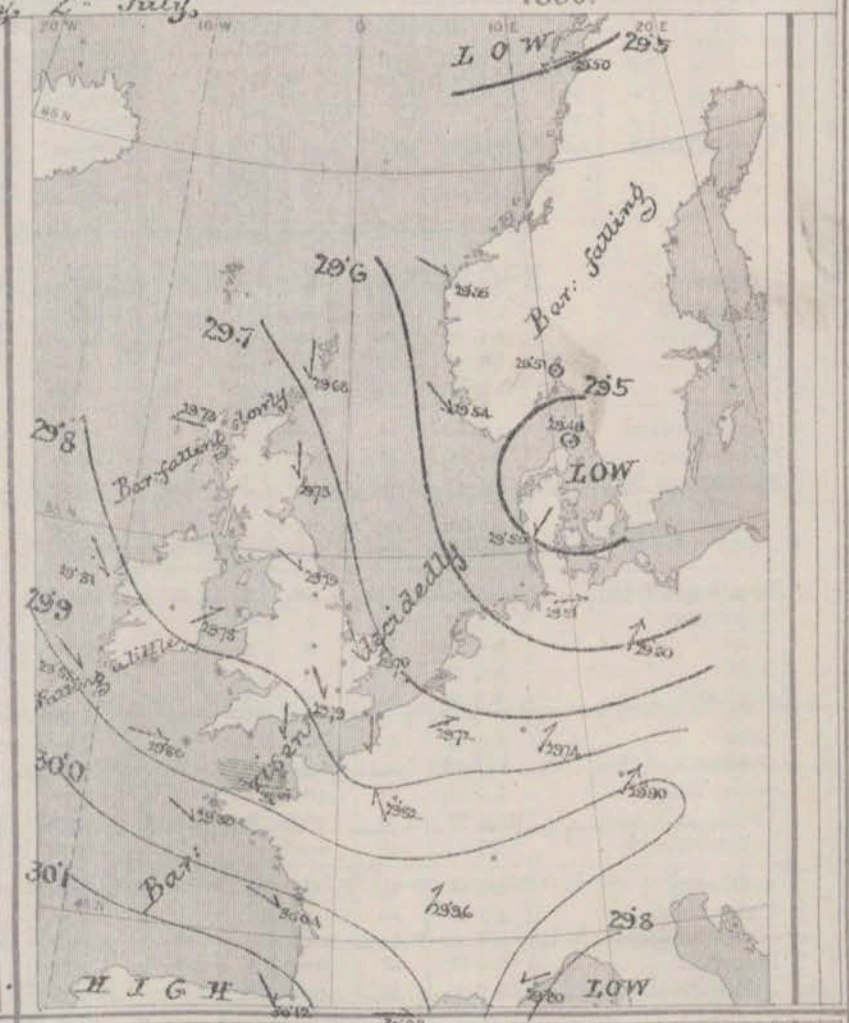
BAROMETER, WIND AND SEA.

EXPLANATION OF MAP.

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

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

SEA DISTURBANCE—Where considerable, is shewn thus:
= Rough. = High.



MEAN HEIGHT OF THE BAROMETER

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

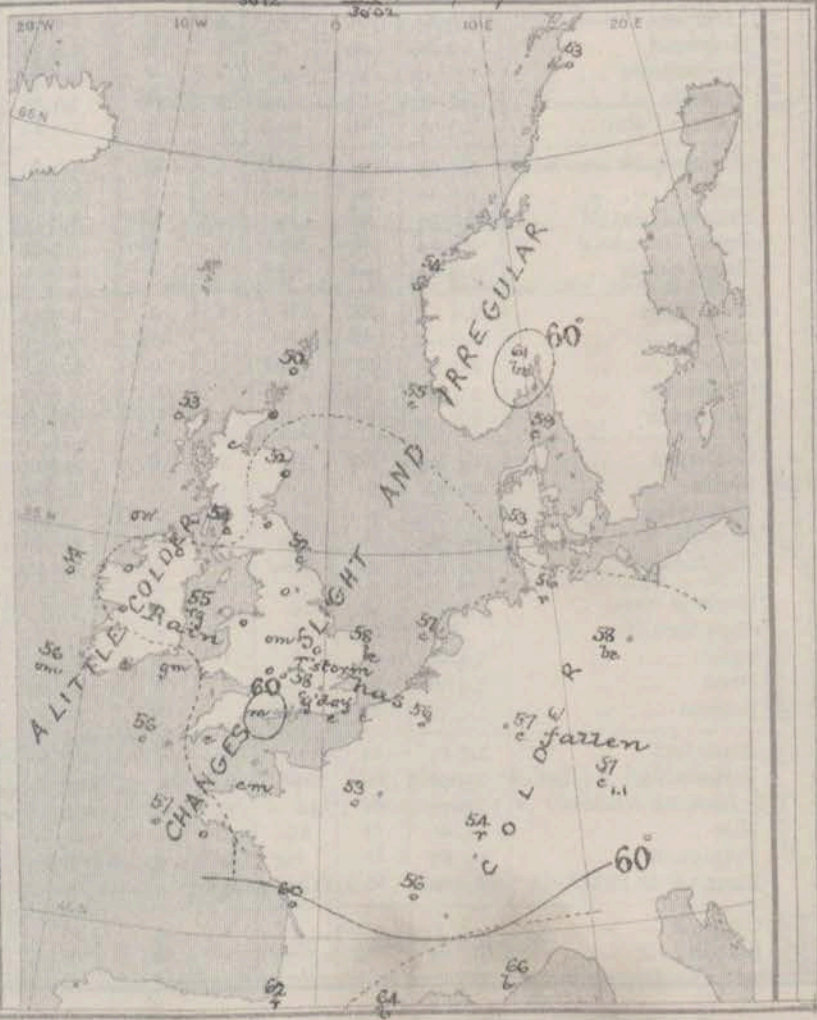
STATIONS.	MEAN READINGS. ins.
Sumburgh Head	29·794
Stornoway	29·797
Wick	29·810
Nairn	29·821
Aberdeen	29·831
Leith	29·850
Shields	29·876
York	29·910
Loughborough	29·936
Ardrossan	29·862
Donaghadee	29·881
Holyhead	29·918
Liverpool	29·913
Parsonstown	29·921
Valencia	29·939
Roche's Point	29·938
Pembroke	29·942
Scilly	29·984
Jersey	30·009
Hurst Castle	29·974
Dover	29·979
LONDON	29·967
Oxford	29·953
Cambridge	29·947
Yarmouth	29·943

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 July.)

STATIONS.	TEMPERATURE. Daily Max.	Daily Min.	at 8 a.m. Dry.	at 8 a.m. Wet.	RAINFALL. (Inches.)
Sumburgh Head	57·8	48·3	53·6	52·0	2·09
Stornoway	60·2	49·5	56·0	54·0	3·02
Wick	62·2	49·2	56·1	53·8	2·25
Nairn	64·7	51·4	57·2	53·6	2·57
Aberdeen	64·4	51·1	58·0	54·4	2·74
Leith	67·1	51·7	58·6	55·3	2·84
Shields	64·4	52·9	58·6	55·4	2·63
York	68·5	52·1	59·4	56·2	2·57
Loughborough	72·1	53·0	62·0	58·2	2·34
Ardrossan	63·9	53·2	57·5	54·8	2·91
Donaghadee	63·1	51·6	57·4	55·6	2·67
Holyhead	63·9	54·7	58·2	55·9	2·32
Liverpool	66·1	54·4	59·6	55·9	2·99
Parsonstown	66·4	51·9	58·3	54·8	3·01
Valencia	64·1	53·6	58·7	56·3	3·01
Roche's Point	66·7	53·3	58·7	55·8	3·16
Pembroke	62·9	55·0	58·1	55·9	2·31
Scilly	64·5	56·3	60·1	58·0	2·29
Jersey	68·8	56·3	62·2	59·2	2·21
Hurst Castle	67·9	55·7	61·3	58·8	2·15
Dover	67·2	56·9	62·6	58·8	1·82
LONDON	73·0	54·1	62·8	58·1	2·17
Oxford	69·9	53·7	60·2	56·8	2·51
Cambridge	72·2	52·4	61·4	57·9	2·30
Yarmouth	68·8	55·2	61·2	58·1	2·68

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

GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest 30.1 ins. to 29.9 ins. over the Bay of Biscay, Spain, and the west and south of France.
Lowest 29.5 ins. and less over Denmark, and also at Bodö, and about 29.7 ins. off the west of Scotland.
Gradient moderate to slight, and very irregular.
Barometer unsteady in the northwest, rising a little elsewhere.

TEMPERATURE

Highest 66° at Nice, 64° at Perpignan, 60° at Rochefort.
Lowest 50° at Sumburgh Head, 52° at Aberdeen and Shields, 53° at Bodö, Wick, Ardrossan, Fanö and Paris.
The daily maxima recorded yesterday, were all low (60° to 67° in our Islands)

WIND

Chiefly NW½ to W½ over Ireland, England, the Bay of Biscay and west of France – W½ and SW½ over Germany – Very variable elsewhere – E½ at Stornoway.

WEATHER

Cloudy very generally, with a showery appearance in many places. Rain was falling at Holyhead.
Rainfall yesterday was heaviest over the southeast of England (where thunderstorm occurred) and over south Germany. At Munich more than an inch fell.

SEA

Moderate over the Bay of Biscay, slight in most other places.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The new disturbance in the northwest seems likely to spread to the southward, and to cause showers in most parts of England, and thunder in some places.

FORECASTS

For the 24 hours ending at NOON on 3rd JULY 1890.

DISTRICTS.	FORECASTS.	DISTRICTS.	FORECASTS.
0 SCOTLAND NORTH 1 SCOTLAND EAST	Varying light breezes; unsettled, some rain at times.	6 SCOTLAND WEST 7 ENGLAND N.W.	SW½ to NW½ breezes, changeable, showery to fair.
2 ENGLAND N.E.	Light breezes; fair as a whole, but not settled.	8 ENGLAND S.W. 9 IRELAND NORTH 10 IRELAND SOUTH	NW½ breezes, moderate; changeable, some showers.
3 ENGLAND EAST 4 MIDLAND COUNTIES 5 ENGLAND SOUTH	W½ and SW½ breezes, light; fine, warm; afterwards showery and unsettled, perhaps thunder.	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: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Skudesnaes ...	29.39	63	55	NW	5	b	2
Sumburgh Head	29.71	56	50	NE	3	bc	5
Stornoway	29.75	57	56	E	3	b	4
Aberdeen	29.69	55	51	NNE	4	o p	5
Shields	29.55	55	54	NNE	5	o	6
Ardrossan	29.66	61	58	NNE	1	o	1
Malin Head ...	29.71	58	54	N	3	b	2
Mullaghmore ...	29.71	62	59	NW	5	bcv	3
Belmullet	29.77	61	56	N	2	b	*

	BAR:	THER: D.	THER: W	WIND D.	WIND F.	WEA.	SEA
Holyhead	29.56	55	53	NNE	5	o q	5
Valencia	29.84	62	58	NW	5	bc	4
Scilly	29.62	59	57	WNW	6	c q	4
Jersey	29.44	57	56	W	6	o	5
Dungeness	29.96	56	54	WSW	5	b	3
London	29.40	58	54	ESE	3	op	*
Yarmouth	29.37	60	55	SE	3	b	2
Rochefort	29.81	61	57	W	6	c	4

GENERAL REMARKS ON THE WEATHER OVER EUROPE

DURING THE PAST 24 HOURS.

Weather showery over the greater part of our Islands and France, and rainy in Germany and the south of Denmark. Fine in most other parts of Europe, but dull in Austria, and also in the north of Spain.—Some improvement taking place later in the west and north of our Islands, but weather remaining very showery elsewhere, with thunderstorms in the east and southeast of England.

Temperature highest 78° at Brindisi and Algiers, 77° at Odessa, and 76° at Nicolaieff, Oran, La Galle and Malta; above 70° over Eastern Europe and the Mediterranean generally, but below it in Spain. Lowest 49° at Limoges, 50° at Leith, and 51° at Loughborough and Rochefort; below 55° at several of our own and the French stations, as well as in the west of Norway. Daily maxima below 60° at several of our western and northern stations, but thermometer exceeding 65° in the southeast of England.

Wind moderate to strong from the NE^ly over the North Sea and the northern parts of the United Kingdom, from the NW^ly in the west of our Islands, and from the W^ly over the Bay of Biscay; light from the SW^ly over the Netherlands and western Germany, and also over Finland. Light from S. in Italy and Austria; moderate to strong from the NE^ly in Spain, variable or E^ly in Algeria. Subsequently shifting to the N^ly in most parts of the United Kingdom.

Barometer highest 30.0 ins. and upwards in an anticyclone lying to the west and southwest of the Iberian Peninsula, and also (apparently) in another system lying over the south of Russia. Lowest 29.3 ins. and less in a well marked depression lying over England, and also in another disturbance over the north of Scandinavia. English depression subsequently moving eastwards, and partially filling up; barometer rising in all part 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 *Thursday, 3rd July,* 1890.

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

	STATIONS.	YESTERDAY EVENING. Barom: Reading at 32° F. and Sea Level.	Temp. Dry.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	8 A.M. TO DAY. Barometer. Reading at 32° F. and Sea Level.	Barometer. Difference from 8 a.m. yesterday.	Shade Temp. Dry.	Shade Temp. Wet.	Shade Temp. Difference from 8 a.m. yesterday.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	Sea. (0 to 6.)	PAST 24 HOURS. Shade Temp. Max.	Shade Temp. Min.	Amount of Rainfall.
SCANDINAVIA.	Haparanda ...	29.39	55	Z	0	b	29.44	+.03	62	59	+5	N	2	bc	*	63	50	-
	Hernösand ...	29.43	60	Z	0	b	29.56	+.05	61	55	+4	SW	2	b	*	75	50	-
	Stockholm ...	29.53	54	WSW	2	r	29.67	+.20	61	56	+6	WSW	4	b	*	?	48	0.24
	Wisby	29.57	55	WSW	4	bc	29.73	+.28	60	56	+2	WSW	4	b	*	59	52	-
	Bodö	29.52	54	NNW	1	c	29.58	-.01	53	50	0	W	2	0	1	54	48	-
	Christiansund	29.54	59	NNE	2	bc	29.62	+.07	55	51	+1	NNE	2	[illegible]	3	?	52	-
	Skudesnaes ...	29.62	54	NW	6	o	29.70	+.16	56	51	0	NNW	2	[illegible]	3	?	48	-
	Christiania Fjord (Fiarder)	29.51	59	SSW	5	b	29.58	+.07	60	56	-1	S	4	b	4	64	57	-
	Skagen (The Scaw)	29.56	56	W	3	o	29.69	+.20	57	52	-2	W	3	bc	4	66	?	-
	Fanö	29.75	54	NW	4	c	29.80	+.30	57	53	+4	SW	4	c	*	63	?	0.04
BRITISH ISLANDS.	Sumburgh Head	29.69	52	NNW	2	c	29.68	.00	51	50	+1	W	2	o	3	55	47	0.14
	Stornoway ...	29.74	53	E	3	bc	29.76	+.03	52	51	-1	E	2	c	3	56	45	-
	Wick	29.72	53	N	1	o	29.74	+.03	54	51	+1	N	1	c	0	56	37	-
	Nairn	29.71	56	E	1	bc	29.74	+.02	53	49	-1	ESE	2	c	1	61	44	-
	Aberdeen ...	29.73	53	SSE	2	c	29.73	.00	53	49	+1	N	2	o	1	59	47	0.02
	Leith	29.70	56	ESE	1	c	29.72	-.02	49	47	-4	N	1	o	*	59	47	0.12
	Shields	29.74	52	SE	3	r	29.68	-.07	56	51	+3	WNW	3	c	3	57	49	0.52
	Spurn Head ...	29.76	56	S	3	r	29.71	-.03	55	53	0	WNW	4	o	3	60	53	0.11
	York	29.76	55	E	1	op	29.72	-.05	54	53	+2	SW	1	c	*	65	49	0.40
	Loughborough	29.79	58	WSW	1	o	29.77	-.02	53	52	-3	WNW	2	r	*	62	51	0.27
	Ardrossan ...	29.71	59	NW	2	b	29.74	+.03	51	49	-3	NE	3	op	2	59	49	0.06
	Malin Head ...	29.75	52	NW	4	op	29.77	+.04	53	49	-2	NNW	4	op	2	59	47	0.33
	Mullaghmore ...	29.81	55	WNW	4	c	29.83	+.06	54	50	-1	NW	5	bc	2	60	48	0.18
	Belmullet ...	29.85	55	N	2	o	29.88	+.07	53	50	-2	NW	2	b	*	59	49	0.02
	Donaghadee ...	29.76	55	NE	2	c	29.75	.00	54	52	-1	WNW	3	o	2	60	53	0.19
	Liverpool (Bidston)	29.77	61	WNW	3	b	29.75	-.02	53	49	-2	W	5	bc	4	61	51	0.05
	Holyhead ...	29.78	58	SW	3	bc	29.78	.00	58	53	+3	WNW	4	bc	4	65	50	0.02
	Parsonstown ...	29.82	59	Z	0	c	29.87	+.07	55	53	0	Z	0	bc	*	62	46	0.02
	Valencia	29.90	58	NW	2	c	29.95	+.07	56	52	0	N	2	o	2	60	52	-
	Roche's Point ...	29.86	58	NW	2	c	29.90	+.04	54	49	-1	NW	3	b	3	60	50	-
	Pembroke (St. Ann's Hd.)	29.84	56	W	2	bc	29.86	+.05	53	51	-2	NW	3	b	3	59	51	-
	Scilly	29.88	55	WSW	3	o	29.91	+.05	57	54	+1	NW	4	c	2	58	52	-
	Prawle Point ...	29.88	55	W	4	c	29.86	+.01	56	54	+1	WNW	3	og	2	59	51	-
	Jersey (St. Aubin's)	29.93	58	W	5	cm	29.87	+.01	57	55	-1	WNW	4	ogm	3	61	54	0.15
	Hurst Castle ...	29.86	60	WSW	5	c	29.83	+.02	58	56	-3	W	3	c	2	64	54	-
	Dungeness ...	29.83	60	WSW	4	bc	?29.79	+.04	57	54	-2	WSW	4	r	3	65	55	-
	London	29.83	62	SW	2	o	29.79	.00	58	54	0	W	2	bc	*	69	54	-
	Oxford	29.83	56	WNW	1	o	29.78	-.02	57	53	0	W	3	cp	*	66	52	0.18
	Cambridge ...	29.82	59	NW	1	o	29.75	-.03	59	55	+2	SW	1	o	*	67	52	0.03
	Yarmouth ...	29.81	58	SE	3	cp	29.75	+.05	58	56	0	SW	2	cm	3	62	53	0.05
GERMANY & HOLLAND.	Cuxhaven ...	29.73	58	WNW	3	b	29.86	+.35	58	57	+2	SSW	2	m	*	62	?	-
	Berlin	29.83	60	SW	3	bc	29.96	+.36	60	57	+2	SW	3	bc	*	66	54	0.12
	Wiesbaden ...	*	*	*	*	*	29.96	+.22	60	57	+3	SW	2	o	*	68	54	-
	Munich	30.03	57	SW	3	c	30.07	+.17	59	56	+2	SW	1	o	*	66	52	0.04
	The Helder ...	29.84	59	NW	1	b	29.80	+.25	58	56	+1	S	2	c	2	61	52	-
FRANCE AND BELGIUM.	Brussels (9 a.m.)	*	*	*	*	*	29.88	+.16	57	55	+1	SSW	2	o	*	66	53	0.08
	Cape Gris Nez	?	59	NW	3	bc	?	?	56	53	0	WSW	5	o	5	61	54	-
	Paris	29.93	67	WSW	2	c	29.93	+.11	56	54	+3	SSW	2	r	*	65	?	0.08
	Brest	29.96	55	NW	3	o	29.93	.00	56	53	-1	N	1	o	2	68	50	0.04
	Lorient	29.99	57	WSW	3	o	29.92	-.04	55	55	+1	W	4	o	4	59	54	-
	Rochefort ...	30.13	60	WNW	5	o	30.07	+.03	61	61	+1	W	5	r	*	66	52	0.05
	Belfort	?29.95	61	NW	1	o	?30.02	+.18	56	48	+2	NW	1	o	*	68	48	-
	Lyons	30.02	63	SW	1	c	30.06	+.10	61	54	+5	ESE	2	bc	*	68	55	-
	Nice	29.83	68	E	2	b	29.97	+.14	64	60	-2	NE	5	b	2	75	57	-
	Perpignan ...	30.07	69	NW	3	o	30.13	+.11	67	56	+3	NW	3	b	*	74	61	-
	Biarritz	30.15	64	W	3	c	30.12	.00	64	59	+2	W	5	o	2	68	61	-
PENINSULA.	Corunna	*	*	*	*	*												
	Lisbon	30.05	66	?	5	b	30.10	+.01	66	58	+5	N	4	b	5	75	61	-

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

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

WEATHER CHARTS

for 8 a.m. on Thursday, 3RD July, 1890.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP.

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

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

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

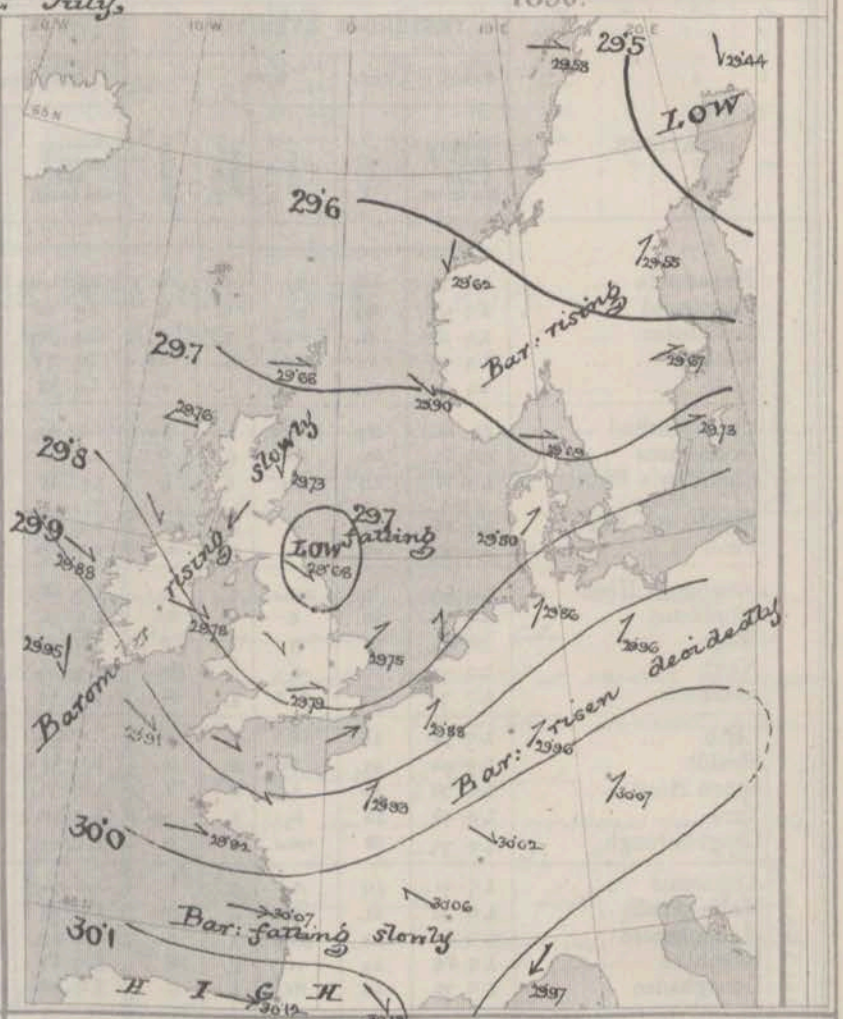
SEA DISTURBANCE—Where considerable, is shewn thus:

= Rough. = High.

MEAN HEIGHT OF THE BAROMETER

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

STATIONS.	MEAN READINGS.
	ins.
Sumburgh Head	29·794
Stornoway	29·797
Wick	29·810
Nairn	29·821
Aberdeen	29·831
Leith	29·850
Shields	29·876
York	29·910
Loughborough	29·936
Ardrossan	29·862
Donaghadee	29·881
Holyhead	29·918
Liverpool	29·913
Parsonstown	29·921
Valencia	29·939
Roche's Point	29·938
Pembroke	29·942
Scilly	29·984
Jersey	30·009
Hurst Castle	29·974
Dover	29·970
LONDON	29·967
Oxford	29·953
Cambridge	29·947
Yarmouth	29·943



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.

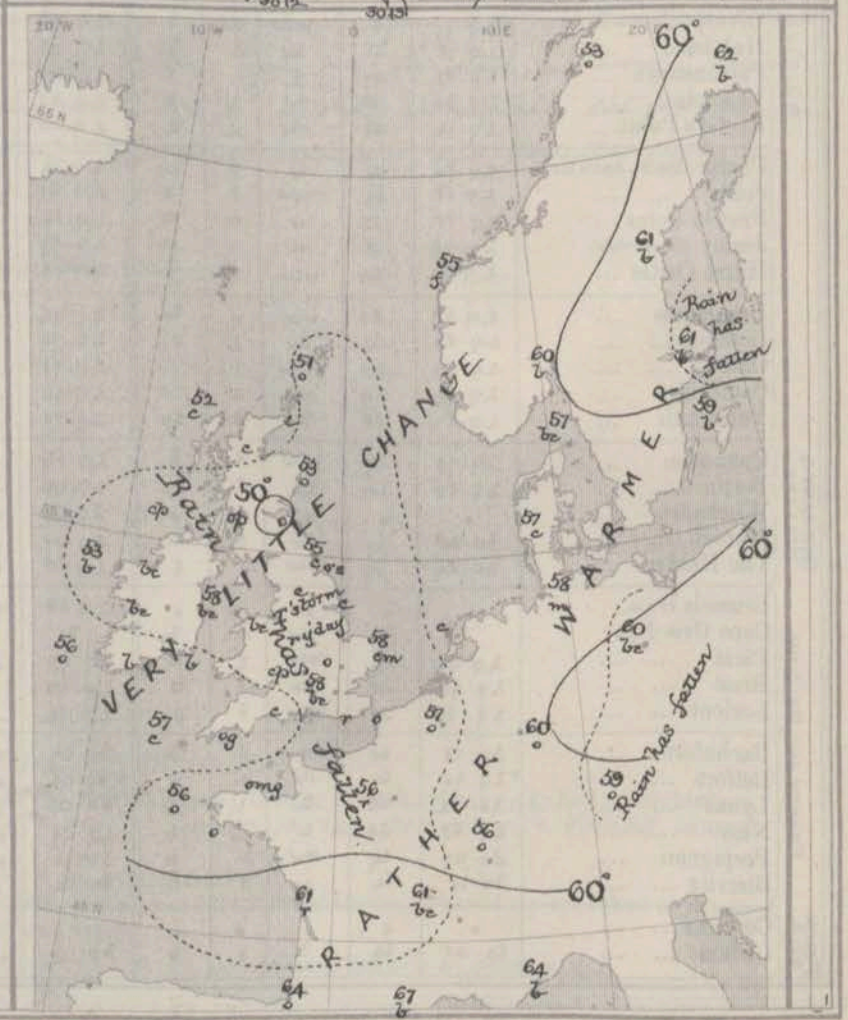
RAINFALL—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0·5 in. or more are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of July.)

STATIONS.	TEMPERATURE. Daily Max.	Daily Min.	at 8 a.m. Dry.	at 8 a.m. Wet.	RAINFALL. (Inches.)
Sumburgh Head	57·8	48·3	53·6	52·0	2·00
Stornoway	60·2	49·5	56·0	54·0	3·02
Wick	62·2	49·2	56·1	53·8	2·25
Nairn	64·7	51·4	57·2	53·6	2·57
Aberdeen	64·4	51·1	58·0	54·4	2·74
Leith	67·1	51·7	58·6	55·3	2·84
Shields	64·4	52·9	58·6	55·4	2·63
York	68·5	52·1	59·4	56·2	2·57
Loughborough	72·1	53·0	62·0	58·2	2·34
Ardrossan	63·9	53·2	57·5	54·8	2·91
Donaghadee	63·1	51·6	57·4	55·6	2·67
Holyhead	63·9	54·7	58·2	55·9	2·32
Liverpool	66·1	54·4	59·6	55·9	2·99
Parsonstown	66·4	51·9	58·3	54·8	3·01
Valencia	64·1	53·6	58·7	56·3	3·91
Roche's Point	66·7	53·3	58·7	55·8	3·16
Pembroke	62·9	55·0	58·1	55·9	2·31
Scilly	64·5	56·3	60·1	58·0	2·29
Jersey	68·8	56·3	62·2	59·2	2·21
Hurst Castle	67·9	55·7	61·3	58·8	2·15
Dover	67·2	56·9	62·6	58·8	1·82
LONDON	73·0	54·1	62·3	58·1	2·17
Oxford	69·9	53·7	60·2	56·8	2·51
Cambridge	72·3	52·4	61·4	57·9	2·30
Yarmouth	66·8	55·2	61·2	58·1	2·68

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



GENERAL SITUATION AT 8 A.M.

PRESSURE	Highest 30·1 ins. to 30·0 ins. over the Spanish Peninsula, and the southern parts of France & Germany. Lowest 29.5 ins. and less over Finland, and 29.7 ins. and less in a shallow depression lying over the northeast of England. Gradients slight and very irregular. Barometer rising in the far south, and in Norway, unsteady over our Islands.
TEMPERATURE	Highest 67° at Perpignan 66° at Lisbon, 64° at Nice and Biarritz, 61° at Stockholm and Hernosand. Lowest, 49° at Leith, 51° at Ardrossan and Dunbugh Head, 52° at Stornoway & 53° at several other stations. In London the temperature was 58°, at Paris 56.
WIND	NW½ over Ireland, Wales and the southwest of England; W½ in the Channel and west of France; SW½ over Holland and the southeast of England, very variable elsewhere.
WEATHER	Clear over Sweden and also in the extreme south of Europe, cloudy and unsettled elsewhere, with rain in many parts of England. Rain and thunder prevailed in the northwest and northeast yesterday, slight showers in the southeast of England, and over France.
SEA	Moderate on our northwestern coasts, slight to moderate in the Channel, smooth on our northeastern coasts.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

There is at present no indication of any permanent improvement in the weather.

FORECASTS

For the 24 hours ending at NOON on 4th JULY 1890.

DISTRICTS.	FORECASTS.	DISTRICTS.	FORECASTS.
0 SCOTLAND NORTH 1 SCOTLAND EAST	Very variable breezes, light; changeable, showery.	6 SCOTLAND WEST 7 ENGLAND N.W.	Same as No. 0 and 1.
2 ENGLAND N.E. 3 ENGLAND EAST 4 MIDLAND COUNTIES 5 ENGLAND SOUTH	Varying W½ and NW½ breezes, moderate; cloudy, showery at times; thunder locally.	8 ENGLAND S.W.	NW½ breezes, moderate; showery.
		9 IRELAND NORTH 10 IRELAND SOUTH	NW½ breezes, moderate; fair as a whole, 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: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Skudesnaes ...	29.86	58	52	NW	7	c	3
Sumburgh Head	29.68	50	50	NE	1	r	2
Stornoway	29.75	53	52	E	3	c	3
Aberdeen	29.74	54	49	SE	2	c	2
Shields	29.76	53	50	ESE	2	r	3
Ardrossan	29.72	57	53	SW	1	c	1
Malin Head ...	29.75	58	54	NW	2	o	1
Mullaghmore ...	29.81	57	52	WNW	4	o	2
Belmullet	29.86	57	50	NW	2	bc	*

	BAR:	THER: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Holyhead	29.79	68	56	WSW	3	b	2
Valencia	29.90	59	55	WNW	2	c	2
Scilly	29.90	55	54	W	3	c	3
Jersey	29.93	60	57	W	3	o	5
Dungeness	29.83	63	58	WSW	4	b	3
London	29.81	68	58	W	2	c	*
Yarmouth	29.80	61	57	N	4	c	4
Rochefort	30.13	64	60	WNW	5	c	2

GENERAL REMARKS ON THE WEATHER OVER EUROPE

DURING THE PAST 24 HOURS.

Weather fine and bright over southeastern Europe, and the southern parts of the Mediterranean as well as over the southern half of Spain, cloudy and unsettled elsewhere, with rain in some places. Thunderstorms over several parts of England later, showers in Ireland and at several French and German stations.

Temperature still very low in most places; ranging between 70° and 81° over the southern and eastern parts of the Mediterranean, in central and southern Russia and at Constantinople, much lower elsewhere. As low as 50° at Sumburgh Head; 52° at Aberdeen and Shields, 53° at many other stations (including Paris), and 58° at London and Berlin, rising to 69° in London later and to upwards of 70° over the southern parts of France, but low generally for the time of year.

Wind very variable. Mainly NW. ¾ over the British Isles and Bay of Biscay, NE. ¾ over Spain; SW. ¾ over Germany, very variable elsewhere. Becoming SE. ¾ on our northeast and east coasts later, no material change in other places.

Barometer highest 30.1 ins. and more to 29.9 ins. over southwestern Europe and south Germany exceeding 29.9 ins. over the southeast of Russia. Lowest 29.5 ins. and less over the Baltic and Gulf of Bothnia, 29.8 ins. and less over the Gulf of Genoa; shallow local disturbances in several places, one being off the west of Scotland. Latter disturbance moving southeastwards later.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

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

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

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

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

DAILY WEATHER REPORT.

for Friday, 4th July, 1890.

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

	STATIONS.	YESTERDAY EVENING. Barom: Reading at 32° F. and Sea Level.	Temp. Dry.	Wind. Direc.	Wind. Force (0 to 12.)	Weather.	8 A.M. TO DAY. Barometer. Reading at 32° F. and Sea Level.	Barometer. Difference from 8 a.m. yesterday.	Shade Temp. Dry.	Shade Temp. Wet.	Shade Temp. Difference from 8 a.m. yesterday.	Wind. Direc.	Wind. Force (0 to 12.)	Weather.	Sea. (0 to 6.)	PAST 24 HOURS. Shade Temp. Max.	Shade Temp. Min.	Amount of Rainfall.
SCANDINAVIA.	Haparanda ...	29.61	56	NW	0	bc	29.70	+.26	64	62	+2	E	2	0	*	66	45	-
	Hernösand ...	29.68	61	NW	0	bc	29.72	+.17	63	56	+2	W	2	b	*	72	50	-
	Stockholm ...	29.82	59	W	2	bc	29.84	+.17	65	56	+4	SSW	2	b	*	73	50	-
	Wisby	29.84	57	S	4	b	29.80	+.07	63	56	+4	SSE	4	b	*	68	54	-
	Bodö	29.71	53	W	2	b	29.77	+.19	54	50	+1	NW	1	0	1	57	48	-
	Christiansund	29.72	57	NW	2	bc	29.69	+.07	58	53	+3	ENE	3	b	2	59	50	-
	Skudesnaes ...	29.74	55	NNW	2	c	29.58	-.12	54	52	-1	NNE	2	†	2	61	50	0.16
	Christiania Fjord (Færder)	29.72	58	SSW	6	b	29.67	+.09	57	54	-3	ESE	6	†	2	?	57	-
	Skagen (The Skaw)	29.76	57	W	0	c	29.62	-.07	57	56	0	SSE	3	†	3	64	54	0.35
	Fanö	29.72	57	S	4	†	29.64	-.16	56	53	-1	SSW	4	c	*	63	54	0.39
BRITISH ISLANDS.	Sumburgh Head	29.72	52	NE	1	0	29.70	+.02	55	51	+4	NNE	3	c	3	56	45	0.04
	Stornoway ...	29.79	53	NW	2	0	29.82	+.06	52	51	0	NE	3	0	3	56	47	0.04
	Wick	29.76	55	N	1	0	29.76	+.02	55	51	+1	N	2	c	0	57	46	0.05
	Nairn	29.76	58	E	1	c	29.78	+.04	51	49	-2	E	1	c	1	61	49	0.12
	Aberdeen ...	29.76	57	ENE	3	bc	29.75	+.02	50	49	-3	NNW	4	0 q p	3	55	44	0.05
	Leith	29.76	53	ESE	1	c	29.76	+.04	53	51	+4	W	2	r m	*	57	45	0.15
	Shields	29.73	52	NW	3	0	29.75	+.04	54	51	-1	WNW	2	c	2	58	47	0.07
	Spurn Head ...	29.70	56	W	4	c	29.77	+.06	55	52	0	W	4	b	4	59	49	0.16
	York	29.73	54	W	2	bc	29.78	+.06	56	51	+2	W	3	b	*	62	45	0.12
	Loughborough	29.78	61	WNW	4	bc	29.84	+.04	58	52	+5	W	3	bw	*	63	47	0.02
	Ardrossan ...	29.77	56	W	3	b	29.77	+.03	55	52	+4	WSW	3	b	2	60	48	0.08
	Malin Head ...	29.83	55	NNW	4	bp	29.81	+.04	53	52	0	NNW	3	op	2	56	50	0.04
	Mullaghmore ...	29.90	56	NW	4	bv	29.86	+.03	55	50	+1	NW	4	c	2	60	50	-
	Belmullet ...	29.94	57	N	2	bc	29.88	.00	55	49	+2	N	1	b	*	58	47	-
	Donaghadee ...	29.83	58	NNE	5	b	29.81	+.06	54	52	0	NNE	3	c	2	61	51	0.01
	Liverpool (Bidston)	29.80	56	W	5	b	29.82	+.07	52	49	-1	W	3	0	4	58	50	-
	Holyhead ...	29.84	56	WNW	3	b	29.83	+.05	61	55	+3	WNW	1	bw	2	62	49	-
	Parsonstown ...	29.89	59	W	0	0	29.88	+.01	54	50	-1	W	0	bc	*	63	39	-
	Valencia	29.95	57	NW	2	cv	29.88	-.04	55	52	-1	N	1	0	2	61	46	-
	Roche's Point ...	29.91	58	W	1	bc	29.87	-.03	54	51	0	N	1	c	2	60	48	-
	Pembroke (St. Ann's Hd.)	29.88	56	W	4	bc	29.84	-.02	56	53	+3	E	1	bc	2	58	50	-
	Scilly	29.95	57	WSW	3	bc	29.81	-.10	53	52	-4	E	3	o †	?	59	52	0.04
	Prawle Point ...	29.92	55	W	3	0	29.85	-.01	53	51	-3	SE	2	o q	1	62	48	-
	Jersey (St. Aubin's)	29.96	58	WNW	4	0	29.87	.00	58	53	+1	ESE	4	o g r m	3	61	50	0.07
	Hurst Castle ...	29.87	63	WNW	5	b	29.88	+.05	58	56	0	SW	2	bc	2	65	48	-
	Dungeness ...	29.79	59	W	5	c	29.86	+.04	58	54	+1	W	3	bc	2	63	44	0.02
	London	29.81	62	WNW	2	bc	29.86	+.07	56	52	-2	W	1	b	*	65	45	0.06
	Oxford	29.86	55	WNW	2	b	29.87	+.09	55	52	-2	SW	1	b	*	65	45	0.02
	Cambridge ...	29.78	60	W	1	bc	29.83	+.08	57	53	-2	SW	1	b	*	66	44	0.01
	Yarmouth ...	29.74	60	WNW	2	c	29.82	+.04	57	53	-1	W	2	b	2	61	45	0.06
GERMANY & HOLLAND.	Cuxhaven ...	29.81	58	S	3	c	29.75	-.11	58	57	0	WSW	4	c	*	65	56	0.08
	Berlin	29.89	62	SSE	2	c	29.79	-.17	61	59	+1	SSW	3	0	*	73	55	0.39
	Wiesbaden ...	*	*	*	*	*	29.94	-.02	59	55	-1	SW	1	0	*	66	53	0.16
	Munich	30.04	56	SE	2	bc	30.04	-.03	59	56	0	SW	2	†	*	63	50	0.08
	The Helder ...	29.75	57	WSW	2	c	29.79	-.01	57	52	-1	W	3	c	3	61	55	0.08
FRANCE AND BELGIUM.	Brussels (9 a.m.)	*	*	*	*	*	29.90	+.02	56	53	-1	WSW	1	c	*	61	50	0.12
	Cape Gris Nez	?	58	W	5	c	?	?	56	55	0	NW	3	b	2	61	52	-
	Paris	29.93	61	WNW	2	0	29.98	+.05	55	52	-1	SW	1	0	*	68	52	0.35
	Brest	30.04	59	W	1	0	29.79	-.14	58	57	+2	SW	3	†	3	66	50	0.04
	Lorient	29.99	56	W	4	0	29.85	-.07	57	57	+2	SSW	3	†	4	59	54	0.16
	Rochefort ...	30.10	63	W	4	c	30.05	-.02	61	58	0	SW	4	0	*	?	?	-
	Belfort	? 30.02	60	W	1	†	? 29.98	-.04	56	48	0	W	1	0	*	68	55	0.53
	Lyons	30.01	66	S	2	c	30.02	-.04	66	59	+5	W	0	b	*	73	55	0.08
	Nice	29.93	71	SSE	4	b	30.01	+.04	68	61	+4	WSW	2	bc	1	75	57	-
	Perpignan ...	30.08	71	S	2	0	30.02	-.11	68	63	+1	NE	2	b	*	79	55	-
	Biarritz	30.15	68	WSW	3	c	30.03	-.09	66	62	+2	SSE	2	bc	2	73	59	-
PENINSULA.	Corunna	*	*	*	*	*												
	Lisbon	30.06	65	NNW	6	b	30.07	-.03	63	59	-3	NNE	3	bc	4	79	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 Friday, 4th July, 1890.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP.

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

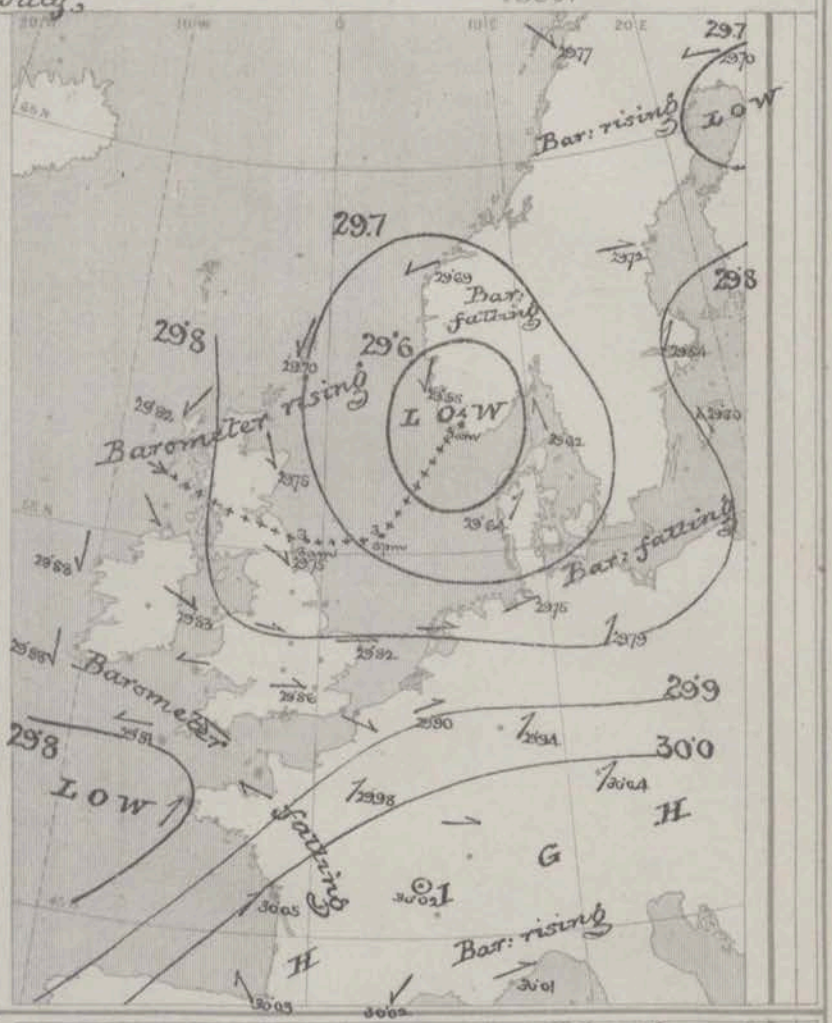
WIND - Arrows shew the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—
= forces above 10; = forces 8 to 10;
= forces 5 to 7; = forces 1 to 4.
⊙ = dead calm.

SEA DISTURBANCE—Where considerable, is shewn thus:
= Rough. = High.

MEAN HEIGHT OF THE BAROMETER

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

STATIONS.	MEAN READINGS.
	ins.
Sumburgh Head	29·794
Stornoway	29·797
Wick	29·810
Nairn	29·821
Aberdeen	29·831
Leith	29·850
Shields	29·876
York	29·910
Loughborough	29·936
Ardrossan	29·862
Donaghadée	29·881
Holyhead	29·918
Liverpool	29·913
Parsonstown	29·921
Valencia	29·939
Roche's Point	29·938
Pembroke	29·942
Scilly	29·984
Jersey	30·009
Hurst Castle	29·974
Dover	29·970
LONDON	29·967
Oxford	29·953
Cambridge	29·947
Yarmouth	29·943



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 July.)

STATIONS.	TEMPERATURE. Daily Max.	Daily Min.	at 8 a.m. Dry.	at 8 a.m. Wet.	RAINFALL. (Inches.)
Sumburgh Head	57·8	48·3	53·6	52·0	2·09
Stornoway	60·2	49·5	56·0	54·0	3·02
Wick	62·2	49·2	56·1	53·8	2·25
Nairn	64·7	51·4	57·2	53·6	2·57
Aberdeen	64·4	51·1	58·9	54·4	2·74
Leith	67·1	51·7	58·6	55·3	2·84
Shields	64·4	52·9	58·6	55·4	2·63
York	68·5	52·1	59·4	56·2	2·57
Loughborough	72·1	53·0	62·0	58·2	2·34
Ardrossan	63·9	53·2	57·5	54·8	2·91
Donaghadee	63·1	51·6	57·4	55·6	2·67
Holyhead	63·9	54·7	58·2	55·8	2·32
Liverpool	66·1	54·4	59·6	55·9	2·99
Parsonstown	66·4	51·9	58·3	54·8	3·01
Valencia	64·1	53·6	58·7	56·3	3·91
Roche's Point	66·7	53·3	58·7	55·8	3·16
Pembroke	62·9	55·0	58·1	55·9	2·31
Scilly	64·5	56·3	60·1	58·0	2·29
Jersey	68·8	56·3	62·2	59·2	2·21
Hurst Castle	67·9	55·7	61·3	58·8	2·15
Dover	67·2	56·9	62·6	58·8	1·82
LONDON	73·0	54·1	62·3	58·1	3·17
Oxford	69·9	53·7	60·2	56·8	2·51
Cambridge	72·3	52·4	61·4	57·9	2·30
Yarmouth	66·8	55·2	61·2	58·1	2·68

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

GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest 29.9 ins. to 30.0 ins. and more over France and Spain, and apparently about 29.9 ins. off our extreme W. coasts.
Lowest 29.6 ins. and less over the south of Norway, 29.8 ins. and less at the mouth of the English Channel.
Gradients moderate for SW. winds over the Bay of Biscay and Brittany.

TEMPERATURE

Barometer falling again in the southwest and south, rising in the far north.
Highest 68° at Nice and Perpignan, 66° at Biarritz, 65° at Stockholm, 64° at Haparanda, 61° at Berlin.
Lowest 50° at Aberdeen, 51° at Nairn, 53° at Scilly, 54° at Parsonstown & Shields, 55° at Paris, 56° in London.
The daily maxima yesterday did not exceed 66° at any of our own stations. Last night was very cold over England; in London the thermometer fell to 45° in the Shade, and to 36° on the grass.

WIND

Light from the N. in Scotland, from NW. on our northwestern coasts, from W. over England, SW. in Holstein, and from S. and SE. in the Skager Rack. In the west of France it was SW., at the mouth of the Channel E., and in the south of Ireland N.

WEATHER

Clear and bright in many part of England, rather showery at many of the northern stations, rainy over Brittany, the Channel Islands, and at Scilly. Rain fell yesterday except at our western stations, thunder and hail occurred at Spurn Head. Rainfall in our Islands was not heavy.

SEA

Very little disturbed anywhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

Much rain seems likely to fall over the southern half of England shortly.

FORECASTS

For the 24 hours ending at NOON on 5th JULY 1890.

DISTRICTS.	FORECASTS.	DISTRICTS.	FORECASTS.
0 SCOTLAND NORTH 1 SCOTLAND EAST	N. and variable breezes, light; showery to fair. Cold to night.	6 SCOTLAND WEST 7 ENGLAND N.W.	Same as No. 0 and 1.
2 ENGLAND N.E.	Varying winds, finally E.; fair to-day, less settled later.	8 ENGLAND S.W.	Varying light winds, finally W.; much rain, thunder locally.
3 ENGLAND EAST	Same as No. 5.	9 IRELAND NORTH	Same as No. 0 and 1.
4 MIDLAND COUNTIES	Same as No. 2.	10 IRELAND SOUTH	NE. and N. winds; dull, rain at times.
5 ENGLAND SOUTH	Wind backing to SW. and S.; light; warm at first, rainy later and probably thundery.	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: D.	THER: W.	WIND D.	WIND F.	WEA	SEA
Skudesnaes ...	29.76	60	53	W	2	c	1
Sumburgh Head	29.71	54	53	W	1	o	2
Stornoway	29.79	56	54	NW	3	c	3
Aberdeen	29.77	52	49	NE	3	ep	3
Shields	29.69	55	51	NNW	1	r	2
Ardrossan	29.78	57	52	SW	3	c	2
Malin Head ...	29.84	56	51	NNW	4	b	2
Mullaghmore ...	29.88	58	53	NW	4	bev	2
Belmullet	29.92	59	53	N	2	o	*

	BAR:	THER: D.	THER: W.	WIND D.	WIND F.	WEA	SEA
Holyhead	29.82	62	56	WNW	4	b	3
Valencia	29.95	61	56	WNW	2	bev	2
Scilly	29.95	59	56	NW	3	bc	2
Jersey	29.93	60	55	W	4	c	4
Dungeness	29.77	62	57	WSW	6	bc	4
London	29.80	62	57	W	2	bc	*
Yarmouth	29.74	57	54	NW	3	ep	3
Rochefort	30.09	65	63	W	5	o	3

GENERAL REMARKS ON THE WEATHER OVER EUROPE

DURING THE PAST 24 HOURS.

Weather fine in the western parts of our Islands, as well as over Scandinavia and the whole of southern and eastern Europe. Cloudy or overcast elsewhere with showers at some of the English and French stations. Showers falling during day in nearly all parts of western Europe, with thunder and hail at Spurn Head.

Temperature highest 79° at Brindisi, 78° at Odessa, 77° at Malta, and 76° at Nicolaieff and La Calle; above 70° in nearly all parts of southern and eastern Europe, and above 60° over Lapland and northern Russia. Lowest 49° at Leith, 51° at Sumburgh Head and Ardrossan, 52° at Stornoway, and 53° at Bodö, Nairn, Aberdeen, Malin Head, Belmullet, Liverpool, Loughborough and Pembroke. Daily maxima below 60° at several of our western and northern stations, but thermometer rising to 65° or a little more in the south and east of England.

Wind light to moderate from the W^ard^ or NW^ard^ over Ireland, England and the west of France, and from the SW^ard^ over the Netherlands, Denmark, Sweden, the Baltic and the greater part of central Europe. Light from between N. and E. in Scotland, and also in Spain, NW^ly^ over Italy and the adjacent parts of the Mediterranean; variable in Austria and the south of Russia. No important change occurring during day.

Barometer highest 30.1 ins. and upwards in a large anticyclone lying over Spain and Algeria; 30.0 ins. and upwards over the south of Russia. Lowest 29.4 ins. and less in a depression lying over the White Sea and its immediate neighbourhood; 29.7 ins. and less in a shallow disturbance lying off the northeast of England. Latter system subsequently moving eastwards across the North Sea, and barometer rising in most parts of our Islands and 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 Saturday, 5th July, 1890.

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

	STATIONS.	YESTERDAY EVENING. Barom: Reading at 32° F. and Sea Level.	Temp. Dry.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	8 A.M. TO DAY. Barometer. Reading at 32° F. and Sea Level.	Barometer. Difference from 8 a.m. yesterday.	Shade Temp. Dry.	Shade Temp. Wet.	Shade Temp. Difference from 8 a.m. yesterday.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	Sea. (0 to 8.)	PAST 24 HOURS. Shade Temp. Max.	Shade Temp. Min.	Amount of Rainfall.
SCANDINAVIA.	Haparanda ...	29.65	55	Z	0	0	29.63	-.07	56	56	-8	E	2	†	*	66	55	0.16
	Hernösand ...	29.70	57	SSW	2	†	29.61	-.11	58	55	-5	S	6	0	*	72	52	-
	Stockholm ...	29.72	57	ESE	4	†	29.72	-.12	63	55	-2	WSW	2	b	*	72	50	0.04
	Wisby	29.72	60	S	4	†	29.76	-.04	59	56	-4	W	4	bc	*	?	?	0.04
	Bodö	29.79	53	NNE	2	c	29.68	-.09	53	49	-1	N	2	b	1	57	48	-
	Christiansund	29.59	59	NE	8	bc	29.54	-.15	54	52	-4	ENE	7	†	3	64	52	-
	Skudesnaes ...	29.54	54	WNW	1	†	29.54	-.04	55	52	+1	SE	2	c	2	55	50	0.24
	Christiania Fjord (Færder)	29.58	57	SSE	3	c	29.59	-.08	53	51	-4	SSW	6	†	4	57	?	0.91
	Skagen (The Scaw)	29.61	55	WSW	3	0	29.61	-.01	55	53	-2	SW	4	bc	3	64	50	-
	Fanö	29.71	53	WSW	4	b	29.65	+.01	59	54	+3	SW	4	c	*	61	?	-
BRITISH ISLANDS.	Sumburgh Head	29.69	53	N	2	c	29.65	-.05	54	52	-1	N	3	0	4	57	48	0.08
	Stornoway ...	29.83	52	E	4	0	29.84	+.02	52	51	0	NE	4	c	4	56	46	0.02
	Wick	29.76	53	N	1	b	29.73	-.03	53	51	-2	N	4	bc	2	56	42	0.06
	Nairn	29.76	58	E	1	c	29.76	-.02	51	50	0	NNW	2	†	2	59	44	0.05
	Aberdeen ...	29.75	54	NNW	3	c	29.72	-.03	52	49	+2	NW	4	o g p	4	60	46	0.02
	Leith	29.74	55	E	1	c	29.75	-.01	59	52	+6	NNW	2	b	*	60	45	0.03
	Shields	29.74	55	NNE	2	c	29.71	-.04	53	50	-1	N	3	c	3	60	44	0.03
	Spurn Head ...	29.69	59	NNE	2	bc	29.62	-.15	55	52	0	NE	5	c	4	64	51	-
	York ...	29.72	61	ENE	1	bc	29.69	-.09	59	55	+3	N	2	c	*	65	48	-
	Loughborough	29.72	66	Z	0	c	29.65	-.19	54	49	-4	NNE	4	c g	*	67	49	-
	Ardrossan ...	29.73	60	WSW	3	bc	29.76	-.01	56	53	+1	WSW	1	b	0	64	50	-
	Malin Head ...	29.81	54	NNW	4	c	29.82	+.01	52	49	-1	NNW	5	bcp	3	56	50	0.03
	Mullaghmore ...	29.83	55	N	5	ov	29.88	+.02	53	50	-2	NNW	5	c g p	4	59	49	0.03
	Belmullet ...	29.88	56	NNE	2	0	29.95	+.07	54	49	-1	N	3	0	*	58	49	0.01
	Donaghadee ...	29.77	58	NNE	4	b	29.79	-.02	52	51	-2	NNE	5	0	3	63	51	-
	Liverpool (Bidston)	29.74	59	NW	2	bc	29.72	-.10	52	48	0	NNE	2	0	3	61	50	-
	Holyhead ...	29.75	55	NW	2	c	29.73	-.10	54	52	-7	N	4	c	3	63	52	-
	Parsonstown ...	29.78	58	Z	0	c	29.86	-.02	53	52	-1	NW	2	c	*	61	44	0.02
	Valencia	29.84	56	N	3	0	29.99	+.09	54	50	-1	NNW	4	bc	3	60	51	0.08
	Roche's Point ...	29.80	56	WNW	2	c	29.87	.00	53	49	-1	N	5	c	4	58	50	0.05
	Pembroke (St. Ann's Hd.)	29.72	55	NNW	3	c	29.73	-.11	52	50	-4	NNW	5	o g	4	59	51	0.06
	Scilly	29.73	54	NNW	4	†	29.75	-.06	55	53	+2	NNW	5	c p	2	55	50	0.40
	Prawle Point ...	29.68	50	ESE	4	†	29.64	-.21	54	52	+1	NNW	3	o p g	2	55	49	0.50
	Jersey (St. Aubin's)	29.62	60	SW	2	fm	29.56	-.31	53	50	-5	NW	6	o p m	5	60	51	1.31
	Hurst Castle ...	29.68	54	ENE	3	†	29.50	-.38	53	53	-5	NNE	6	o †	3	64	50	0.45
	Dungeness ...	29.70	55	Z	0	†	29.35	-.51	55	55	-3	Z	0	0	0	62	52	1.20
	London	29.73	54	SE	2	o †	29.48	-.38	50	48	-6	N	5	†	*	64	45	0.80
	Oxford	29.70	52	S	1	0	29.57	-.30	52	50	-3	N	4	0	*	65	49	0.36
	Cambridge ...	29.71	60	S	1	†	29.56	-.27	52	52	-5	N	2	†	*	69	50	0.45
	Yarmouth ...	29.73	59	S	3	c	29.52	-.30	54	53	-3	NE	7	o g †	5	61	52	0.23
GERMANY & HOLLAND.	Cuxhaven ...	29.81	56	NW	4	b	29.70	-.05	57	55	-1	E	2	0	*	60	55	-
	Berlin	29.84	67	WNW	2	0	29.78	-.01	61	57	0	ESE	3	b	*	75	55	0.08
	Wiesbaden ...	*	*	*	*	*	29.65	-.29	60	59	+1	Z	0	†	*	64	54	0.08
	Munich	29.94	64	SE	2	c	29.79	-.25	64	60	+5	SE	5	bc	*	72	55	0.39
	The Helder ...	29.76	59	WSW	1	c	29.54	-.25	57	55	0	E	2	†	3	66	55	-
FRANCE AND BELGIUM.	Brussels (9 a.m.)	*	*	*	*	*	29.47	-.43	59	57	+3	SSE	1	0	*	66	53	0.32
	Cape Gris Nez	?	55	W	2	†	?	?	59	57	+3	SW	4	†	4	61	52	1.46
	Paris	29.78	61	S	2	0	29.50	-.48	59	57	+4	SSW	3	0	*	62	?	0.32
	Brest	29.67	57	NNW	1	†	29.73	-.06	56	53	-2	NW	4	0	3	64	48	0.12
	Lorient	29.67	59	SW	3	†	29.71	-.14	53	51	-4	NW	4	†	4	63	52	0.55
	Rochefort ...	29.91	63	SW	4	†	29.80	-.25	59	57	-2	W	6	†	*	66	52	0.08
	Belfort	?29.89	59	SSE	1	†	?29.76	-.22	58	50	+2	W	1	0	*	72	51	0.39
	Lyons	29.79	72	S	4	0	29.76	-.26	50	58	-7	SSW	2	†	*	78	?	0.55
	Nice	29.96	67	SE	4	b	29.87	-.14	?	61	?	ESE	2	bc	0	73	57	-
	Perpignan ...	29.84	71	NE	2	0	29.82	-.18	67	61	-1	N	2	0	*	75	61	-
	Biarritz	29.91	67	NW	3	c	29.90	-.13	62	57	-4	W	6	†	3	73	59	0.04
PENINSULA.	Corunna	*	*	*	*	*												
	Lisbon	30.10	65	NW	4	0	30.13	+.06	61	57	-2	NNW	4	0	2	73	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 Saturday, 5th July, 1890.

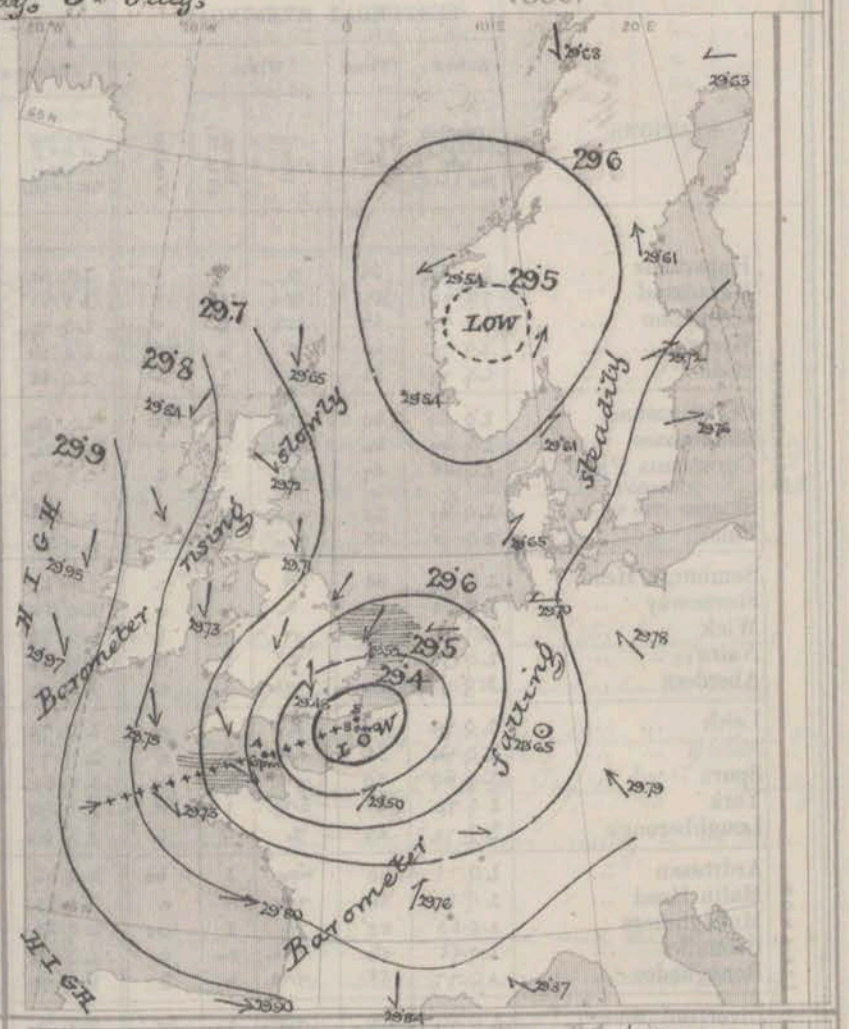
BAROMETER, WIND AND SEA.

EXPLANATION OF MAP.

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

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

SEA DISTURBANCE—Where considerable, is shewn thus:
▤ = Rough. ▩ = High.



MEAN HEIGHT OF THE BAROMETER

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

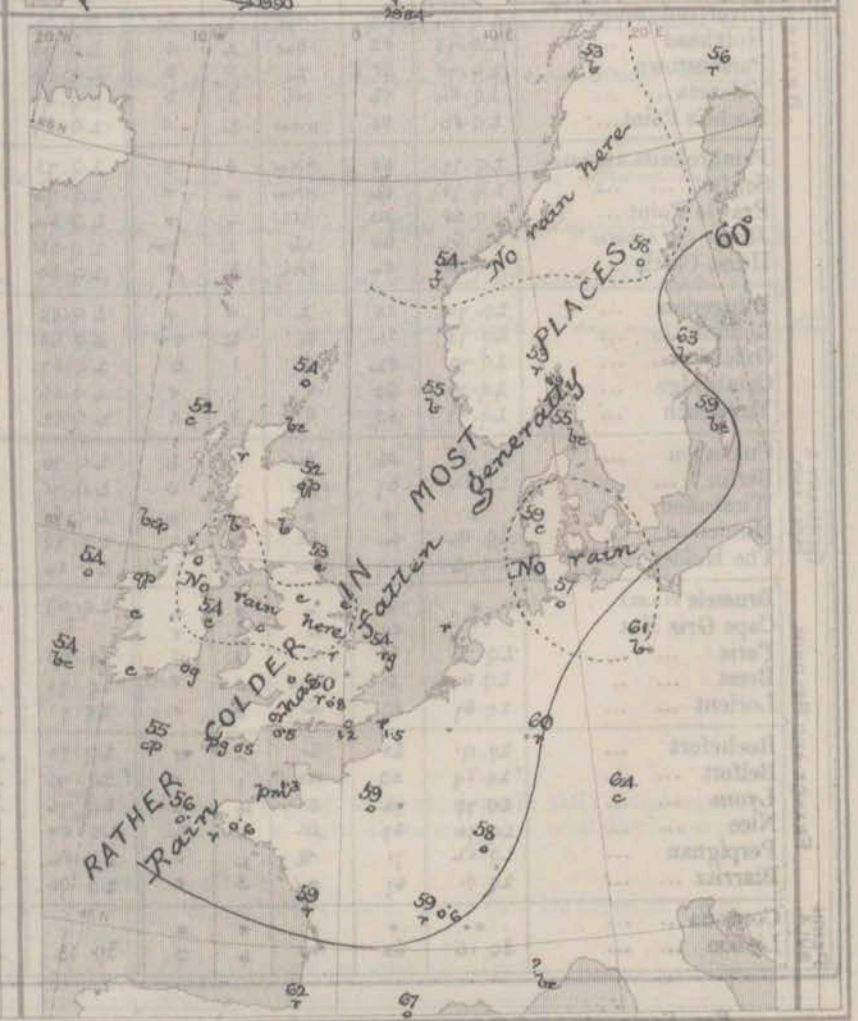
STATIONS.	MEAN READINGS. ins.
Sumburgh Head	29·794
Stornoway	29·797
Wick	29·810
Nairn	29·821
Aberdeen	29·831
Leith	29·859
Shields	29·876
York	29·910
Loughborough	29·936
Ardrossan	29·862
Donaghadee	29·881
Holyhead	29·918
Liverpool	29·913
Parsonstown	29·921
Valencia	29·939
Roche's Point	29·938
Pembroke	29·942
Scilly	29·984
Jersey	30·009
Hurst Castle	29·974
Dover	29·970
LONDON	29·967
Oxford	29·953
Cambridge	29·947
Yarmouth	29·943

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 July.)

STATIONS.	TEMPERATURE. Daily Max.	Daily Min.	at 8 a.m. Dry.	at 8 a.m. Wet.	RAINFALL (Inches.)
Sumburgh Head	57·8	48·3	53·6	52·0	2·09
Stornoway	60·2	49·5	56·0	54·0	3·02
Wick	62·2	49·2	56·1	53·8	2·25
Nairn	64·7	51·4	57·2	53·6	2·57
Aberdeen	64·4	51·1	58·0	54·4	2·74
Leith	67·1	51·7	58·6	55·3	2·84
Shields	64·4	52·9	58·6	55·4	2·63
York	68·5	52·1	59·4	56·2	2·57
Loughborough	72·1	53·9	62·0	58·2	2·34
Ardrossan	63·9	53·2	57·5	54·8	2·91
Donaghadee	63·1	51·6	57·4	55·6	2·67
Holyhead	63·9	54·7	58·2	55·9	2·32
Liverpool	66·1	54·4	59·6	55·9	2·99
Parsonstown	66·4	51·9	58·3	54·8	3·01
Valencia	64·1	53·6	58·7	56·3	3·91
Roche's Point	66·7	53·3	58·7	55·8	3·16
Pembroke	62·9	55·0	58·1	55·9	2·51
Scilly	64·5	56·3	60·1	58·0	2·29
Jersey	68·8	56·3	62·2	59·2	2·21
Hurst Castle	67·9	55·7	61·3	58·8	2·15
Dover	67·2	56·9	62·6	58·8	1·82
LONDON	73·0	54·1	62·3	58·1	2·17
Oxford	69·9	53·7	60·2	56·8	2·51
Cambridge	72·3	52·4	61·4	57·9	2·30
Yarmouth	66·8	55·2	61·2	58·1	2·68

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

GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest 30·1 ins. to 29·9 ins. over the Spanish Peninsula; 29·9 ins. and more over the west of Ireland; 29·9 ins. and more over Germany and the Baltic.

Lowest about 29·5 ins. in a depression over the south of Norway, and 29·4 ins. and less over the Straits of Dover.

Gradients are somewhat steep over the southern parts of our Islands, and the northwest of France, moderate elsewhere.

Barometer rising in the west of our Islands, falling in the east. In London it is beginning to rise slowly, after falling very decidedly.

TEMPERATURE

Highest 67° at Perpignan, 64° at Munich, 63° at Stockholm, 62° at Biarritz.

Lowest 50° in London, 51° at Nairn, 52° at Oxford, Cambridge and several other stations in our Islands.

The daily maxima yesterday ranged between 60° and 69° over England; the night minima were low (45° in London)

WIND

N. by E. (NW. by N. to NNE. by E.) over our Islands, and blow strongly at our southeastern stations, moderately in the west and north.

NW. by N., strong over Brittany and the Channel Islands, W. by N. strong over the Bay of Biscay, SW. by S. in the northeast of France, and light E. by S. in Holland.

WEATHER

Fair at our western stations, showery in the north, and very rainy in the east and south.

The amounts measured this morning were 0·8 in. in London, 1·2 ins. at Dungeness, 1·3 ins. at Jersey.

At Lynstead, near Sittingbourne 2·9 ins. are reported.

SEA

Is rather rough in the east and south, moderate to slight elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

As the depression in the southeast passes off an improvement in the weather is likely in the south and east of England, it is probable that the night will be very cold for the time of year.

FORECASTS

For the 24 hours ending at NOON on 6th JULY 1890.

DISTRICTS.	FORECASTS.	DISTRICTS.	FORECASTS.
0 SCOTLAND NORTH	NW. by N. breezes, moderate or light; showery to fair.	6 SCOTLAND WEST	Same as Nos. 0 and 1.
1 SCOTLAND EAST		7 ENGLAND N.W.	N. by E. and NW. by N. breezes, moderate; fine. very cold to-night.
2 ENGLAND N.E.	N. by E. breezes, moderate; some rain, then finer. very cold to-night.	8 ENGLAND S.W.	
3 ENGLAND EAST	Same as No. 5.	9 IRELAND NORTH	
4 MIDLAND COUNTIES	Same as No. 2.	10 IRELAND SOUTH	
5 ENGLAND SOUTH	NE. by E. winds and rain; improving later. very cold during to-night.	WARNINGS	NONE ISSUED.

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

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

YESTERDAY'S 2 P.M. REPORTS.

	BAR:	THER: D.	THER: W.	WIND D.	WIND F.	WEA	SEA
Skudesnaes ...	29.57	54	51	S	1	r	2
Sumburgh Head	29.71	52	50	N	2	r	3
Stornoway	29.62	52	52	E	4	o	4
Aberdeen	29.74	59	50	NNW	4	bc q	3
Shields	29.76	54	51	NNE	2	c	2
Ardrossan	29.75	63	56	NSW	3	bc	2
Malin Head ...	29.82	56	51	N	3	b	2
Mullaghmore ...	29.83	55	52	NNW	4	o p	2
Belmullet	29.86	57	51	WNW	2	o	*

	BAR:	THER: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Holyhead	29.79	59	54	NW	1	b	1
Valencia	29.85	57	53	N	3	o	3
Scilly	29.77	54	53	NE.	3.	r	2
Jersey	29.71	57	57	SSE.	3	o	3
Dungeness	29.89	60	56	NSW	3	o	2
London	29.78	62	55	S	2	o	*
Yarmouth	29.79	60	56	SSE.	4	bc	3
Rochefort	29.98	64	63	SW	4	o	*

GENERAL REMARKS ON THE WEATHER OVER EUROPE

DURING THE PAST 24 HOURS.

Weather fine over the greater part of England, Ireland and Scandinavia, as well as over the whole of Russia and southern Europe. Dull elsewhere, with rain over the western part of the Channel and the northwest of France, as well as in the east of Scotland and the south of Norway. Weather improving later in Scotland, but rain falling over nearly the whole of Ireland, England and France; amounts large in many places (1·2 in. at Dungeness, 1·3 in. at Jersey, 1·5 in. at Cape Gris Nez, and 2·9 in at Littlehampton)

Temperature highest 84° at Sfax, 80° at Constantinople, 79° at Brindisi, 78° at Trieste, and 77° at Nicolaieff; above 60° in Finland and Sweden. Lowest 50° at Aberdeen, 51° at Nairn, 52° at Stornoway and Liverpool, and 53° at Scilly and Prawle Point, low for the time of year in all parts of the United Kingdom. Daily maxima below 60° at several of our southwestern, western and northern stations, but thermometer rising to 67° at Loughborough, and 69° at Cambridge.

Wind over western Europe showing cyclonic circulation round the two depressions lying respectively near the mouth of the Channel and over the south of Norway, its force being everywhere light or moderate. Chiefly light from the S.and in Russia, but N.ly in Spain, Italy and Algeria, and variable in Austria. Wind in south of England shifting to the N.and at night, and blowing strongly in many places.

Barometer highest 30.0 ins. and upwards in a large anticyclone lying over Spain, France and the western part of Italy and the Mediterranean, as well as in a smaller system over Central Russia. Lowest 29.6 ins. and less in a shallow depression over the south of Norway; 29.7 ins. and less in a smaller system lying near Haparanda, 29.8 ins. and less in two other disturbances lying respectively near the mouth of the Channel and over the south of Russia. Channel depression subsequently advancing steadily in an east-northeasterly direction, and barometer falling briskly over France and the south of England.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

WEATHER.—*Beaufort Scale* is b. blue sky; c. detached clouds; d. drizzling rain; f. fog; g. dark, gloomy; h. hail; l. lightning; m. misty (hazy); o. overcast; p. passing showers; q. 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 July. 1890.

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

	STATIONS.	YESTERDAY EVENING. Barom: Reading at 32° F. and Sea Level.	Temp. Dry.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	8 A.M. TO DAY. Barometer. Reading at 32° F. and Sea Level.	Barometer. Difference from 8 a.m. yesterday.	Shade Temp. Dry.	Shade Temp. Wet.	Shade Temp. Difference from 8 a.m. yesterday.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	Sea. (0 to 9.)	PAST 24 HOURS. Shade Temp. Max.	Shade Temp. Min.	Amount of Rainfall.
SCANDINAVIA.	Haparanda ...	29.65	51	NE	4	r	29.72	+.09	51	51	-5	NE	2	0	*	59	50	0.39
	Hernösand ...	29.60	58	SSW	4	b	29.63	+.02	61	55	+3	SSW	2	0	*	72	52	—
	Stockholm ...	29.69	60	S	2	0	29.43	-.29	57	56	-6	ESE	8	r	*	68	54	0.39
	Wisby	29.67	53	SE	4	b	29.33	-.43	62	60	+3	SSE	6	r	*	66	52	0.24
	Bodö	29.65	57	NNE	4	b	29.68	0.0	57	50	+4	ENE	4	b	2	57	48	—
	Christiansund	29.59	53	NE	6	r	29.54	0.0	54	52	0	E	1	f	1	54	52	0.32
	Skudesnaes ...	29.54	55	NNW	2	bc	29.40	-.14	55	52	0	NNW	5	c	2	63	50	—
	Christiania Fjord (Færder)	29.58	58	SSE	3	b	29.25	-.34	54	53	+1	NNE	8	r	2	59	52	1.02
	Skagen (The Scaw)	29.52	55	E	1	0	29.11	-.50	59	55	+4	SE	4	bc	3	61	54	0.71
	Fanö	29.39	55	NE	4	r	29.31	-.34	53	53	-6	NNW	3	r	*	63	53	0.63
BRITISH ISLANDS.	Sumburgh Head	29.69	50	NE	4	0	29.69	+.04	52	48	-2	N	3	bc	5	57	45	0.01
	Stornoway ...	29.86	52	N	5	bc	29.85	+.05	52	51	0	NE	5	0	4	55	47	0.03
	Wick	29.76	54	N	3	c	29.75	+.06	51	49	-2	N	3	bc	2	57	44	0.05
	Nairn	29.78	54	NNW	3	0	29.80	+.04	51	48	0	NNW	3	c	3	58	48	0.07
	Aberdeen ...	29.71	52	NNW	5	0q/p	29.77	+.05	50	47	-2	NW	4	c-pq	4	55	48	0.03
	Leith	29.74	58	N	1	c	29.80	+.05	55	50	-4	NNW	1	c	*	65	49	0.07
	Shields	29.69	54	NNW	4	0	29.77	+.06	53	49	0	NNW	3	0-p	5	59	49	—
	Spurn Head ...	29.61	54	N	7	cq	29.70	+.08	53	51	-2	NW	6	0	5	57	51	0.06
	York	29.68	56	NNE	2	c	29.78	+.09	55	50	-4	N	3	0	*	63	49	—
	Loughborough	29.67	60	NNW	3	c	29.81	+.16	53	51	-1	WNW	3	0	*	62	50	0.06
	Ardrossan ...	29.75	60	NW	2	c	29.84	+.08	54	50	-2	NW	4	c	2	62	53	0.02
	Malin Head ...	29.87	53	NNW	6	b-p	29.92	+.10	52	49	0	NNW	5	0	3	56	49	—
	Mullaghmore ...	29.95	54	NW	6	c	30.00	+.12	53	48	0	NNW	5	c	3	58	50	0.03
	Belmullet ...	30.03	49	N	4	b	30.05	+.10	54	52	0	N	2	0	*	58	49	0.19
	Donaghadee ...	29.81	57	N	6	b	29.91	+.12	54	52	+2	NNW	6	bc	5	61	51	—
	Liverpool (Bidston)	29.73	58	WNW	5	bc	29.84	+.12	55	51	+3	NW	3	0	4	61	51	0.13
	Holyhead ...	29.79	55	NNW	4	b	29.88	+.15	55	51	+1	NNW	5	c	5	58	51	—
	Parsonstown ...	29.92	54	NW	2	r	30.01	+.15	53	51	0	NW	1	0	*	61	47	0.08
	Valencia	30.05	56	NNW	3	bc q	30.11	+.14	54	51	0	NNW	2	c-p	3	59	50	0.08
	Roche's Point ...	29.91	55	NNW	5	bc	30.03	+.16	55	51	+2	NNW	4	bc	3	60	50	0.05
	Pembroke (St. Ann's Hd.)	29.83	56	NNW	3	bc	29.94	+.21	52	49	0	NW	4	c	3	59	50	0.02
	Scilly	29.91	58	WNW	4	c	29.98	+.23	54	52	-1	NNW	5	c q	3	58	50	0.11
	Prawle Point ...	29.80	58	SW	4	0	29.92	+.28	60	55	+6	NW	4	bc	3	63	47	—
	Jersey (St. Aubin's)	29.81	58	WNW	4	c g m	29.92	+.36	58	54	+5	NW	4	bc m	3	61	51	0.14
	Hurst Castle ...	29.71	60	NNW	3	c	29.86	+.36	57	55	+4	NW	3	bc	1	61	48	0.02
	Dungeness ...	29.58	52	N	7	r	29.78	+.43	55	51	0	NW	5	c	3	59	49	0.02
	London	29.66	55	NW	3	0-p	29.81	+.33	54	50	+4	NW	3	0	*	57	48	0.56
	Oxford	29.73	55	N	3	0	29.84	+.27	52	50	0	NW	3	0 g	*	60	46	—
	Cambridge ...	29.66	56	N	1	c	29.80	+.24	52	51	0	NW	1	r	*	57	48	0.14
	Yarmouth ...	29.52	52	N	5	r 0	29.67	+.15	53	52	-1	NW	4	r 0 g	4	55	48	1.06
GERMANY & HOLLAND.	Cuxhaven ...	29.42	54	ESE	2	r	29.34	-.36	55	54	-2	W	3	0	*	62	54	0.88
	Berlin	29.56	60	WSW	4	r	29.49	-.29	60	54	-1	SSW	6	0	*	77	57	0.12
	Wiesbaden ...	*	*	*	*	*	29.75	+.10	55	52	-5	SW	4	r	*	64	52	0.39
	Munich	29.80	53	W	3	r	29.90	+.11	55	50	-9	SW	6	c	*	77	48	0.75
	The Helder ...	29.37	56	N	5	r	29.56	+.02	57	53	0	WNW	2	c	3	61	54	0.63
FRANCE AND BELGIUM.	Brussels (9 a.m.)	*	*	*	*	*	29.76	+.29	51	50	-8	WSW	2	r	*	68	49	0.24
	Cape Gris Nez	?	53	N	7	0	?	?	53	50	-6	NW	6	0	5	64	50	0.11
	Paris	29.68	52	W	3	r	29.89	+.39	53	51	-6	SW	2	c	*	61	46	0.08
	Brest	29.91	58	NNW	3	bc	29.97	+.24	55	52	-1	NNW	2	c	4	64	48	—
	Lorient	29.92	57	NW	4	0	29.99	+.28	54	52	+1	NW	3	c	4	59	52	0.16
	Rochefort ...	29.96	61	WNW	6	c	30.05	+.25	58	55	-1	WNW	4	c	2	64	52	—
	Belfort	?29.68	58	W	1	0	?29.73	-.03	56	48	-2	W	1	0	*	68	49	0.32
	Lyons	29.80	65	W	2	bc	29.96	+.20	58	50	+3	NNW	1	0	*	73	50	0.32
	Nice	29.76	68	SW	5	b	29.73	-.14	65	53	?	W	5	bc	4	77	61	—
	Perpignan ...	?29.90	67	WNW	3	0	30.01	+.17	60	53	-7	NW	3	0	*	70	57	—
	Biarritz	30.04	63	NW	5	c	30.12	+.22	57	54	-5	W	2	0	3	66	54	0.51
PENINSULA.	Corunna	*	*	*	*	*	30.23	+.18	62	58	0	NNW	4	bc	5	68	54	—
	Lisbon	30.11	62	NNW	5	b	30.14	+.01	60	53	-1	N	6	b	4	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 Sunday, 6th July, 1890.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP.

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

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

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

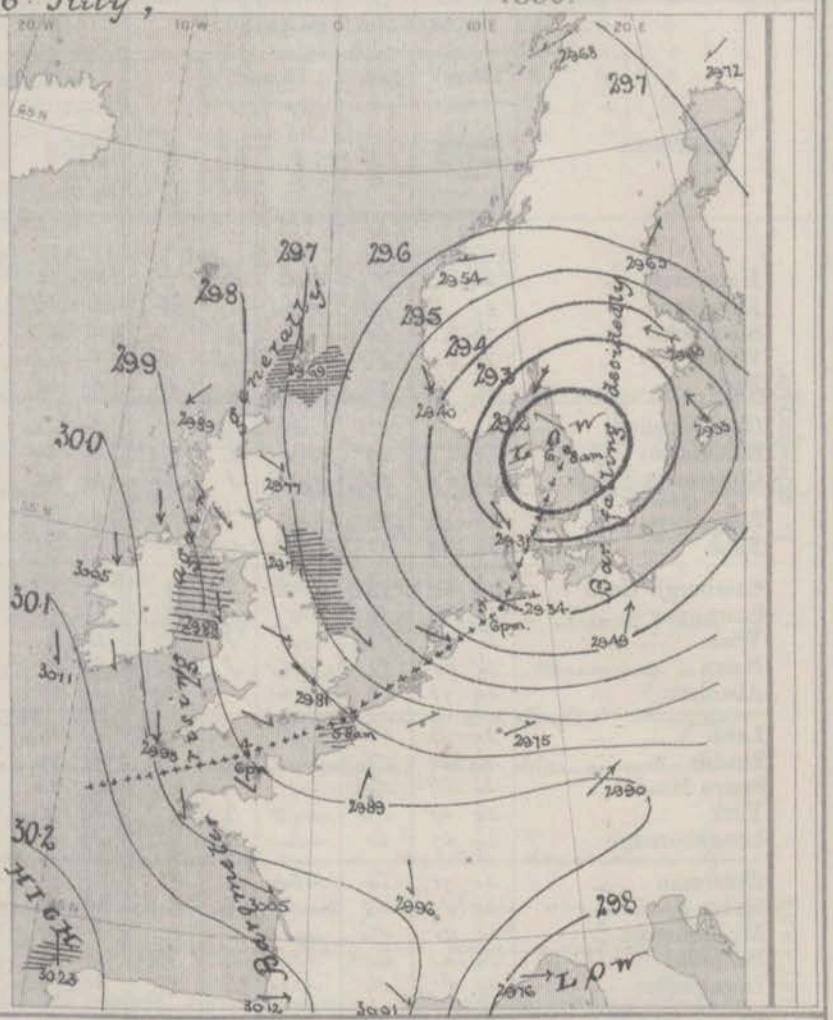
SEA DISTURBANCE—Where considerable, is shewn thus:

= Rough. = High.

MEAN HEIGHT OF THE BAROMETER

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

STATIONS.	MEAN READINGS.
	ins.
Sumburgh Head	29·794
Stornoway	29·797
Wick	29·810
Nairn	29·821
Aberdeen	29·831
Leith	29·850
Shields	29·876
York	29·910
Loughborough	29·936
Ardrossan	29·862
Donaghadee	29·881
Holyhead	29·918
Liverpool	29·913
Parsonstown	29·921
Valencia	29·939
Roche's Point	29·938
Pembroke	29·942
Scilly	29·984
Jersey	30·009
Hurst Castle	29·974
Dover	29·970
LONDON	29·967
Oxford	29·953
Cambridge	29·947
Yarmouth	29·943



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.

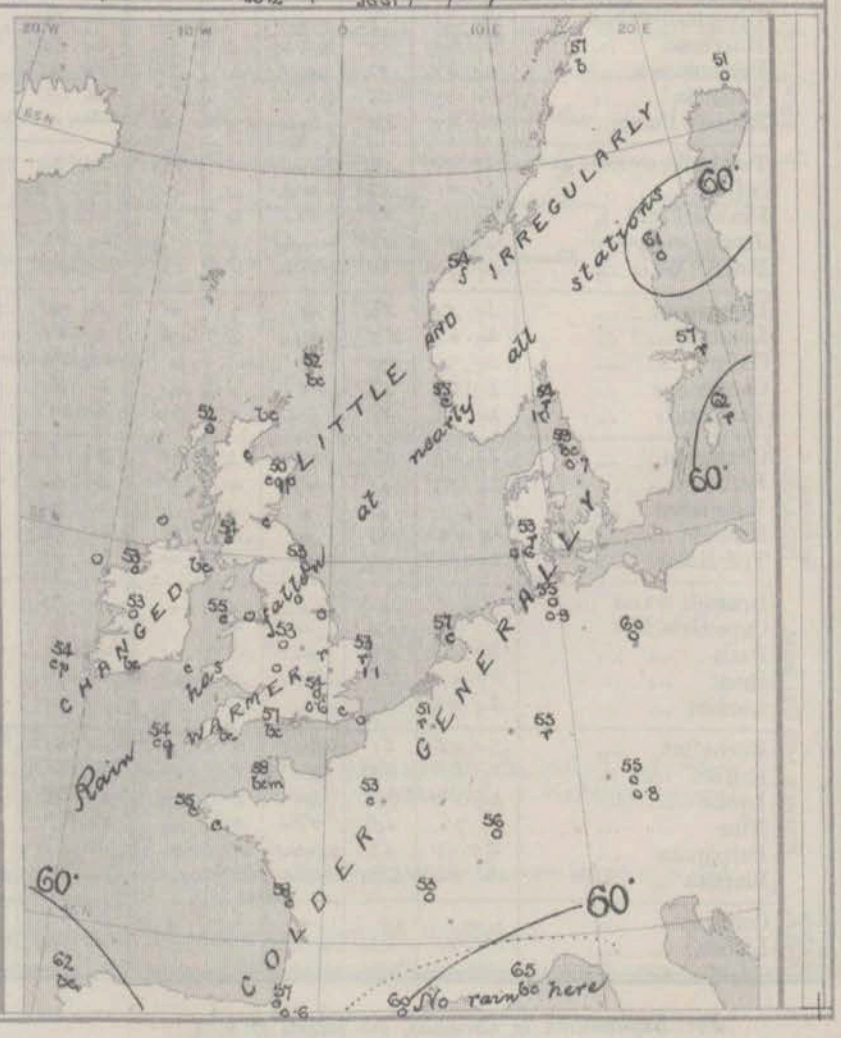
RAINFALL—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0·5 in. or more are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of July.)

STATIONS.	TEMPERATURE. Daily Max.	Daily Min.	at 8 a.m. Dry.	at 8 a.m. Wet.	RAINFALL. (Inches.)
Sumburgh Head	57·8	48·3	53·6	52·0	2·09
Stornoway	60·2	49·5	56·0	54·0	3·02
Wick	62·2	49·2	56·1	53·8	2·25
Nairn	64·7	51·4	57·2	53·6	2·57
Aberdeen	64·4	51·1	58·0	54·4	2·74
Leith	67·1	51·7	58·5	55·3	2·84
Shields	64·4	52·9	58·6	55·4	2·63
York	68·5	52·1	59·4	56·2	2·57
Loughborough	72·1	53·0	62·0	58·2	2·34
Ardrossan	63·9	53·2	57·5	54·8	2·91
Donaghadee	63·1	51·6	57·4	55·6	2·67
Holyhead	63·9	54·7	58·2	55·9	2·32
Liverpool	66·1	54·4	59·6	55·9	2·99
Parsonstown	66·4	51·9	58·3	54·8	3·01
Valencia	64·1	53·6	58·7	56·3	3·91
Roche's Point	66·7	53·3	58·7	55·8	3·16
Pembroke	62·9	55·0	58·1	55·9	2·31
Scilly	64·5	56·3	60·1	58·0	2·29
Jersey	68·8	56·3	62·2	59·2	2·21
Hurst Castle	67·9	55·7	61·3	58·8	2·15
Dover	67·2	56·9	62·6	58·8	1·82
LONDON	73·0	54·1	62·3	58·1	2·17
Oxford	69·9	53·7	60·2	56·8	2·51
Cambridge	72·3	52·4	61·4	57·9	2·30
Yarmouth	66·8	55·2	61·2	58·1	2·68

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



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest 30·2 ins. to 30·0 ins. over the Iberian Peninsula, the Bay of Biscay and southwestern half of Ireland; 29·9 ins. and more in a ridge over central France.
Lowest About 29·1 ins. in a depression lying over Denmark and the Kattegat.
Gradients somewhat steep over the North Sea, moderate in the west and south.
Barometer rising in our Islands, most in the southeast, falling over Scandinavia.

TEMPERATURE

Highest 65° at Nice, 62° at Corunna and Wisby, 61° at Marnösund, 60° at Prawle Point and Berlin.
Lowest 50° at Aberdeen, 51° at Wick, 52° at Lerwick, Malin Head, Pembroke & Oxford, 53° at Shields, Yarmouth and Lerwick.
The night minima have again been very low, and temperature generally is much below the normal value for July.

WIND

Moderate N. at our northern stations – NW. in the south – NW. to W. over the Bay of Biscay and southwest of France – N. to NE. over Spain. To the eastward of the North Sea there is a well-marked cyclonic circulation round the depression referred to above.

WEATHER

Very rainy on the Danish coasts, and in the south of Sweden, Cloudy and unsettled elsewhere, with rain at times in several part of our Islands and over Germany. The rainfall has been very heavy in the extreme east of England, and on the eastern shores of the North Sea; 1·1 ins at Yarmouth, 1·0 ins. at Faerder, 0·9 ins. at Cuxhaven, 0·6 in at the Helder and in London.

SEA

Rather rough in the north and northeast, and at Cape Gris Nez, moderate to slight in most other places.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

FORECASTS

For the 24 hours ending at NOON on 7TH JULY 1890.

DISTRICTS.	FORECASTS.	DISTRICTS.	FORECASTS.
0 SCOTLAND NORTH	NONE ISSUED	6 SCOTLAND WEST	NONE ISSUED
1 SCOTLAND EAST		7 ENGLAND N.W.	
2 ENGLAND N.E.		8 ENGLAND S.W.	
3 ENGLAND EAST		9 IRELAND NORTH	
4 MIDLAND COUNTIES		10 IRELAND SOUTH	
5 ENGLAND SOUTH		WARNINGS	NONE ISSUED

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

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

YESTERDAY'S 2 P.M. REPORTS.

	BAR:	THER: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Skudesnaes ...	29.54	63	57	W	2	c	2
Sumburgh Head	29.67	53	51	NE	4	o	5
Stornoway	29.86	53	53	N	5	o	5
Aberdeen	29.70	54	49	NNW	5	oq p	4
Shields	29.69	58	52	N	4	c	4
Ardrossan	29.75	62	58	NW	3	c	2
Malin Head ...	29.82	54	51	N	5	bc	3
Mullaghmore ...	29.91	57	51	NNW	6	cq p	4
Belmullet	29.99	57	52	N	5	bc	*

	BAR:	THER: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Holyhead	29.78	55	52	N	5	bc	4
Valencia	30.03	57	53	NNW	4	cq	4
Scilly	29.85	57	54	NW	5	c	2
Jersey	29.72	57	55	NW	3	c gm	3
Dungeness	29.45	51	50	N	6	r	4
London	29.59	54	51	NNW	4	o p	*
Yarmouth	29.49	53	52	N	6	r	5
Rochefort	29.90	63	57	WNW	6	c	?

GENERAL REMARKS ON THE WEATHER OVER EUROPE

DURING THE PAST 24 HOURS.

Weather in morning fine and bright over the southeastern half of Spain, the Mediterranean, and southeastern Europe, as well as over Finland; cloudy or overcast and unsettled elsewhere. Much rain later over the southeast of England and the northeast of France, and on the eastern shores of the North Sea, as well as in Bavaria. Showers in most other places; very unsettled generally.

Temperature very low for time of year except in extreme south and southeast, morning readings exceeding 70° at the Mediterranean stations and over southeastern Europe only; below 60° over northwestern Europe, and as low as 50° in London, 51° at Nairn, 52° at Stornoway, Aberdeen, Liverpool and Oxford. Scarcely exceeding 60° in any part of our Islands later (except at Leith), exceeding 80° over the extreme southern part of France, and in Italy, and exceeding 90° in some parts of Algeria.

Wind N.W. to N.E. over the United Kingdom – strong to a gale on our south and southeast coasts; N.W. strong over Brittany and the southwest of France, very variable and moderate over central and southern Europe, S.W. to S. over the Baltic. Blowing strongly from the N. on our southeast and east coasts later, moderating in the west.

Barometer highest, 30.0 ins. and more over Portugal and the adjacent parts of the Atlantic, 29.9 ins. and more over the west of Ireland, 29.8 ins. and more over central Europe, western and central Russia; lower elsewhere. As low as 29.5 ins. in the depression lying over Norway, and 29.4 ins. and less in a well-marked disturbance lying over Kent and the Straits of Dover. Latter disturbance moving northeastwards later, across the North Sea.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

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

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

The evening observations are taken at 6 p.m. 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 July. 1890.

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

	STATIONS.	YESTERDAY EVENING. Barom: Reading at 32° F. and Sea Level.	Temp. Dry.	Wind. Direc.	Force. (0 to 12.)	Weather.	8 A.M. TO DAY. Barometer. Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Shade Temp. Dry.	Wet.	Difference from 8 a.m. yesterday.	Wind. Direc.	Force. (0 to 12.)	Weather.	Sea. (0 to 9.)	PAST 24 HOURS. Shade Temp. Max.	Min.	Amount of Rainfall.
SCANDINAVIA.	Haparanda ...	29.60	56	NE	4	r	29.41	−.31	58	55	+7	SW	4	c	*	59	46	0.51
	Hernösand ...	29.29	54	E	4	f	29.27	−.36	53	51	−8	S	8	r	*	63	48	0.83
	Stockholm ...	29.34	57	S	4	c	29.43	0.0	59	53	+2	SSW	6	c	*	66	54	0.12
	Wisby	29.46	58	SSW	6	bc	29.58	+.25	58	53	−4	SW	8	b	*	64	54	0.04
	Bodö	29.56	57	ENE	4	b	29.26	−.42	53	51	−2	E	2	c	1	64	50	0.08
	Christiansund	29.30	56	ENE	6	r	29.15	−.39	53	50	−1	NW	7	r	4	59	?	0.55
	Skudesnaes ...	29.30	54	NW	7	o	29.44	+.04	52	49	−3	WNW	8	o	4	57	48	—
	Christiania Fjord (Færder)	29.08	55	NNE	5	r	29.24	−.01	57	54	+3	WSW	6	o	4	59	54	0.39
	Skagen (The Scaw)	29.15	54	W	7	o	29.37	+.26	56	53	−3	WNW	7	o	5	61	52	0.32
	Fanö	29.54	53	W	6	c	29.67	+.36	54	?	+1	WNW	3	bc	*	59	50	0.04
BRITISH ISLANDS.	Sumburgh Head	29.61	50	NNW	3	c	29.55	−.14	50	46	−2	NW	3	b	4	54	45	0.01
	Stornoway ...	29.83	51	N	4	o	29.69	−.20	50	49	−2	NW	2	o	2	56	44	0.04
	Wick	29.75	54	N	4	b	29.66	−.13	51	49	0	NW	1	o	1	57	42	0.03
	Nairn	29.77	54	NNW	4	o	29.69	−.11	53	49	+2	WNW	2	c	3	58	45	0.01
	Aberdeen ...	29.75	53	NW	4	bc	29.72	−.05	52	46	+2	W	2	c	3	57	43	0.01
	Leith	29.77	56	W	1	r	29.77	−.03	59	52	+4	W	1	r	*	64	45	0.05
	Shields	29.78	53	NE	1	o	29.80	+.03	55	50	+2	SW	2	c	3	58	45	0.04
	Spurn Head ...	29.81	55	2	0	c	29.83	+.03	55	51	+2	WSW	4	c	3	55	50	—
	York	29.82	58	W	2	c	29.85	+.07	57	50	+2	W	2	c	*	61	46	—
	Loughborough	29.98	55	WNW	3	o	29.91	+.10	56	49	+3	W	3	c	*	61	48	—
	Ardrossan ...	29.83	54	WNW	5	c	29.77	−.07	54	51	0	SSW	1	c	1	59	49	—
	Malin Head ...	29.92	52	NW	5	og	29.75	−.17	51	49	−1	S	3	or	1	54	48	0.08
	Mullaghmore ...	29.99	54	WNW	4	o	29.75	−.25	51	48	−2	SSE	4	or	2	58	48	—
	Belmullet ...	30.03	55	WNW	2	o	29.65	−.40	51	51	−3	SSE	2	or	*	59	49	0.11
	Donaghadee ...	29.92	54	N	3	c	29.82	−.09	56	52	+2	WSW	4	c	2	61	53	—
	Liverpool (Bidston)	29.90	55	WNW	5	o	29.88	+.04	55	53	0	WSW	2	o	3	59	50	—
	Holyhead ...	29.93	56	NW	4	bc	29.86	−.02	55	52	0	SW	3	cg	2	59	49	0.01
	Parsonstown ...	29.99	58	2	0	o	29.78	−.23	50	49	−3	2	0	fg	*	62	45	0.03
	Valencia	30.08	58	W	2	cr	29.63	−.44	57	56	+3	SSE	7	rmw	6	60	50	0.38
	Roche's Point ...	30.02	59	NW	4	bc	29.77	−.26	55	55	0	SW	5	r	4	62	46	0.15
	Pembroke (St. Ann's Hd.)	29.99	57	WNW	3	bc	29.92	−.02	56	54	+4	SSW	4	c	3	58	51	—
	Scilly	30.08	57	NW	4	bc	29.98	0.0	56	54	+2	SSW	5	o	2	58	52	—
	Prawle Point ...	29.99	56	NW	4	b	30.02	+.10	55	52	−5	WSW	4	bc	3	63	44	—
	Jersey (St. Aubin's)	29.99	59	WNW	3	b	30.08	+.16	59	53	−1	W	4	bc	3	61	52	—
	Hurst Castle ...	29.93	59	NNW	3	cf	29.99	+.13	60	58	+3	WSW	3	bc	2	63	50	0.15
GERMANY & HOLLAND.	Dungeness ...	29.87	55	NW	1	o	29.96	+.18	55	52	+2	NNW	3	bc	1	62	51	—
	London	29.90	58	W	1	o	29.96	+.15	56	53	+2	WSW	2	o	*	60	47	0.01
	Oxford	29.93	55	W	1	o	29.95	+.11	53	51	+1	SW	1	og	*	59	46	0.02
	Cambridge ...	29.89	55	W	1	o	29.93	+.13	59	50	+5	WSW	1	bc	*	59	47	0.01
	Yarmouth ...	29.81	54	NW	3	c	29.87	+.20	54	52	+1	WNW	3	c	3	54	49	0.04
	Cuxhaven ...	29.60	55	WNW	5	c	29.74	−.40	55	53	0	WNW	4	c	*	59	53	0.08
	Berlin	29.75	60	SW	5	c	29.84	+.35	58	54	−2	WNW	4	bc	*	70	52	—
	Wiesbaden ...	*	*	*	*	*	29.99	+.24	56	53	+1	Z	0	o	*	64	52	—
	Munich	29.97	50	SW	4	o	30.06	+.16	52	49	−3	SW	5	o	*	57	46	0.08
	The Helder ...	29.77	55	NW	3	c	29.84	+.28	56	53	−1	W	2	c	3	59	54	0.04
FRANCE AND BELGIUM.	Brussels (9 a.m.)	*	*	*	*	*	29.99	+.23	56	54	+5	WNW	2	o	*	59	50	0.12
	Cape Gris Nez	?	?	W	3	r	?	?	55	51	+2	WNW	3	c	3	63	50	0.04
	Paris	29.96	53	WNW	2	o	30.09	+.20	53	52	0	SSW	1	o	*	66	45	0.35
	Brest	30.07	58	N	4	b	30.11	+.14	55	53	0	W	3	b	3	63	48	—
	Lorient	30.06	57	NW	3	b	30.15	+.16	55	53	+1	WNW	3	c	3	59	52	0.28
	Rochefort ...	30.13	60	NW	4	c	30.26	+.21	57	54	−1	WNW	4	b	2	66	50	—
	Belfort	29.90	62	W	1	o	29.91	+.18	60	57	+4	W	1	o	*	67	49	0.35
	Lyons	30.00	55	WNW	1	bc	30.16	+.20	53	45	0	WNW	1	o	*	?	?	
	Nice	29.67	74	SW	6	b	29.84	+.11	64	57	−1	N	5	b	2	79	55	—
	Perpignan ...	30.03	69	NW	3	o	30.17	+.16	61	52	+1	NW	3	b	*	73	52	—
	Biarritz	30.16	61	W	5	c	30.25	+.13	57	54	0	WSW	3	c	2	68	54	0.20
PENINSULA.	Corunna	*	*	*	*	*												
	Lisbon	30.10	61	NNW	6	b	30.11	−.03	63	53	+3	N	3	b	5	70	57	—

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, 7 July, 1890.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP.

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

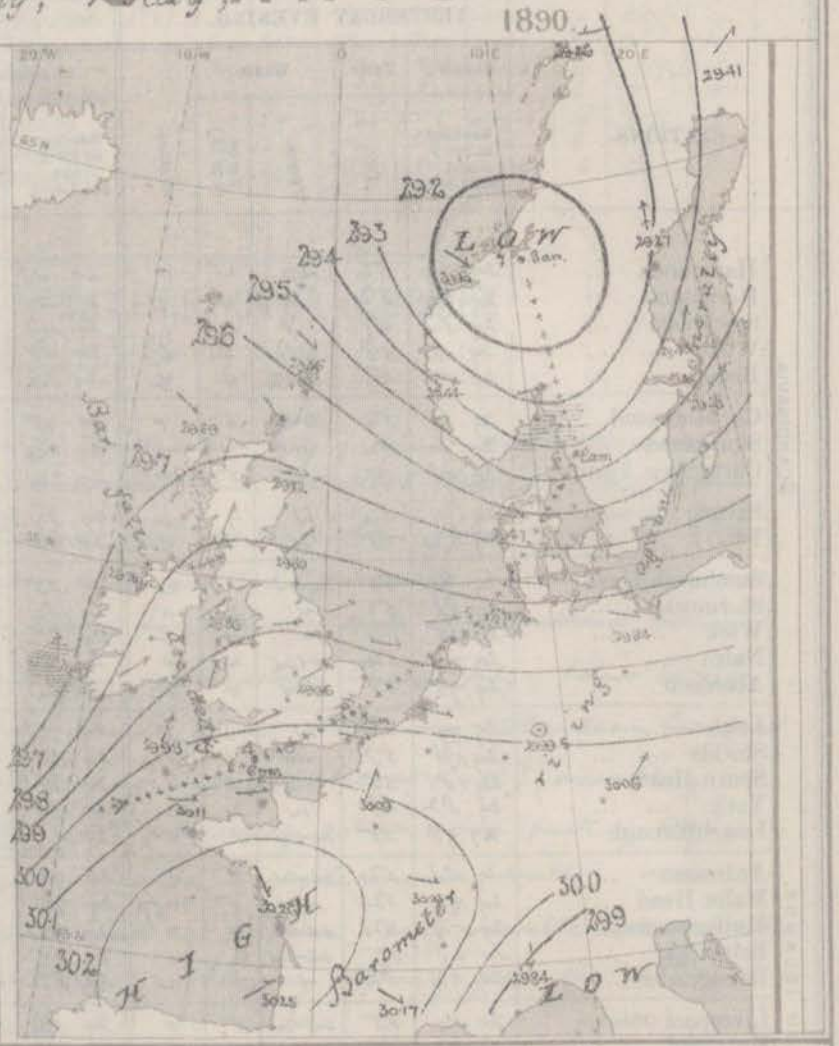
WIND - Arrows shew the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—
= forces above 10; = forces 8 to 10;
= forces 5 to 7; = forces 1 to 4.
= dead calm.

SEA DISTURBANCE—Where considerable, is shewn thus:
= Rough. = High.

MEAN HEIGHT OF THE BAROMETER

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

STATIONS.	MEAN READINGS.
	ins.
Sumburgh Head	29·794
Stornoway	29·797
Wick	29·810
Nairn	29·821
Aberdeen	29·831
Leith	29·859
Shields	29·876
York	29·910
Loughborough	29·936
Ardrossan	29·862
Donaghadee	29·881
Holyhead	29·918
Liverpool	29·913
Parsonstown	29·921
Valencia	29·939
Roche's Point	29·938
Pembroke	29·942
Scilly	29·984
Jersey	30·009
Hurst Castle	29·974
Dover	29·970
LONDON	29·967
Oxford	29·953
Cambridge	29·947
Yarmouth	29·943



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.

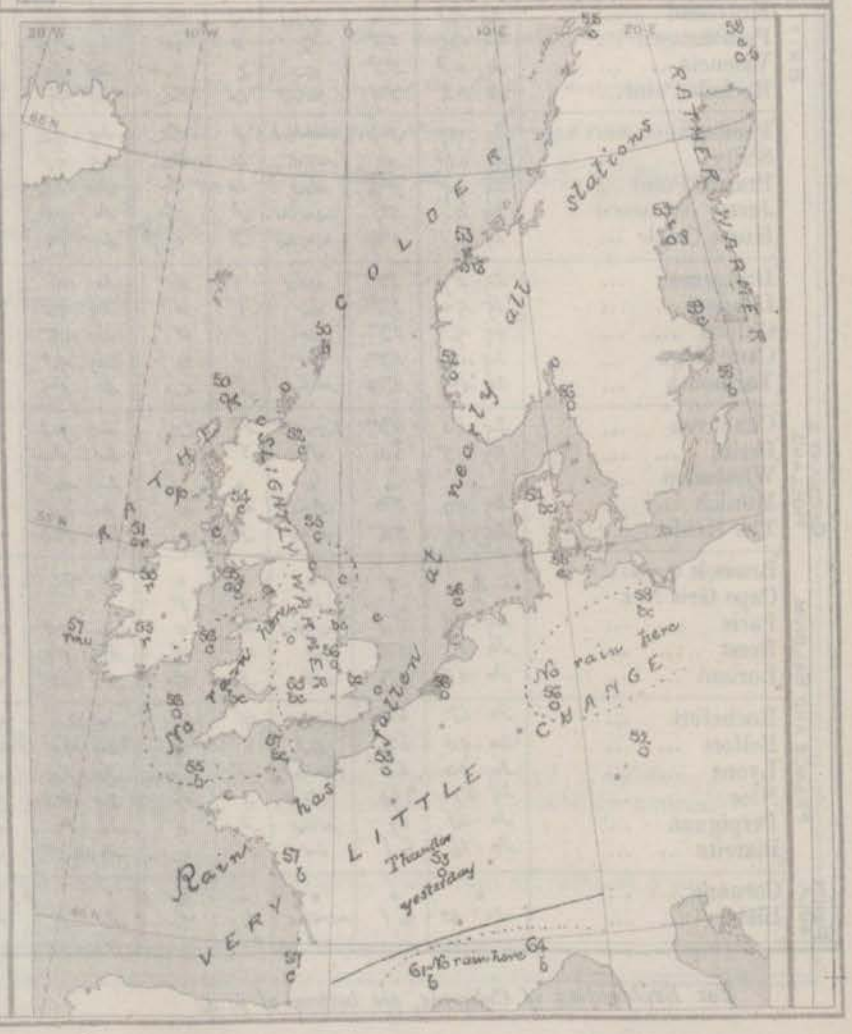
RAINFALL—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0·5 in. or more are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of July.)

STATIONS.	TEMPERATURE. Daily Max.	Daily Min.	at 8 a.m. Dry.	Wet.	RAINFALL. (Inches.)
Sumburgh Head	57·8	48·2	53·6	52·0	2·09
Stornoway	60·2	49·5	56·0	54·0	3·02
Wick	62·2	49·2	56·1	53·3	2·25
Nairn	64·7	51·4	57·2	53·6	2·57
Aberdeen	64·4	51·1	58·0	54·4	2·74
Leith	67·1	51·7	58·6	55·3	2·84
Shields	64·4	52·9	58·6	55·4	2·63
York	68·5	52·1	59·4	56·2	2·57
Loughborough	72·1	53·0	62·0	58·2	2·34
Ardrossan	63·9	53·2	57·5	54·8	2·91
Donaghadee	63·1	51·6	57·4	55·6	2·67
Holyhead	62·9	54·7	58·2	55·9	2·32
Liverpool	66·1	54·4	59·6	55·9	2·99
Parsonstown	66·4	51·9	58·3	54·8	3·01
Valencia	64·1	53·6	58·7	56·3	3·91
Roche's Point	66·7	53·3	58·7	55·8	3·16
Pembroke	62·9	55·0	58·1	55·9	2·31
Scilly	64·5	56·3	60·1	58·0	2·29
Jersey	68·8	56·3	62·2	59·2	2·21
Hurst Castle	67·9	56·7	61·3	58·8	2·15
Dover	67·2	56·9	62·6	58·8	1·82
LONDON	73·0	54·1	62·3	58·1	2·17
Oxford	69·9	53·7	60·2	56·8	2·51
Cambridge	72·3	52·4	61·4	57·9	2·30
Yarmouth	66·8	55·2	61·2	58·1	2·68

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



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30.2 in. and upwards in an anticyclone lying over the southwest of France and the southern part of the Bay of Biscay. Ireland.
Lowest, 29.2 in. and less in a depression over Norway, with its centre near Trondjhem; 29.6 in. and less in another disturbance lying to the westward of Ireland.
Gradients rather steep over our extreme south west coasts and also over the southern parts of Scandinavia, but moderate or slight elsewhere.
Barometer falling rapidly in the west of Ireland and less decidedly in the western and northern parts of our islands generally as well as in the north of Scandinavia; rising elsewhere.

TEMPERATURE

Highest, 64° at Nice; 63° at Lisbon, 61° at Perpignan, 60° at Hurst Castle and 59° at Stockholm and Leith.
Lowest, 50° at Sumburgh Head, Stornoway and Parsonstown and 51° at Lerwick, Malin Head, Belmullet and Mullaghmore.
The daily maxima registered yesterday were very little above 60° in any part of the United Kingdom.

WIND

S.W. over the greater part of England and Ireland, but S. or S.E. in the far west, with a moderate gale at Valencia Island.
Light or moderate from the N.W. in Scotland and also in the west of France; strong to a gale from the same quarter in the west of Norway.
Strong W. winds reported in Denmark; S. gales in Sweden.

WEATHER

Dull and rainy in Ireland, as well as at several of the Scandinavian stations.
Fair in most other localities.
A little rain fell yesterday in many parts of Great Britain and large quantities in Scandinavia. A lunar halo was seen at Hurst Castle last night.

SEA

Rough at Valencia Island, and rather rough at Skagen and Lisbon, but moderate to smooth elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The depression which is approaching Ireland seems likely to occasion gales on many parts of our western coasts, and as it spreads eastwards rainy weather will probably set in again over nearly the whole Kingdom.

FORECASTS

For the 24 hours ending at NOON on 8th JULY 1890.

DISTRICTS.	FORECASTS.
0 SCOTLAND NORTH	Wind backing to the S.W. or S.E.; fair to unsettled and some rain.
1 SCOTLAND EAST	
2 ENGLAND N.E.	Wind backing to the S. and freshening considerably; fair to dull and rainy.
3 ENGLAND EAST	
4 MIDLAND COUNTIES	
5 ENGLAND SOUTH	
6 SCOTLAND WEST	S.W. winds, increasing in force; dull, some rain.
7 ENGLAND N.W.	S.W. winds, increasing to a gale; squally, some rain.
8 ENGLAND S.W.	
9 IRELAND NORTH	S.W. to W.N.W. strong winds and gales; squally & rainy at first, some improvement later.
10 IRELAND SOUTH	
WARNINGS	The SOUTH CONE has been hoisted this morning in districts 7 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: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Skudesnaes ...	29.80	57	54	NW	8	o	3
Sumburgh Head							
Stornoway	29.84	55	53	N	4	c	4
Aberdeen							
Shields							
Ardrossan							
Malin Head ...	29.94	54	50	NW	4	o	2
Mullaghmore ...							
Belmullet	30.04	57	51	NNW	2	c	*

	BAR:	THER: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Holyhead	29.93	54	52	NW	4	c9f	4
Valencia							
Scilly							
Jersey	29.96	61	56	WNW	3	bc	3
Dungeness	29.83	58	53	NW	4	c	2
London							*
Yarmouth							
Rochefort	30.10	65	62	NW	4	c	2

GENERAL REMARKS ON THE WEATHER OVER EUROPE

DURING THE PAST 24 HOURS.

Weather in morning clear and bright over Spain, the southern and eastern shores of the Mediterranean and southeastern Europe generally, as well as in Lapland and the north of Russia, cloudy, changeable and very unsettled elsewhere, with heavy rain in Denmark and the south of Sweden, and showers in several parts of our Islands, France and Germany. No important change later, largest amounts of rain reported being 0.8 in. at Hernösand & 0.4 in. to 0.6 in. over the south of Sweden.

Temperature very low generally, highest morning values ranging from 70° to 79° at the Mediterranean stations and over southeastern Europe, the lowest (below 60°) over France, the British Islands, the North Sea and Norway. Lowest of all 50° at Aberdeen, 51° at Wick, 52° at Sumburgh Head, Stornoway, Malin Head, Pembroke and Oxford. Rising to very little above 60° over the United Kingdom and Norway during the day, and exceeding 70° over the southern parts of our area only.

Wind NW^{ly} and moderate over the British Islands and the Bay of Biscay, N^{ly} to NE^{ly} in Spain, SW^{ly} over Germany, S^{ly} to SE^{ly} over the Baltic, and blowing a fresh gale from ESE. at Stockholm, and from NNE. at Lacrder; falling light in our Islands later, and beginning to back towards W. at the Irish stations.

Barometer highest 30.2 ins. to 30.0 ins. over Spain, the Bay of Biscay, and the west of Ireland, and exceeding 29.9 ins. over central Russia; lower elsewhere, and lowest of all, about 29.1 ins. over the Kattegat, to which position the depression noticed near Dover on Saturday had advanced; latter disturbance moving northwards later, barometer rising over the North Sea and Germany, but beginning to fall again in the west of Ireland.

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

FROM THE 29TH JUNE TO 5TH JULY 1890

The weather experienced over the British Islands during the past week, and indeed over all the northern and central countries of Europe, has been of a most unsettled and showery type; temperature has been very low, the rainfall heavy, and the winds variable both in force and direction.

The first important depression lay off the west coast of Ireland on Monday morning, and a V shaped secondary stretched thence across the western and southwestern parts of the Kingdom. The system then moved eastwards, causing rain all over the Kingdom, W^{ly} winds in the south, and E^{ly} to NE^{ly} in the north.

Small secondary disturbances then travelled southeastwards across our Islands for a day or two, keeping the weather cold and showery in almost all districts.

The second important system appeared at the mouth of the Channel early on Friday, and travelling eastwards up the Channel caused unusually heavy rains over our southern and southeastern counties, and very cold strong winds from between E. and N., while W^{ly} breezes were felt in France.

This system was passing away to the northeastward at the close of the week, but the recovery of pressure in its rear was not of a very decided character, nor did the sky assume a settled appearance.

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 8th July. 1890.

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

	STATIONS.	YESTERDAY EVENING. Barom: Reading at 32° F. and Sea Level.	Temp. Dry.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	8 A.M. TO DAY. Barometer. Reading at 32° F. and Sea Level.	Barometer. Difference from 8 a.m. yesterday.	Shade Temp. Dry.	Shade Temp. Wet.	Shade Temp. Difference from 8 a.m. yesterday.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	Sea. (0 to 6.)	PAST 24 HOURS. Shade Temp. Max.	Shade Temp. Min.	Amount of Rainfall.
SCANDINAVIA.	Haparanda ...	29.40	57	SW	2	c	29.37	-.04	54	54	-4	SW	4	r	*	63	50	0.08
	Hernösand ...	29.32	52	SSW	4	b	29.29	+.12	57	51	+4	W	4	bc	*	61	50	—
	Stockholm ...	29.51	57	S	4	b	29.58	+.15	56	52	-3	SW	4	o	*	66	52	—
	Wisby	29.63	58	WSW	6	b	29.70	+.12	57	51	-1	WSW	6	c	*	64	54	—
	Bodö	29.18	59	*	1	c	29.25	-.01	51	49	-4	SW	1	r	1	59	48	0.12
	Christiansund	29.41	52	W	6	f	29.47	+.32	53	50	0	W	4	f	3	53	48	0.32
	Skudesnaes ...	29.61	52	W	3	o	29.56	+.12	53	49	+1	SE	4	c	3	54	48	0.12
	Christiania Fjord (Færder)	29.41	59	WSW	8	b	29.52	+.28	56	51	-1	WSW	6	b	4	63	53	—
	Skagen (The Scaw)	29.55	53	WNW	7	b	29.62	+.25	55	50	-1	SW	3	o	3	61	*	—
	Fanö	29.76	54	W	6	c	29.69	+.02	56	53	+2	WSW	4	c	*	59	54	—
BRITISH ISLANDS.	Sumburgh Head	29.58	50	NW	2	o	29.43	-.12	46	45	-4	NE	1	r	3	54	43	0.03
	Stornoway ...	29.61	49	2	0	o	29.47	-.22	51	50	+1	NE	4	bc	4	51	40	0.61
	Wick	29.59	50	SW	1	r	29.38	-.28	48	47	-3	N	1	o	1	55	42	0.29
	Nairn	29.61	51	W	1	r	29.42	-.27	47	46	-6	WNW	2	cr	2	53	45	1.05
	Aberdeen ...	29.63	50	SW	1	or	29.33	-.35	47	46	-5	NW	4	o q	4	58	45	1.34
	Leith	29.64	54	NNW	1	r	29.37	-.40	47	46	-12	NNW	1	o	*	59	43	0.54
	Shields	29.68	55	SW	1	r	29.30	-.50	56	55	+1	SSW	2	r	2	66	51	0.26
	Spurn Head ...	29.74	59	SW	3	r	29.40	-.43	58	56	+3	SSW	5	c	4	63	51	0.09
	York	29.74	57	SSW	3	o	29.37	-.48	58	56	+1	S	3	o	*	62	51	0.10
	Loughborough	29.79	56	SSW	3	o	29.44	-.47	59	57	+3	SW	3	c	*	65	51	0.12
	Ardrossan ...	29.57	51	NE	2	rm	29.41	-.36	53	49	-1	W	3	b	2	56	48	1.02
	Malin Head ...	29.52	51	ENE	3	o	29.53	-.22	52	47	+1	NNW	4	b	3	56	48	0.10
	Mullaghmore ...	29.45	60	ESE	2	o	29.38	-.17	53	49	+2	NW	4	c	2	61	49	0.17
	Belmullet ...	29.45	60	NE	4	o	29.63	-.02	54	50	+3	NNW	1	o	*	60	50	0.06
	Donaghadee ...	29.54	55	SSW	5	rq	29.48	-.34	51	49	-5	WNW	5	bc	3	61	50	0.14
	Liverpool (Bidston)	29.67	54	SSE	3	r	29.43	-.45	53	52	-2	W	5	o	4	62	52	0.26
	Holyhead ...	29.58	55	S	5	rqm	29.48	-.38	52	51	-3	NNW	5	cqr	5	60	52	0.28
	Parsonstown ...	29.40	60	2	0	o	29.60	-.18	54	50	+4	NW	1	c	*	62	49	0.14
	Valencia	29.41	57	WSW	2	df	29.68	+.01	56	54	-1	NNW	1	o	2	60	49	0.55
	Roche's Point...	29.45	56	SSE	5	fm	29.60	-.17	54	54	-1	NNW	3	f	4	61	54	0.80
	Pembroke (St. Ann's Hd.)	29.56	55	S	8	r	29.53	-.35	55	55	-1	WNW	4	cq	5	59	53	0.71
	Scilly	29.62	56	S	7	r	29.62	-.36	57	56	+1	WNW	4	b	4	57	54	0.43
	Prawle Point ...	29.78	52	SSW	7	r	29.59	-.43	55	55	0	W	5	fp	4	62	51	0.35
	Jersey (St. Aubin's)	29.77	59	SSW	4	ofm	29.66	-.42	59	57	+2	WSW	6	omp	5	63	52	0.29
	Hurst Castle ...	29.90	56	SW	6	r	29.56	-.43	59	58	-1	SW	7	bc	5	60	54	0.43
	Dungeness ...	29.90	57	WNW	6	o	29.56	-.40	56	55	-1	SW	7	r	6	61	52	0.35
	London	29.88	56	SW	4	o	29.52	-.44	58	57	+2	SW	3	o	*	66	53	0.23
	Oxford	29.78	52	SSW	5	r	29.49	-.46	59	56	+6	SW	2	oqr	*	64	51	0.25
	Cambridge ...	29.81	59	SW	1	r	29.49	-.44	59	57	+2	SW	1	o	*	65	50	0.15
	Yarmouth ...	29.81	58	SSW	3	c	29.51	-.36	56	55	+2	SW	4	oq	4	63	50	0.12
GERMANY & HOLLAND.	Cuxhaven ...	29.83	55	W	3	c	29.80	+.06	53	52	-2	SSW	3	o	*	59	52	—
	Berlin	29.91	58	SW	3	c	29.93	+.09	58	55	0	SW	3	c	*	66	50	0.04
	Wiesbaden ...	*	*	*	*	*	29.93	-.06	56	53	0	?	0	o	*	66	50	0.04
	Munich	30.15	51	SW	4	c	30.06	0.0	56	51	+4	SE	5	o	*	59	41	0.39
	The Helder ...	29.86	58	SW	2	c	29.65	-.19	54	52	-2	SSW	3	o	3	61	54	0.04
FRANCE AND BELGIUM.	Brussels (9 a.m.)	*	*	*	*	*	29.74	-.25	52	50	-4	SSW	3	r	*	64	51	0.08
	Cape Gris Nez	*	57	WSW	5	c	*	*	52	52	-3	S	6	r	6	61	50	0.28
	Paris	30.06	61	SW	3	o	29.80	-.29	55	52	+2	S	2	o	*	66	52	0.04
	Brest	29.91	56	SSE	7	r	29.69	-.42	57	56	+2	W	5	o	6	63	48	0.20
	Lorient	29.98	56	SW	4	r	29.76	-.39	56	55	+1	W	5	o	5	61	54	0.35
	Rochefort ...	30.19	63	SW	3	c	29.96	-.30	60	60	+3	SW	6	r	*	72	54	0.08
	Belfort	29.96	60	W	1	o	29.96	+.05	55	49	-5	W	1	o	*	64	46	—
	Lyons	30.14	63	E	1	b	30.04	-.12	54	51	+1	SSW	2	o	*	66	49	0.16
	Nice	29.98	71	SE	1	b	30.06	+.22	64	57	0	W	1	b	2	77	57	—
	Perpignan ...	30.13	70	SSW	2	b	30.05	-.12	63	58	+2	SW	1	o	*	77	53	—
	Biarritz	30.11	67	NE	4	b	30.05	-.20	64	61	+3	WNW	4	o	2	72	61	—
PENINSULA.	Coruna	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Lisbon	30.07	66	NNW	5	b	30.10	-.01	63	57	0	NNE	4	b	3	79	57	—

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, 8th July, 1890.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP.

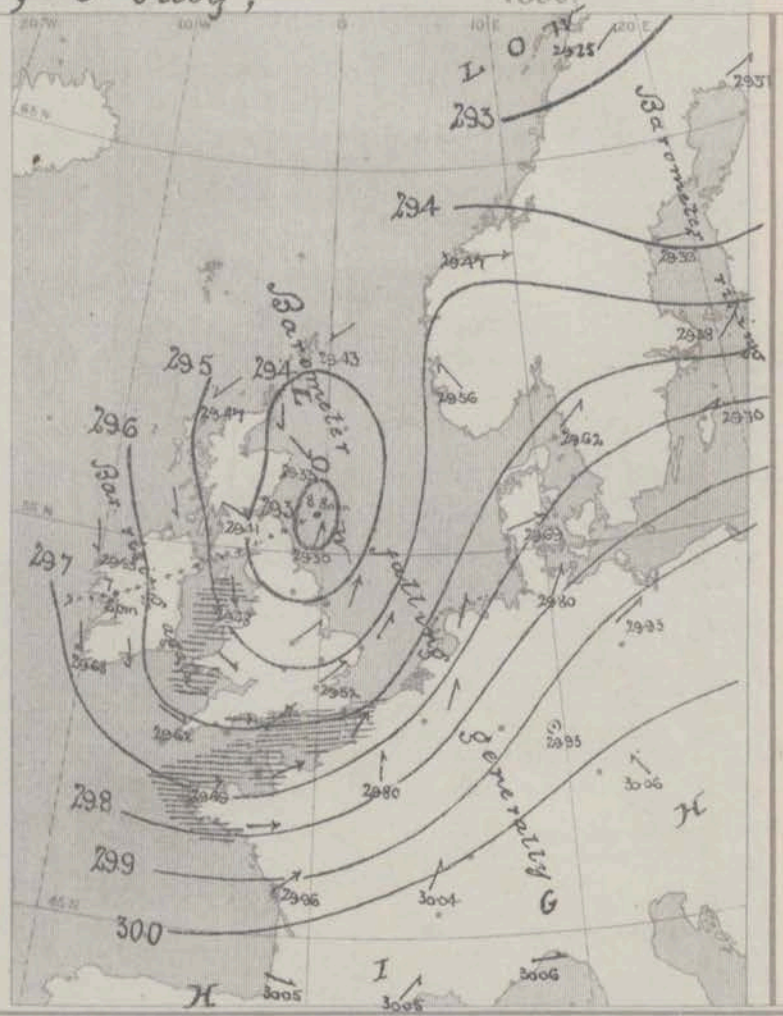
BAROMETER—Isobars are drawn for each tenth of an inch. Changes since previous morning are stated in words.

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

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

SEA DISTURBANCE—Where considerable, is shewn thus:

= Rough. = High.



MEAN HEIGHT OF THE BAROMETER

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

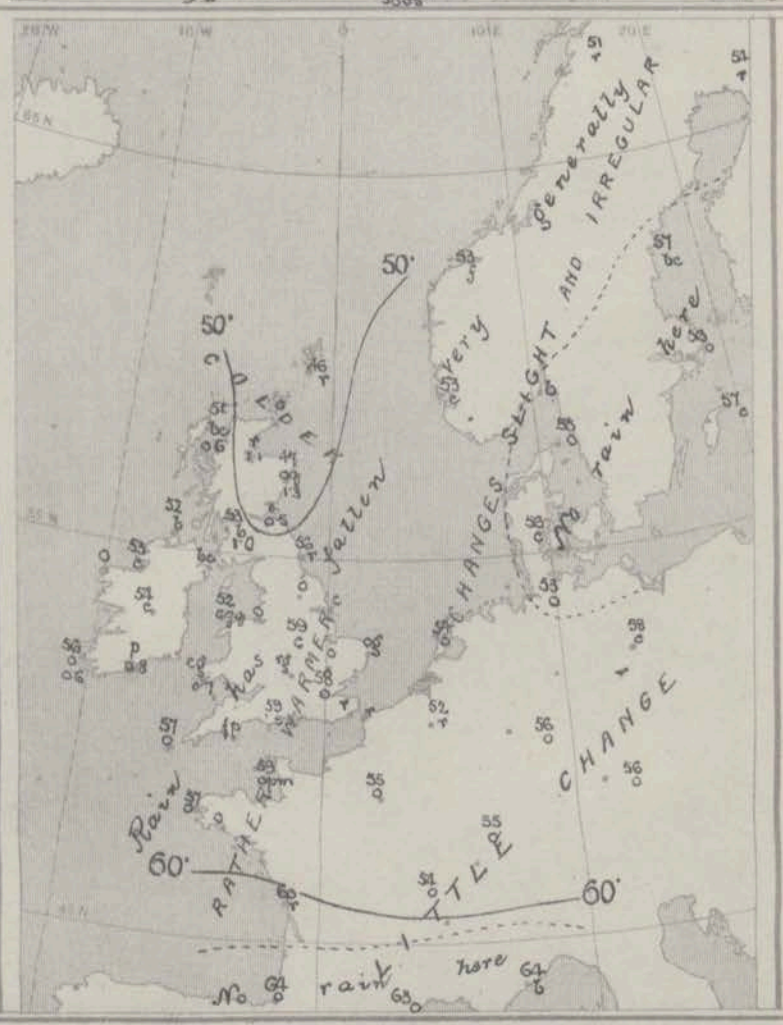
STATIONS.	MEAN READINGS.
	ins.
Sumburgh Head	29·794
Stornoway	29·797
Wick	29·810
Nairn	29·821
Aberdeen	29·831
Leith	29·850
Shields	29·876
York	29·910
Loughborough	29·936
Ardrossan	29·862
Donaghadee	29·881
Holyhead	29·918
Liverpool	29·913
Parsonstown	29·921
Valencia	29·939
Roche's Point	29·938
Pembroke	29·942
Scilly	29·984
Jersey	30·009
Hurst Castle	29·974
Dover	29·970
LONDON	29·967
Oxford	29·953
Cambridge	29·947
Yarmouth	29·943

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 shewn 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 July.)

STATIONS.	TEMPERATURE. Daily Max.	Daily Min.	at 8 a.m. Dry.	at 8 a.m. Wet.	RAINFALL (Inches.)
Sumburgh Head	57·8	48·3	53·6	52·0	2·09
Stornoway	60·2	49·5	56·0	54·0	3·02
Wick	62·2	49·2	56·1	53·8	2·25
Nairn	64·7	51·4	57·2	53·6	2·57
Aberdeen	64·4	51·1	58·0	54·4	2·74
Leith	67·1	51·7	58·6	55·3	2·84
Shields	64·4	52·9	58·6	55·4	2·65
York	68·5	52·1	59·4	56·2	2·57
Loughborough	72·1	53·0	62·0	58·2	2·34
Ardrossan	63·9	53·2	57·5	54·8	2·91
Donaghadee	63·1	51·6	57·4	55·6	2·67
Holyhead	63·9	54·7	58·2	55·9	2·32
Liverpool	66·1	54·4	59·6	55·9	2·99
Parsonstown	66·4	51·9	58·3	54·8	3·01
Valencia	64·1	53·6	58·7	56·3	3·91
Roche's Point	65·7	53·3	58·7	55·8	3·16
Pembroke	62·9	55·0	58·1	55·9	2·31
Scilly	64·5	56·3	60·1	58·0	2·29
Jersey	68·8	56·3	62·2	59·2	2·21
Hurst Castle	67·9	55·7	61·3	58·8	2·15
Dover	67·2	56·9	62·6	58·8	1·82
LONDON	73·0	54·1	62·3	58·1	2·17
Oxford	69·9	53·7	60·2	56·8	2·51
Cambridge	72·3	52·4	61·4	57·9	2·30
Yarmouth	66·8	55·2	61·2	58·1	2·68

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 30.10 ins. at Lisbon, 30.0 ins. and upwards in the south of France.
Lowest 29.3 ins. and less in the north of Norway, 29.4 ins. and less in a depression, the centre of which lies off the Berwick coast.
Gradients moderate generally. Barometer rising in the west of our Islands, & also in Scandinavia, but falling elsewhere.

TEMPERATURE

Highest 64° at Nice and Biarritz, 63° at Perpignan and Lisbon, 60° at Rochefort, and 59° at Loughborough, Oxford, Cambridge, Hurst Castle and Jersey.
Lowest 46° at Shetland Head, 47° at Nairn, Aberdeen and Leith, 48° at Wick and 51° at Bodo, Stornoway and Donaghadee.
The maxima registered yesterday were below 60° at many of our western and northern stations, but in London the thermometer rose to 66°.

WIND

Light from the N.ward in Scotland, and light to fresh from the NW.ward on our western coasts.
SW.ly over England, as well as at most of the Continental stations; strong in force in the Channel & Bay of Biscay.
A moderate to strong gale from the S.ward or SW.ward has been experienced on many parts of our south and southwest coasts.

WEATHER

Fine in the extreme northwest of our Islands, but cloudy in nearly all other parts of W. Europe with rain in many places.
Heavy rain has fallen in the western and northern parts of the United Kingdom, the largest amounts being 1.3 ins. at Aberdeen, 1.1 ins. at Nairn, 1.0 in. at Ardrossan, and 0.8 in. at Rochel Point.
A solar halo was seen at Oxford yesterday morning.

SEA

Rough or rather so in the English, Bristol and St George's Channels, but moderate to smooth elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The depression off our northeast coasts will probably travel away across the North Sea, but no very decided improvement in the weather is likely to take place over our Islands at present.

FORECASTS

For the 24 hours ending at NOON on 9TH JULY 1890.

DISTRICTS.	FORECASTS.	DISTRICTS.	FORECASTS.
0 SCOTLAND NORTH	N.ly winds, light or moderate; cloudy and showery at first, but improving later.	6 SCOTLAND WEST	W.ly to N.ly winds, light; fair generally.
1 SCOTLAND EAST		ENGLAND N.W.	W.ly and NW.ly winds, strong; squally, showery.
2 ENGLAND N.E.	SW.ly to W.ly winds, fresh; changeable, showery.	ENGLAND S.W.	
3 ENGLAND EAST		IRELAND NORTH	N.ly and NW.ly winds, backing later; unsettled, showery.
4 MIDLAND COUNTIES		IRELAND SOUTH	
5 ENGLAND SOUTH	SW.ly to W.ly winds, strong on coast; gusty, showery.	WARNINGS	The S. Cone is still flying in districts 3, 5 & 7. 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: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Skudesnaes ...	29.54	53	52	W	6	r	4
Sumburgh Head	29.58	53	49	NW	3	b	4
Stornoway	29.66	48	48	S	2	r	2
Aberdeen	29.68	54	50	S	2	o p	3
Shields	29.74	59	52	SW	2	c	3
Ardrossan	29.69	55	54	SW	1	o	4
Malin Head ...	29.62	53	51	SSE	3	o r	1
Mullaghmore ...	29.56	55	54	ESE	4	o r	2
Belmullet	29.51	59	55	SE	4	o	*

	BAR:	THER: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Holyhead	29.74	54	53	S	5	r m q	4
Valencia	29.44	59	58	SW	4	m	4
Scilly	29.80	55	55	S	6	r	3
Jersey	30.05	63	56	SSW	3	o q	3
Dungeness	29.94	61	56	NW	7	c	5
London	29.91	66	59	SSW	4	b c	*
Yarmouth	29.87	62	54	W	3	b c	3
Rochefort	30.26	67	59	NW	3	c	*

GENERAL REMARKS ON THE WEATHER OVER EUROPE

DURING THE PAST 24 HOURS.

Weather in morning fine and bright over Spain, the south and eastern shores of the Mediterranean, and over southeastern Europe, southern and central Russia; changeable and unsettled elsewhere, with rain in many places, fall again beginning in the west of our Islands. Large quantities in the western and northern districts later (more than an inch in the east of Scotland) smaller quantities in the southeast and east.

Temperature continuing very low for time of year over the whole of northwestern Europe and the British Islands, higher and rising in the south and east. Exceeding 70° in morning over southern and eastern parts of the Mediterranean, the Balkan Peninsula and southern Russia; below 60° over northwestern Europe, and as low as 50° in the Shetlands, Hebrides, and at Parsonstown, 52° at Aberdeen and Skudesnaes, and below 55° in many other places. Not reaching 80° during day at any of the French stations from which reports have arrived at present, and remaining below 67° all over our Islands, and below 60° in many places.

Wind mainly SW.^{3} to NW.^{3} over northern and northwestern Europe and blowing strongly at several of the Baltic and Scandinavian stations, backing to S. and in Ireland and blowing a moderate gale at Valencia Island; chiefly NW.^{3} over the Mediterranean (a gale at Toulon) NE.^{3} to N.^{3} over Spain. Becoming S.^{3} to SW.^{3} all over Ireland and England later and blowing a gale in English Channel and south of Ireland.

Barometer highest 30.1 ins. to 30.3 ins. in an anticyclone lying over Spain, the Bay of Biscay and southwestern half of France, 29.9 ins. to 30.0 ins. and more over central Russia; lowest about 29.1 ins. in a depression over Norway, about 29.4 ins. in other shallow systems over Hungary and eastern Germany. New depression advancing over Ireland from the westward later, others in north and east disappearing.

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. July. 1890.

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

	STATIONS.	YESTERDAY EVENING. Barom: Reading at 32° F. and Sea Level.	Temp. Dry.	Wind. Direc.	Force. (0 to 12.)	Weather.	8 A.M. TO DAY. Barometer. Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Shade Temp. Dry.	Wet.	Difference from 8 a.m. yesterday.	Wind. Direc.	Force. (0 to 12.)	Weather.	Sea. (0 to 5.)	PAST 24 HOURS. Shade Temp. Max.	Min.	Amount of Rainfall.
SCANDINAVIA.	Haparanda ...	29.41	55	SW	2	c	29.58	+.21	57	55	+3	SW	4	b	*	57	52	0.08
	Hernösand ...	29.56	58	SSW	2	bc	29.61	+.22	56	53	−1	SSW	2	c	*	70	46	—
	Stockholm ...	29.70	56	SSW	2	c	29.69	+.11	55	54	+1	S	4	o	*	66	50	—
	Wisby	29.76	55	SSW	4	b	29.72	+.02	60	55	+3	S	4	c	*	63	54	0.04
	Bodö	29.48	49	WSW	4	c	29.58	+.33	48	46	−3	SW	2	b	1	54	45	0.16
	Christiansund	29.48	55	ENE	3	c	29.25	−.12	58	54	+5	ENE	3	o	3	?	?	—
	Skudesnaes ...	29.29	54	SE	6	r	29.40	−.16	54	50	+1	SE	6	o	5	55	52	0.47
	Christiania Fjord (Færder)	29.54	56	SSE	6	r	29.45	−.07	55	50	−1	WSW	8	b	5	57	55	0.24
	Skagen (The Scaw)	29.59	52	SW	5	r	29.57	−.05	56	52	+1	S	4	bc	3	61	52	0.35
	Fanö	29.52	56	S	6	r	29.65	−.04	57	53	+1	WSW	4	c	*	57	52	0.20
	Sumburgh Head	29.21	48	NE	5	r	29.25	−.18	53	51	+7	NNE	5	c	6	53	45	2.17
	Stornoway ...	29.48	53	N	3	c	29.58	+.11	52	51	+1	NE	6	o	5	55	45	0.08
	Wick	29.35	51	NW	4	o	29.41	+.03	48	48	0	N	6	r	3	52	44	0.41
	Nairn	29.43	55	WNW	3	o	29.52	+.10	50	48	+3	NW	2	r	3	57	44	0.04
	Aberdeen ...	29.40	55	WNW	6	bq	29.45	+.12	51	47	+4	WNW	6	c8	4	58	44	—
BRITISH ISLANDS.	Leith	29.47	59	W	4	b	29.58	+.21	57	49	+10	W	4	bc	*	64	45	—
	Shields	29.50	61	W	3	bc	29.59	+.29	56	50	0	WNW	3	c	2	62	50	0.04
	Spurn Head ...	29.58	55	SE	1	bc	29.66	+.26	53	52	−5	SW	4	r	3	64	51	0.03
	York	29.56	60	W	3	c	29.65	+.28	53	51	−5	SW	1	o	*	65	49	0.01
	Loughborough	29.64	59	W	3	b	29.71	+.29	55	53	−4	WSW	2	r	*	64	47	0.03
	Ardrossan ...	29.55	54	WNW	2	o	29.63	+.22	56	51	+3	WSW	2	bc	1	59	49	—
	Malin Head ...	29.58	53	W	5	o7p	29.68	+.15	53	49	+1	NW	4	b	2	57	49	0.03
	Mullaghmore ...	29.85	53	W	4	r10	29.73	+.15	55	50	+2	N	1	b	0	58	48	0.22
	Belmullet ...	29.67	53	W	2	o7	29.76	+.13	55	50	+1	NNW	2	bc	*	58	48	0.18
	Donaghadee ...	29.60	58	WNW	3	o	29.70	+.22	55	50	+4	WNW	3	c	1	61	50	—
	Liverpool (Bidston)	29.65	58	W	4	bc	29.69	+.26	52	50	−1	W	2	o	3	59	50	0.07
	Holyhead ...	29.66	56	SW	3	bc	29.67	+.21	59	55	+7	WNW	1	bc	2	62	51	0.04
	Parsonstown ...	29.68	59	2	0	*	29.73	+.13	54	51	0	X	0	o	*	61	50	—
	Valencia	29.72	60	WSW	2	c	29.74	+.06	57	55	+1	NNE	2	o7	2	62	53	0.06
	Roche's Point ...	29.70	59	SW	2	c	29.71	+.11	56	54	+2	ESE	2	o	3	60	53	0.10
	Pembroke (St. Ann's Hd.)	29.73	56	WSW	3	c	29.70	+.17	54	54	−1	WSW	2	pf	3	58	53	0.19
	Scilly	29.79	59	WSW	3	bc	29.70	+.08	58	58	+1	SW	4	f	3	60	54	0.05
	Prawle Point ...	29.76	56	WNW	3	o	29.75	+.16	54	54	−1	S	3	f	3	60	52	0.02
	Jersey (St. Aubin's)	29.81	60	W	4	c	29.84	+.18	58	57	−1	S	4	ogqr	3	62	53	0.05
	Hurst Castle ...	29.72	60	WSW	5	cqr	29.79	+.23	56	56	−3	SW	5	cmdf	3	63	56	0.02
	Dungeness ...	29.65	60	SW	6	bc	29.79	+.23	58	56	+2	W	6	c	5	62	57	0.15
	London	29.66	65	W	3	bc	29.75	+.23	59	55	+1	SW	2	o	*	69	55	—
	Oxford	29.70	59	WSW	3	c	29.74	+.25	57	54	−2	SW	3	o	*	69	54	0.01
	Cambridge ...	29.65	64	W	1	b	29.73	+.24	61	56	+2	SW	1	c	*	70	46	0.01
	Yarmouth ...	29.58	62	NW	4	cp	29.72	+.21	59	54	+3	WSW	2	bc	2	66	50	0.14
GERMANY & HOLLAND.	Cuxhaven ...	29.67	53	SSW	4	o	29.72	−.08	59	57	+6	W	3	b	*	?	?	0.04
	Berlin	29.82	59	SSW	3	c	29.86	−.07	63	59	+5	SSW	3	c	*	68	54	0.08
	Wiesbaden ...	*	*	*	*	*	29.95	+.02	61	60	+5	X	0	o	*	61	50	0.08
	Munich	30.05	53	SW	2	r	30.10	+.04	61	56	+5	SW	4	o	*	68	52	0.47
	The Helder ...	29.61	58	W	2	c	29.73	+.08	57	53	+3	WSW	2	c	2	59	50	—
FRANCE AND BELGIUM.	Brussels (9 a.m.)	*	*	*	*	*	29.85	+.11	60	57	+8	WSW	2	r	*	62	?	0.08
	Cape Gris Nez	?	59	W	6	c	?	?	57	55	+5	WSW	6	o	6	66	50	0.08
	Paris	29.84	65	SSW	2	o	29.81	+.01	59	56	+4	SW	3	o	*	67	?	0.28
	Brest	29.86	59	W	3	o	29.83	+.14	59	56	+2	SW	3	m	5	61	50	—
	Lorient	29.85	58	WSW	3	o	29.88	+.12	59	59	+3	SW	4	f	5	59	53	—
	Rochefort ...	30.04	64	W	5	c	30.06	+.10	63	63	+3	WSW	5	r	?	70	55	0.12
	Belfort	29.92	60	W	1	o	29.98	+.02	61	57	+6	W	1	o	*	65	50	0.28
	Lyons	30.01	66	SSE	2	o	30.08	+.04	66	61	+12	S	1	b	*	69	?	—
	Nice	30.00	65	SSE	2	bc	30.07	+.01	64	60	0	NE	2	bc	1	73	57	—
	Perpignan ...	30.08	73	2	0	bc	30.12	+.07	67	63	+4	X	0	c	*	76	55	—
	Biarritz	30.09	74	NNE	2	b	30.09	+.04	67	63	+3	2	0	b	3	75	61	—
PENINSULA.	Corunna	*	*	*	*	*												
	Lisbon	30.05	66	NNW	6	b	30.09	−.01	64	61	+1	N	5	b	5	79	61	—

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

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

WEATHER CHARTS

for 8 a.m. on Wednesday, 9th July, 1890.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP.

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

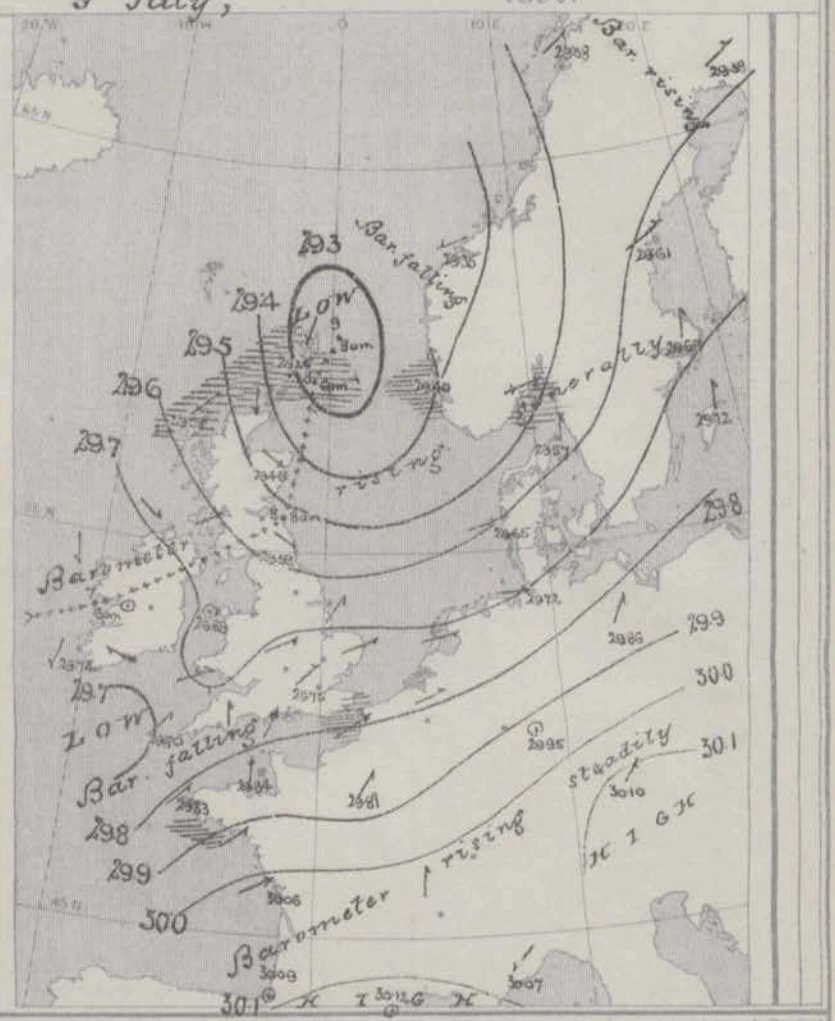
WIND - Arrows shew the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—
= forces above 10; = forces 8 to 10;
= forces 5 to 7; = forces 1 to 4.
⊙ = dead calm.

SEA DISTURBANCE—Where considerable, is shewn thus:
= Rough. = High.

MEAN HEIGHT OF THE BAROMETER

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

STATIONS.	MEAN READINGS.
	ins.
Sumburgh Head	29·794
Stornoway	29·797
Wick	29·810
Nairn	29·821
Aberdeen	29·831
Leith	29·850
Shields	29·876
York	29·910
Loughborough	29·936
Ardrossan	29·862
Donaghadee	29·881
Holyhead	29·918
Liverpool	29·913
Parsonstown	29·921
Valencia	29·939
Roche's Point	29·938
Pembroke	29·942
Scilly	29·984
Jersey	30·069
Hurst Castle	29·974
Dover	29·970
LONDON	29·967
Oxford	29·953
Cambridge	29·947
Yarmouth	29·943



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.

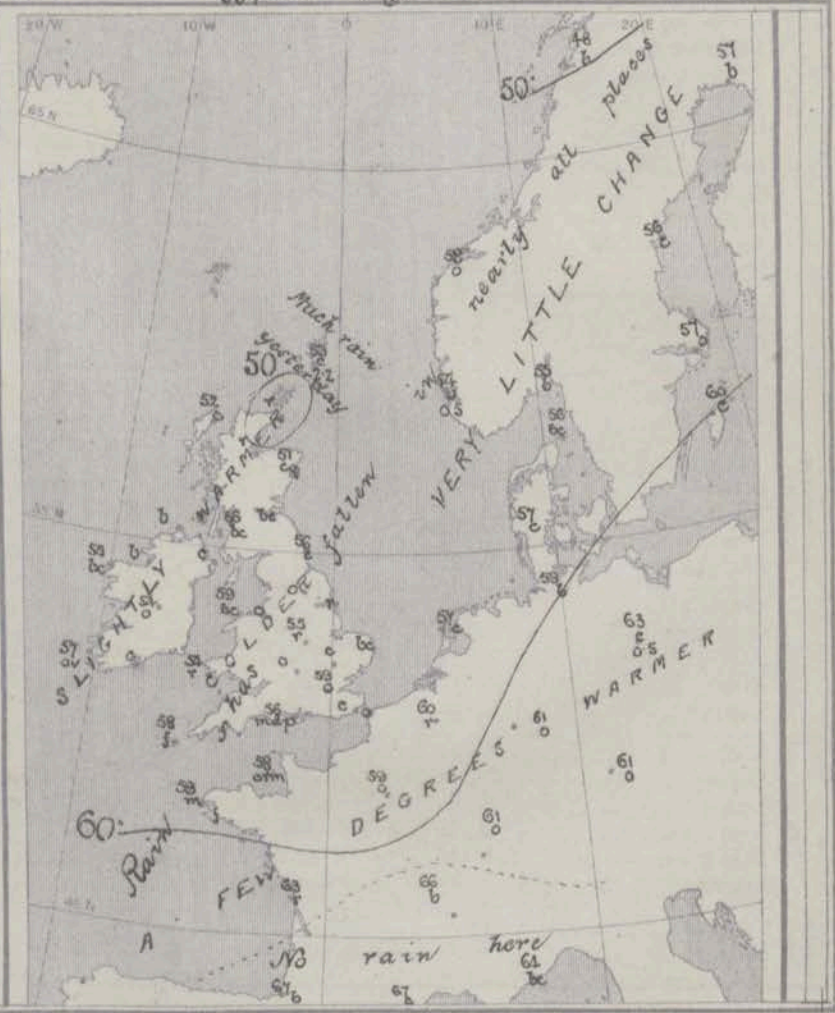
RAINFALL—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0·5 in. or more are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of July.)

STATIONS.	TEMPERATURE. Daily Max.	Daily Min.	at 8 a.m. Dry.	at 8 a.m. Wet.	RAINFALL (Inches.)
Sumburgh Head	57·8	48·3	53·6	52·0	2·09
Stornoway	60·2	49·5	56·0	54·0	3·02
Wick	62·2	49·2	56·1	53·8	2·25
Nairn	64·7	51·4	57·2	53·6	2·57
Aberdeen	64·4	51·1	58·0	54·4	2·74
Leith	67·1	51·7	58·6	55·3	2·84
Shields	64·4	52·9	58·6	55·4	2·63
York	68·5	52·1	59·4	56·2	2·57
Loughborough	72·1	53·0	62·0	58·2	2·34
Ardrossan	63·9	53·2	57·5	54·8	2·91
Donaghadee	63·1	51·6	57·4	55·6	2·67
Holyhead	63·9	54·7	58·2	55·9	2·32
Liverpool	66·1	54·4	59·6	55·9	2·99
Parsonstown	66·4	51·9	58·3	54·8	3·01
Valencia	64·1	53·6	58·7	56·3	3·91
Roche's Point	66·7	53·3	58·7	55·8	3·16
Pembroke	62·9	55·0	58·1	55·9	2·31
Scilly	64·5	56·3	60·1	58·0	2·29
Jersey	68·8	56·3	62·2	59·2	2·21
Hurst Castle	67·9	55·7	61·3	58·8	2·15
Dover	67·2	56·9	62·6	58·8	1·82
LONDON	73·0	54·1	62·3	58·1	2·17
Oxford	69·9	53·7	60·2	56·8	2·51
Cambridge	72·3	52·4	61·4	57·9	2·30
Yarmouth	66·8	55·2	61·2	58·1	2·68

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 Austria and the extreme south of France.
Lowest 29·3 ins. and less in a depression lying between the Shetlands and Norway; 29·7 ins. and less in a shallow system off our southwestern coasts.
Gradients moderate over the North Sea, but slight elsewhere.
Barometer falling in the southwest of England, and also in Scandinavia, but rising elsewhere.

TEMPERATURE

Highest 69° at Biarritz and Perpignan, 64° at Nice and Lisbon, and 63° at Berlin and Rochefort.
Lowest 48° at Wick, 50° at Nairn, 51° at Aberdeen, 52° at Stornoway & Liverpool, & 53° at Sumburgh Hd. Spurn Hd. York and Malin Hd.
The highest maxima registered over our Islands yesterday were 70° at Cambridge, and 69° in London and at York; at Wick the thermometer did not exceed 52.

WIND

Strong from the N^wd. or NE^wd. in the north of Scotland, and moderate from the NW^wd. or W^wd. in other parts of our northern district.
Moderate from the S^rly W^wd. over England, France, the Netherlands, Germany and Denmark.
S^rly in the south of Sweden.

WEATHER

Fine at many of our Northwestern stations, as well as in Denmark and the south of France.
Dull elsewhere with fog over the western parts of the Channel, and rain in many parts of Great Britain.
Rain fell yesterday over nearly the whole of western Europe, the largest amount being 2·2 inches at Sumburgh Hd.
The newspapers report that snow has fallen on the Grampians.

SEA

Rough at Sumburgh Head and Cape Gris Nez, and rather rough at Faarder, Stornoway, Dungeness and Lorient, but slight or smooth elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The new depression which has appeared off our southwest coasts will probably travel northeastward, and occasion further falls of rain over England. The general appearance remains very unsettled.

FORECASTS

For the 24 hours ending at NOON on 10TH JULY 1890.

DISTRICTS.	FORECASTS.	DISTRICTS.	FORECASTS.
0 SCOTLAND NORTH	N^rly winds, strong, to NW^rly moderate; showery to fair.	6 SCOTLAND WEST	Same as No. 1.
1 SCOTLAND EAST	W^rly winds, light or moderate, fair generally.	7 ENGLAND N.W.	Light, variable breezes, changeable, some showers.
2 ENGLAND N.E.	SW^rly to SE^rly winds, light; cloudy, unsettled, some rain.	8 ENGLAND S.W.	S^rly winds, shifting to the NW^wd. or N^wd.; dull, rainy, local fogs.
3 ENGLAND EAST		9 IRELAND NORTH	Light breezes, chiefly N^rly; fair generally, but local showers.
4 MIDLAND COUNTIES		10 IRELAND SOUTH	
5 ENGLAND SOUTH	S^rly winds, moderate or fresh, cloudy, unsettled, rain at times.	WARNINGS	None Issued

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

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

YESTERDAY'S 2 P.M. REPORTS.

	BAR:	THER: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Skudesnaes ...	29.04	55	51	SE	4	o	3
Sumburgh Head	29.30	49	48	NE	3	r	3
Stornoway	29.47	55	53	N.	3	c	3
Aberdeen	29.36	53	48	WNW	6	bc v	4
Shields	29.45	55	50	W	2	c	2
Ardrossan	29.51	56	50	NW	4	bc	2
Malin Head ...	29.56	54	50	WNW	4	o	3
Mullaghmore ...	29.64	55	50	W	3	o	2
Belmullet	29.66	56	51	W	2	o	*

	BAR:	THER: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Holyhead	29.62	61	55	WNW	4	bc	4
Valencia	29.74	62	56	W	2	b v	2
Scilly	29.56	60	59	WSW	4	o	4
Jersey	29.76	62	59	W	6	o	5
Dungeness	29.60	59	58	SW	6	r m	5
London	29.56	65	61	W	3	c	*
Yarmouth	29.49	66	61	WSW	4	c	3
Rochefort	30.02	68	65	W	6	c	?

GENERAL REMARKS ON THE WEATHER OVER EUROPE

DURING THE PAST 24 HOURS.

Weather in morning fine and bright over Spain, the southern and eastern parts of the Mediterranean, and on the shores of the Black Sea; very cloudy, changeable and unsettled elsewhere, rain in many places, thunderstorm at Kiev. Continuing showery during day in almost all places, but amounts of rain not large over the British Islands and France, excepting in the Shetlands.

Temperature continuing very low for the time of year except over southern and central Russia and in Turkey; morning readings exceeding 70° in last named regions, and also over Algeria and southern Italy – exceeding 80° at Constantinople; below 60° all over northwestern Europe, and below 50° in Scotland – lowest of all 46° at Sumburgh Head, 47° at Nairn, Aberdeen and Leith. Continuing below 60° in Scotland all day, and below 70° over the British Islands as a whole, not exceeding 70° at the German stations, nor exceeding 79° even at Biarritz and Lisbon.

Wind extremely variable, cyclonic circulation of light to fresh winds over the British Islands, north of France and North Sea, SW¾ over the Baltic and Germany, N¾ in Austria and Italy, NE¾ over the southern half of Spain. Little change later.

Barometer highest 30.0 ins. to 30.1 ins. and more over the Mediterranean, southwestern and southern Europe, and Austria, and exceeding 29.9 ins. over central and eastern Russia. Lowest 29.3 ins. and less over the west of Lapland, 29.4 ins. and less in a depression off the northeast coast of England and east of Scotland. Both depressions travelling northwards later, very shallow secondary systems passing across the United Kingdom.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

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

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

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

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

DAILY WEATHER REPORT.

for THURSDAY 10TH JULY 1890.

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

	STATIONS.	YESTERDAY EVENING. Barom; Reading at 32° F. and Sea Level.	Temp. Dry.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	8 A.M. TO DAY. Barometer. Reading at 32° F. and Sea Level.	Barometer. Difference from 8 a.m. yesterday.	Shade Temp. Dry.	Shade Temp. Wet.	Shade Temp. Difference from 8 a.m. yesterday.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	Sea. (0 to 6.)	PAST 24 HOURS. Shade Temp. Max.	Shade Temp. Min.	Amount of Rainfall.
SCANDINAVIA.	Haparanda ...	29.63	55	SW	2	0	29.61	+.03	56	55	−1	SW	2	0	•	63	52	0.32
	Hernösand ...	29.58	52	S	2	0	29.60	−.01	55	54	−1	SSW	2	b	•	59	48	—
	Stockholm ...	29.68	55	SSE	2	0	29.65	−.04	64	57	+7	SSE	2	0	•	?	52	0.04
	Wisby	29.54	57	SSW	4	c	29.67	−.05	62	58	+2	S	4	bc	•	66	52	—
	Bodö	29.52	50	NE	4	b	29.45	−.13	57	53	+9	E	2	r	1	?	46	0.04
	Christiansund	29.47	51	SW	6	r	29.51	+.16	51	50	−7	WSW	3	r	3	52	48	0.16
	Skudesnaes ...	29.49	51	ESE	8	r	29.55	+.15	55	52	+1	NNW	6	0	3	55	48	0.20
	Christiania Fjord (Færder)	29.52	53	SSW	4	r	29.54	+.09	58	53	+3	SSE	3	c	4	59	52	0.24
	Skagen (The Scaw)	29.58	55	SW	3	0	29.53	−.04	55	52	−1	SW	2	0	2	59	50	0.08
	Fanö	29.64	55	WSW	5	c	29.59	−.06	57	55	0	WSW	6	c	•	61	54	0.04
BRITISH ISLANDS.	Sumburgh Head	29.49	53	NNE	4	0	29.75	+.50	50	47	−3	N	3	c	4	57	47	0.03
	Stornoway ...	29.74	52	N	5	bc	29.52	+.24	49	49	−3	N	3	0	3	55	43	0.02
	Wick	29.60	50	NW	6	0	29.85	+.44	50	48	+2	NW	4	0	3	52	45	0.33
	Nairn	29.69	52	WNW	3	r	29.89	+.37	53	49	+3	WNW	1	b	1	54	46	0.21
	Aberdeen ...	29.60	53	WNW	5	cq	29.87	+.42	49	46	−2	NW	4	cq	3	55	48	0.01
	Leith	29.65	57	WNW	2	bc	29.83	+.31	59	57	+2	W	2	b	•	66	45	0.01
	Shields	29.66	56	NE	2	c	29.85	+.28	54	49	−2	NW	2	c	3	65	45	0.01
	Spurn Head ...	29.66	59	NE	2	b	29.88	+.22	56	52	+3	WNW	3	b	2	62	50	—
	York	29.67	60	W	3	b	29.91	+.26	55	50	+2	NNW	2	b	•	67	45	—
	Loughborough	29.71	62	W	3	b	29.54	+.23	59	53	+4	WNW	3	bcw	•	63	46	0.16
	Ardrossan ...	29.72	58	W	4	b	29.59	+.30	54	48	−2	NW	3	c	2	60	42	—
	Malin Head ...	29.81	54	NW	4	0	29.57	+.25	53	48	0	NNW	3	0p	2	56	49	—
	Mullaghmore ...	29.87	56	NW	3	bcr	30.01	+.28	54	51	−1	Z	0	0	0	59	50	—
	Belmullet ...	29.91	56	NNW	1	0	30.05	+.29	54	50	−1	W	1	0	•	58	45	0.01
	Donaghadee ...	29.78	59	NNE	4	b	29.98	+.28	56	51	+1	NNE	3	c	1	61	49	—
	Liverpool (Bidston)	29.76	58	W	4	b	29.96	+.27	55	50	+3	WNW	4	c	4	60	52	—
	Holyhead ...	29.79	56	NW	1	b	29.91	+.22	58	52	−1	NNW	3	b	2	61	50	—
	Parsonstown ...	29.84	61	NW	2	bc	30.06	+.33	51	50	−3	Z	0	0	•	63	38	—
	Valencia	29.89	58	N	4	c	30.06	+.32	55	52	−2	Z	0	0	0	63	45	—
	Roche's Point ...	29.85	58	SW	2	c	30.04	+.33	54	51	−2	N	2	c	3	60	49	—
	Pembroke (St. Ann's Hd.)	29.86	55	N	2	c	30.03	+.33	56	54	+2	N	2	b	1	60	50	0.05
	Scilly	29.81	59	NNW	3	c	30.02	+.32	58	55	0	NNW	1	b	2	60	53	—
	Prawle Point ...	29.76	57	WNW	3	c	30.02	+.27	61	55	+7	NW	2	b	1	61	46	0.03
	Jersey (St. Aubin's)	29.80	60	WNW	4	0q	30.02	+.18	61	54	+3	NNE	4	b	3	62	54	0.32
	Hurst Castle ...	29.73	58	WSW	4	2nd	30.00	+.21	58	55	+2	NNW	3	b	3	?61	56	0.04
	Dungeness ...	29.69	58	WSW	5	d	29.91	+.12	57	52	−1	NNW	4	b	2	61	51	0.02
	London	29.95	58	W	1	0d	29.95	+.20	58	52	−1	NW	1	b	•	62	48	0.12
	Oxford	29.76	55	NNW	1	0	29.98	+.24	55	52	−2	NW	3	b	•	62	46	0.13
	Cambridge ...	29.74	57	W	1	r	29.98	+.20	57	53	−4	NW	1	b	•	63	46	0.14
	Yarmouth ...	29.68	62	SW	2	c	29.87	+.15	57	54	−2	NNW	3	bc	3	63	47	0.08
GERMANY & HOLLAND.	Cuxhaven ...	29.75	56	W	1	0	29.67	−.05	57	55	−2	NW	3	b	•	?	51	0.20
	Berlin	29.84	67	SSW	2	c	29.67	−.19	62	61	−1	SW	3	c	•	73	57	0.16
	Wiesbaden ...	*	*	*	*	*	29.78	−.17	64	63	+3	SW	1	0	•	73	61	0.75
	Munich	30.04	65	2	0	b	29.98	−.12	66	61	+5	SW	4	c	•	72	55	0.20
	The Helder ...	29.71	58	WSW	1	c	29.79	+.06	57	53	0	NW	2	b	3	61	55	0.08
FRANCE AND BELGIUM.	Brussels (9 a.m.)	*	*	*	*	*	29.86	+.01	59	57	−1	WNW	3	0	•	67	56	0.39
	Cape Gris Nez	?	59	SW	5	0	?	?	55	52	−2	N	4	bc	3	61	52	0.12
	Paris	29.85	64	SSW	2	0	29.78	+.12	60	57	+1	WNW	2	0	•	70	57	0.20
	Brest	29.84	59	W	1	r	?	?	55	55	−4	N	1	0	3	64	52	0.12
	Lorient	29.86	59	WSW	4	f	30.02	+.14	56	56	−3	NNW	1	0	3	61	55	0.28
	Rochefort ...	30.08	64	WSW	6	0	30.07	+.01	63	63	0	WSW	5	r	3	66	55	0.12
	Belfort	29.90	62	W	1	r	29.90	−.08	61	50	0	W	1	r	•	64	50	0.39
	Lyons	29.99	73	SSW	4	c	30.01	−.07	70	64	+4	S	2	c	•	78	64	—
	Nice	30.04	65	S	4	b	30.02	−.05	69	59	+5	Z	0	b	0	73	59	—
	Perpignan ...	30.03	72	NE	3	b	30.05	−.07	70	66	+3	W	1	b	•	78	59	—
	Biarritz	30.08	70	NNE	3	0	30.15	+.06	67	63	0	NNW	3	0	2	79	64	—
PENINSULA.	Corunna	*	*	*	*	*	30.15	+.06	63	59	−1	NNW	5	b	?	77	59	—
	Lisbon	30.11	66	NNW	5	b												

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, 10th July, 1890.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP.

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

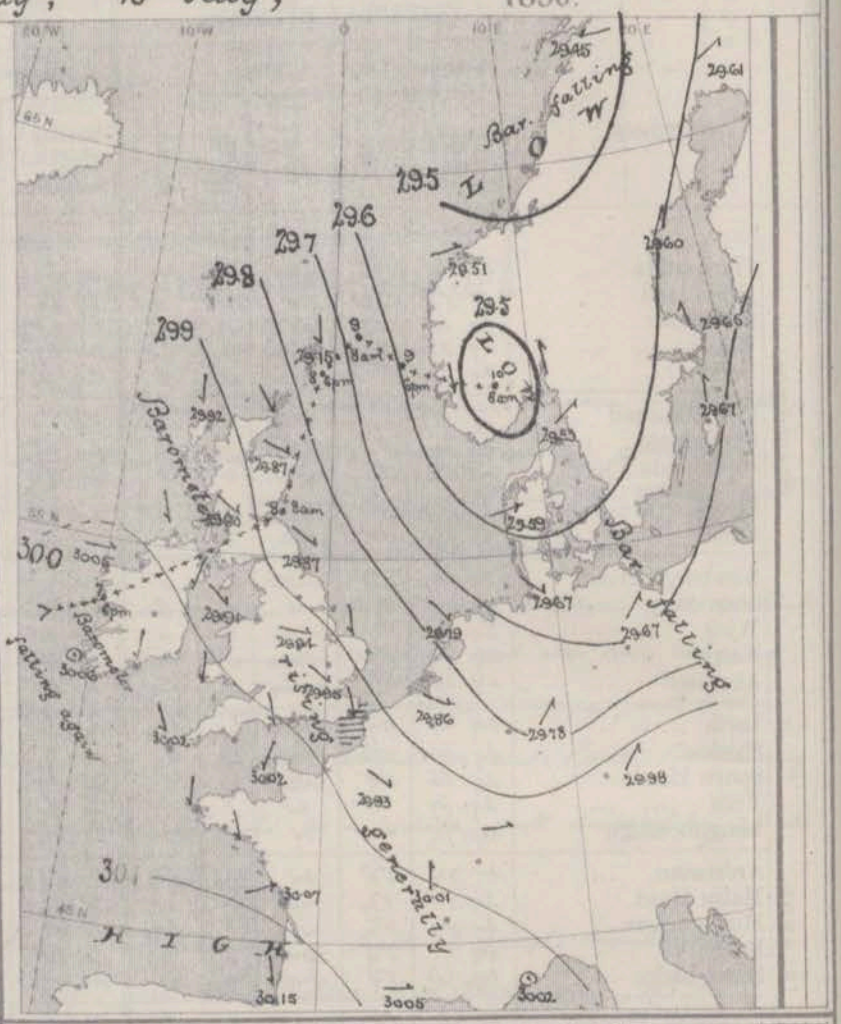
WIND - Arrows shew the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—
= forces above 10; = forces 8 to 10;
= forces 5 to 7; = forces 1 to 4.
⊙ = dead calm.

SEA DISTURBANCE—Where considerable, is shewn thus:
= Rough. = High.

MEAN HEIGHT OF THE BAROMETER

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

STATIONS.	MEAN READINGS.
	Ins.
Sumburgh Head	29 · 794
Stornoway	29 · 797
Wick	29 · 810
Nairn	29 · 821
Aberdeen	29 · 831
Leith	29 · 850
Shields	29 · 876
York	29 · 910
Loughborough	29 · 936
Ardrossan	29 · 862
Donaghadee	29 · 881
Holyhead	29 · 918
Liverpool	29 · 913
Parsonstown	29 · 921
Valencia	29 · 939
Roche's Point	29 · 938
Pembroke	29 · 942
Scilly	29 · 984
Jersey	30 · 009
Hurst Castle	29 · 974
Dover	29 · 970
LONDON	29 · 967
Oxford	29 · 953
Cambridge	29 · 947
Yarmouth	29 · 943



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.

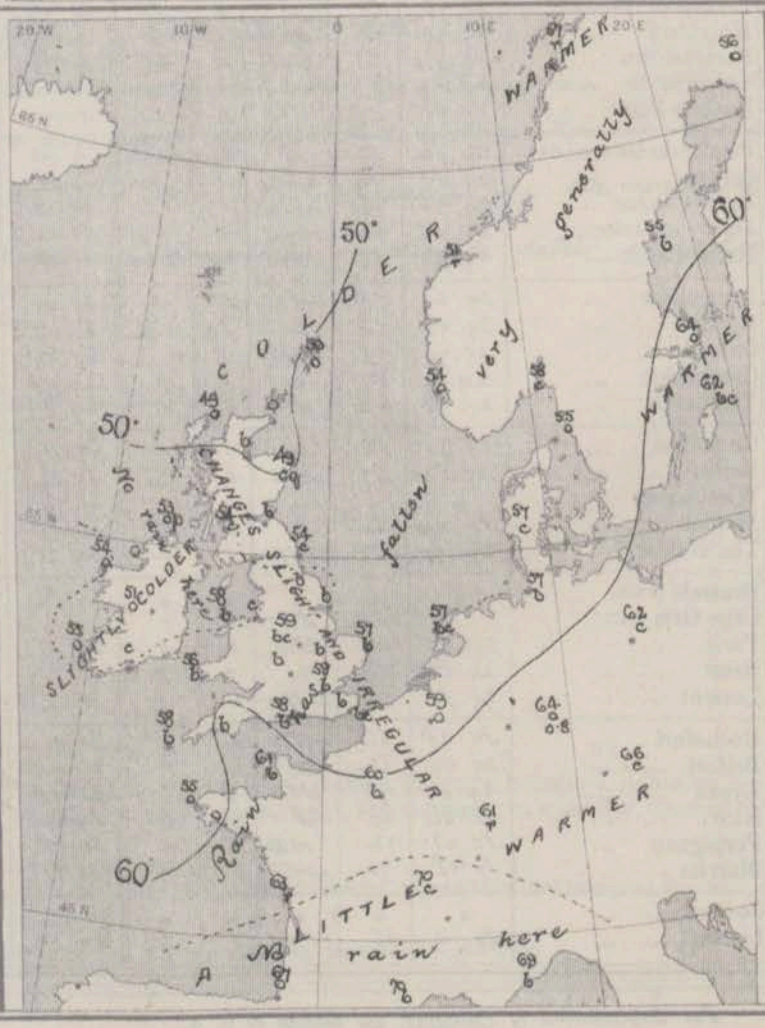
RAINFALL—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0·5 in. or more are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of July.)

STATIONS.	TEMPERATURE. Daily Max.	Daily Min.	at 8 a.m. Dry.	Wet.	RAINFALL. (Inches.)
Sumburgh Head	57 · 8	48 · 3	53 · 6	52 · 0	2 · 09
Stornoway	60 · 2	49 · 5	56 · 0	54 · 0	3 · 02
Wick	62 · 2	49 · 2	56 · 1	53 · 8	2 · 25
Nairn	64 · 7	51 · 4	57 · 2	53 · 6	2 · 57
Aberdeen	64 · 4	51 · 1	58 · 0	54 · 4	2 · 74
Leith	67 · 1	51 · 7	58 · 6	55 · 3	2 · 84
Shields	64 · 4	52 · 9	58 · 6	55 · 4	2 · 63
York	68 · 5	52 · 1	59 · 4	56 · 2	2 · 57
Loughborough	72 · 1	53 · 0	62 · 0	58 · 2	2 · 34
Ardrossan	63 · 9	53 · 2	57 · 5	54 · 8	2 · 91
Donaghadee	63 · 1	51 · 6	57 · 4	55 · 6	2 · 67
Holyhead	63 · 9	54 · 7	58 · 2	55 · 9	2 · 32
Liverpool	66 · 1	54 · 4	59 · 6	55 · 9	2 · 99
Parsonstown	66 · 4	51 · 9	58 · 3	54 · 8	3 · 01
Valencia	64 · 1	53 · 6	58 · 7	56 · 3	3 · 91
Roche's Point	66 · 7	53 · 3	58 · 7	55 · 8	3 · 16
Pembroke	62 · 9	55 · 0	58 · 1	55 · 9	2 · 31
Scilly	64 · 5	56 · 3	60 · 1	58 · 0	2 · 29
Jersey	68 · 8	56 · 3	62 · 2	59 · 2	2 · 21
Hurst Castle	67 · 9	55 · 7	61 · 3	58 · 8	2 · 15
Dover	67 · 2	56 · 9	62 · 6	58 · 8	1 · 82
LONDON	73 · 0	54 · 1	62 · 3	58 · 1	2 · 17
Oxford	69 · 9	53 · 7	60 · 2	56 · 8	2 · 51
Cambridge	72 · 3	52 · 4	61 · 4	57 · 9	2 · 30
Yarmouth	66 · 8	55 · 2	61 · 2	58 · 1	2 · 68

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 Iberian Peninsula and the southwest of France.
Lowest 29.5 ins. and less over the northwest of Norway, and also in a depression lying over the extreme S. of that country.
Gradient slight. Barometer falling in Denmark and Germany, and also (slightly) at Valencia Island, but rising elsewhere.

TEMPERATURE

Highest 70° at Lyons and Perpignan, 69° at Nice, 67° at Biarritz, 66° at Munich, and 64° at Stockholm & Wiesbaden.
Lowest 49° at Stornoway and Aberdeen, 50° at Lerwick Head and Wick, 51° at Christiansund & Parsonstown, & 53° at Nairn and Malin Hd.
The maxima registered over our Islands were as a rule very little above 60°, but at Leith the thermometer rose to 66°, and at York to 67°.

WIND

Light or moderate from the NW^ly over the greater part of our Islands, France and the North Sea, but calms or W^ly airs reported in the west of Ireland.
Moderate to strong from the SW^ly in Denmark and Germany, and light from the S^ly in Sweden.

WEATHER

Fine over Great Britain, the Netherlands and the north of France. Dull elsewhere, with passing showers at Malin Head, and rain in the west of Norway, as well as at Rochefort and Belfort.
Rain fell yesterday at all but our western stations, and an aurora was seen at Valencia Island at night.

SEA

Moderate to smooth generally, but rough at Cape Gris Nez.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The improvement which has taken place over our Islands appears to be merely temporary. At Valencia Island the barometer has begun to fall again, so that fresh disturbances are probably approaching our western coasts. A return to unsettled weather is, however, scarcely likely to take place over England before tomorrow.

FORECASTS

For the 24 hours ending at NOON on 11TH JULY 1890.

DISTRICTS.	FORECASTS.	DISTRICTS.	FORECASTS.
0 SCOTLAND NORTH 1. SCOTLAND EAST	NW^ly winds, backing later; fair generally	6 SCOTLAND WEST	Same as Nos. 0 and 1.
2 ENGLAND N.E. 3 ENGLAND EAST 4 MIDLAND COUNTIES	Same as No. 5	7 ENGLAND N.W. 8 ENGLAND S.W. 9 IRELAND NORTH 10 IRELAND SOUTH	Wind backing to the SW^ly or S^ly; fair at first, but afterwards dull and rainy.
5 ENGLAND SOUTH	NW^ly to W^ly or SW^ly winds; fine today, but becoming unsettled again tomorrow	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: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Skudesnaes ...	29.41	55	50	SSE	6	o	5
Sumburgh Head	29.38	55	52	NNE	5	c	6
Stornoway	29.68	55	54	NE	5	c	5
Aberdeen	29.54	54	49	WNW	6	og	5
Shields	29.60	62	53	WNW	3	c	2
Ardrossan	29.67	58	53	WNW	5	b	3
Malin Head ...	29.75	56	51	NW	4	b p	2
Mullaghmore ...	29.80	58	52	NW	4	b v	2
Belmullet	29.83	55	51	N	3	bc	*

	BAR:	THER: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Holyhead	29.75	57	52	N	2	b	2
Valencia	29.82	63	55	N	3	c v	3
Scilly	29.74	59	58	NNW	3	b	2
Jersey	29.77	61	61	SW	3	o f m	3
Dungeness	29.75	58	55	SW	3	b	3
London	29.73	60	58	SSE	3	o p	*
Yarmouth	29.71	62	59	W SW	2	c p	2
Rochefort	30.07	66	65	W SW	5	b	?

GENERAL REMARKS ON THE WEATHER OVER EUROPE

DURING THE PAST 24 HOURS.

Weather fine and bright over Spain, the shores of the Mediterranean and apparently over the northern half of Russia also; very changeable elsewhere, cloudy in most places, rainy at several stations over the British Islands and France, very foggy over the western half of the English Channel. Rain considerable during day over France, Germany and Scotland, less heavy over the northeast and the south of Great Britain; none at the majority at Irish stations, nor over our northwestern and midland counties.

Temperature in morning exceeding 70° over the central and southeastern parts of Spain, the southern shores of the Mediterranean and southern Russia, and exceeding 80° over central Algeria, much lower elsewhere. Below 60° over northwestern and northern Europe, and as low as 48° at Bodö and Wick, 50° at Nairn, 51° at Aberdeen, and 52° at Liverpool. Rising to above 65° over some of our Midland Counties, and at Leith during day, but falling short of that value at our other stations, and over the greater part of France, exceeding 70° over Germany, and touching 78° at Lyons and Perpignan, and 79° at Biarritz.

Wind. Mainly SW.ly over the south of England, France and Germany, S.ly over the Baltic and Sweden, variable (NW.ly to NE.ly) in Scotland and Ireland, very variable elsewhere; not strong in any district. Subsequently veering to the N.ward over Scotland, Ireland and the western half of England.

Barometer highest 30.0 ins. to 30.1 ins. over southern Europe and the Mediterranean, and apparently about 29.9 ins. over northern Russia. Lowest 29.3 ins. and less in a depression lying between the Shetlands and Norway, and about 29.7 ins. in a new disturbance at the mouth of St Georges Channel, and rather below 29.7 ins. in another one over southern Russia. Depression in southwest filling up later as it moves eastward, that in the north beginning to move southeastwards after travelling northeastwards over our Islands.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

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

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

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

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

DAILY WEATHER REPORT.

for Friday 11th July. 1890.

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

	STATIONS.	YESTERDAY EVENING. Barom: Reading at 32° F. and Sea Level.	Temp. Dry.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	8 A.M. TO DAY. Barometer. Reading at 32° F. and Sea Level.	Barometer. Difference from 8 a.m. yesterday.	Shade Temp. Dry.	Shade Temp. Wet.	Shade Temp. Difference from 8 a.m. yesterday.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	Sea. (0 to 9.)	PAST 24 HOURS. Shade Temp. Max.	Shade Temp. Min.	Amount of Rainfall.
SCANDINAVIA.	Haparanda ...	29.67	57	SSW	4	c	29.58	-.03	56	56	0	NE	2	p	*	61	52	0.04
	Hernösand ...	29.63	52	X	0	0	29.84	-.26	54	52	-1	N	4	0	*	59	46	0.35
	Stockholm ...	29.50	57	SE	2	p	29.49	-.16	59	55	-5	WSW	4	c	*	66	52	0.84
	Wisby	29.54	56	NW	4	p	29.60	-.07	58	54	-4	W	4	c	*	72	54	0.16
	Bodö	29.54	53	N	2	bc	29.65	+.20	53	50	-4	NNE	2	0	1	57	50	—
	Christiansund	29.66	50	N	4	p	29.69	+.18	50	48	-4	NW	2	b	3	54	50	0.28
	Skudesnaes ...	29.72	53	NW	8	0	29.75	+.20	51	48	-4	NNW	6	0	3	57	46	—
	Christiania Fjord (Færder)	29.56	58	W	3	b	29.57	+.03	57	52	-1	N	3	b	2	63	57	—
	Skagen (The Scaw)	29.58	54	NW	1	b	29.59	+.06	57	54	+2	WNW	3	b	3	64	48	—
	Fanö	29.78	53	WNW	6	c	29.78	+.19	56	52	-1	W	4	c	*	61	52	—
BRITISH ISLANDS.	Sumburgh Head	29.87	52	NNW	3	c	29.88	+.13	48	47	-2	NW	3	p	4	53	45	0.09
	Stornoway ...	30.01	52	N	2	p	30.02	+.10	52	51	+3	NW	2	c	3	53	40	0.02
	Wick	29.95	50	NW	3	c	29.97	+.12	54	50	+4	NW	2	bc v	2	56	42	0.02
	Nairn	29.96	53	W	2	c	30.00	+.11	50	47	-3	X	0	b	1	58	46	0.01
	Aberdeen ...	29.96	55	NW	3	bc	29.99	+.12	47	45	-2	WNW	3	c p	2	58	41	0.02
	Leith	29.91	60	W	2	c	29.99	+.10	52	47	-7	NE	1	c	*	66	46	0.03
	Shields	29.94	53	E	1	0	29.96	+.09	50	48	-4	NE	2	c	3	57	48	—
	Spurn Head ...	29.94	55	ESE	2	c	29.91	+.03	55	50	-1	NNE	4	c	3	60	51	0.01
	York	29.95	59	W	1	c	29.96	+.05	53	50	-2	NE	1	0	*	65	49	0.01
	Loughborough	29.99	57	WNW	3	0	29.95	+.01	49	48	-10	N	1	p gm	*	64	40	0.12
	Ardrossan ...	29.96	56	W	3	0	30.00	+.07	50	48	-4	E	2	gm	1	60	47	0.01
	Malin Head ...	30.03	52	NNW	4	bc	30.05	+.08	53	48	0	NNW	3	bc	2	55	50	—
	Mullaghmore ...	30.05	55	NW	4	c r	30.09	+.08	52	48	-2	NNW	3	c	2	57	48	0.09
	Belmullet ...	30.08	55	N	2	bc	30.12	+.07	55	50	+1	NNW	2	bc	*	56	45	0.10
	Donaghadee ...	30.02	54	NNE	2	c	30.02	+.04	54	49	-2	NNE	6	b	4	60	51	—
	Liverpool (Bidston)	30.01	53	W	3	0	29.96	0.0	52	46	-3	NW	3	c	3	58	50	0.04
	Holyhead ...	30.02	55	WNW	1	0 g	29.99	+.08	55	50	-3	NNW	5	bc q	4	60	50	0.03
	Parsonstown ...	30.04	54	NW	2	0 g	30.09	+.03	50	48	-1	NW	1	0	*	59	38	—
	Valencia	30.09	55	NW	2	0	30.17	+.11	55	53	+2	NE	1	bc	1	61	45	—
	Roche's Point ...	30.04	59	NW	1	c	30.10	+.06	58	49	-1	N	4	bc	3	60	49	—
	Pembroke (St. Ann's Hd.)	30.04	54	W	1	c	30.00	-.03	53	52	-3	N	4	bc	2	58	48	0.01
	Scilly	30.01	59	SSW	2	p	30.01	-.01	55	54	-1	N	4	bc	2	63	52	0.40
	Prawle Point ...	30.01	57	WNW	3	0	29.97	-.05	53	54	-2	NW	2	b	1	63	48	0.07
	Jersey (St. Aubin's)	30.03	62	WSW	3	bc	29.96	-.06	56	54	-5	NNW	2	ogm	2	65	54	0.05
	Hurst Castle ...	29.99	59	WSW	4	c	29.93	-.07	53	52	-5	NNE	3	bm	2	66	51	—
	Dungeness ...	29.96	60	SW	3	c	29.86	-.05	52	51	-5	NNE	3	p	2	65	50	0.05
	London	29.97	63	NW	1	c	29.90	-.05	54	50	-4	NW	1	cm	*	67	49	0.30
	Oxford	30.00	54	N	2	p	29.93	-.05	51	49	-4	NNW	2	0	*	65	48	0.03
	Cambridge ...	29.97	60	NW	1	0	29.90	-.03	52	51	-5	NE	1	0	*	66	48	0.07
	Yarmouth ...	29.96	57	SE	3	c r	29.87	0.0	53	51	-4	NNE	4	p	4	60	50	0.07
GERMANY & HOLLAND.	Cuxhaven ...	29.85	54	WNW	5	c	29.85	+.18	57	55	0	WNW	2	c	*	60	?	—
	Berlin	29.82	62	NW	4	b	29.92	+.25	58	53	-4	WNW	3	bc	*	70	50	0.20
	Wiesbaden ...	*	*	*	*	*	29.86	+.08	58	55	-6	NW	1	0	*	68	48	0.12
	Munich	30.05	55	W	3	p	29.93	-.05	57	55	-9	SE	5	0	*	72	52	0.32
	The Helder ...	29.95	56	NW	1	c	29.87	+.08	55	52	-2	NNW	1	c	2	59	54	—
FRANCE AND BELGIUM.	Brussels (9 a.m.)	*	*	*	*	*	29.84	-.02	54	52	-5	NNE	2	0	*	66	51	0.04
	Cape Gris Nez	?	61	W	3	c	?	?	52	52	-3	N	5	p	5	66	50	0.43
	Paris	29.97	66	N	1	0	29.87	-.06	53	53	-7	N	1	0	*	71	?	0.16
	Brest	30.01	61	N	1	0	29.98	?	56	52	+1	N	3	0	2	63	53	—
	Lorient	30.02	61	WNW	2	b	29.95	-.07	54	51	-2	NNE	2	0	4	63	52	—
	Rochefort ...	30.10	64	W	4	0	29.99	-.08	61	59	-2	WNW	4	0	2	68	54	—
	Belfort																	
	Lyons	29.97	71	NW	1	0	29.88	-.13	64	57	-6	SSE	1	0	*	79	61	—
	Nice	29.92	68	W	2	bc	29.87	-.15	62	61	-7	NE	3	0	0	75	59	—
	Perpignan ...	30.00	76	W	3	0	29.93	-.12	69	62	-1	NNE	2	0	*	78	60	—
	Biarritz	30.10	70	NNW	3	b	29.99	-.16	64	62	-3	NW	4	0	2	?	63	—
PENINSULA.	Corunna	*	*	*	*	*	30.11	-.02	63	61	-5	NNW	4	0	4	75	63	—
	Lisbon	30.11	66	NNW	4	b	30.07	-.08	63	61	0	N	4	0	?	77	63	—

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 July, 1890.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP.

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

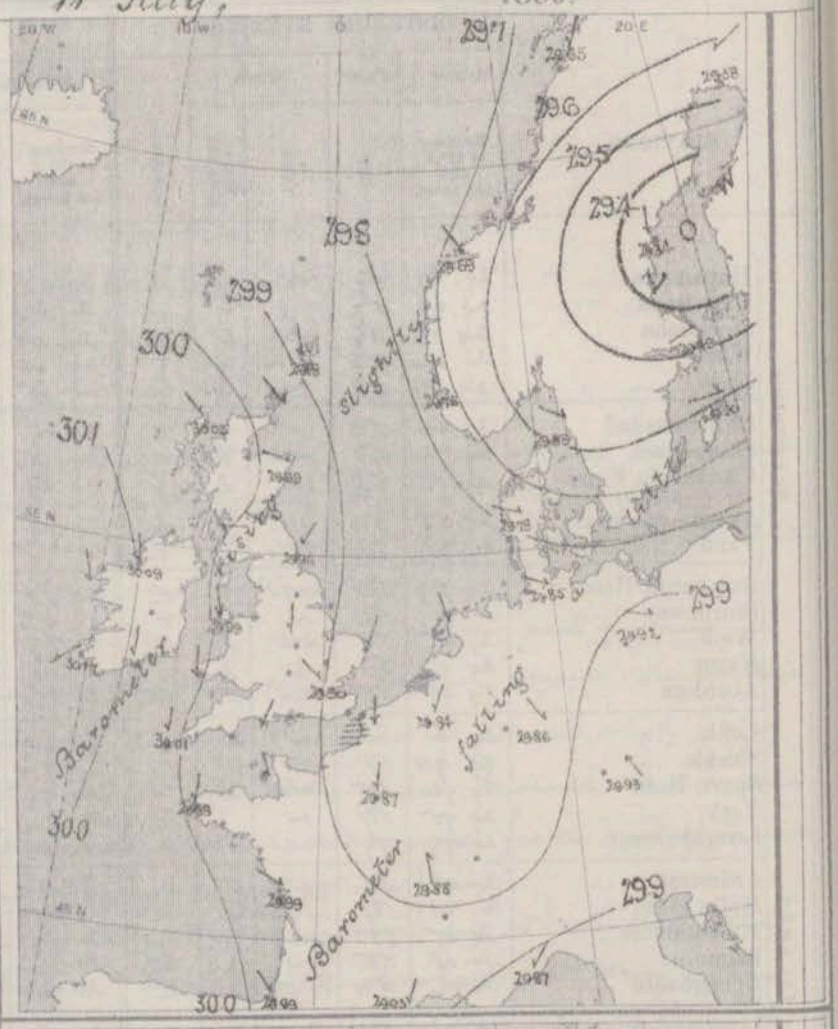
WIND - Arrows shew the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—
= forces above 10; = forces 8 to 10;
= forces 5 to 7; = forces 1 to 4.
= dead calm.

SEA DISTURBANCE—Where considerable, is shewn thus:
= Rough. = High.

MEAN HEIGHT OF THE BAROMETER

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

STATIONS.	MEAN READINGS. ins.
Sumburgh Head	29·794
Stornoway	29·787
Wick	29·810
Nairn	29·821
Aberdeen	29·831
Leith	29·850
Shields	29·876
York	29·910
Loughborough	29·936
Ardrossan	29·862
Donaghadee	29·881
Holyhead	29·918
Liverpool	29·913
Parsonstown	29·921
Valencia	29·939
Roche's Point	29·938
Pembroke	29·912
Scilly	29·984
Jersey	30·009
Hurst Castle	29·974
Dover	29·970
LONDON	29·967
Oxford	29·953
Cambridge	29·947
Yarmouth	29·943



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.

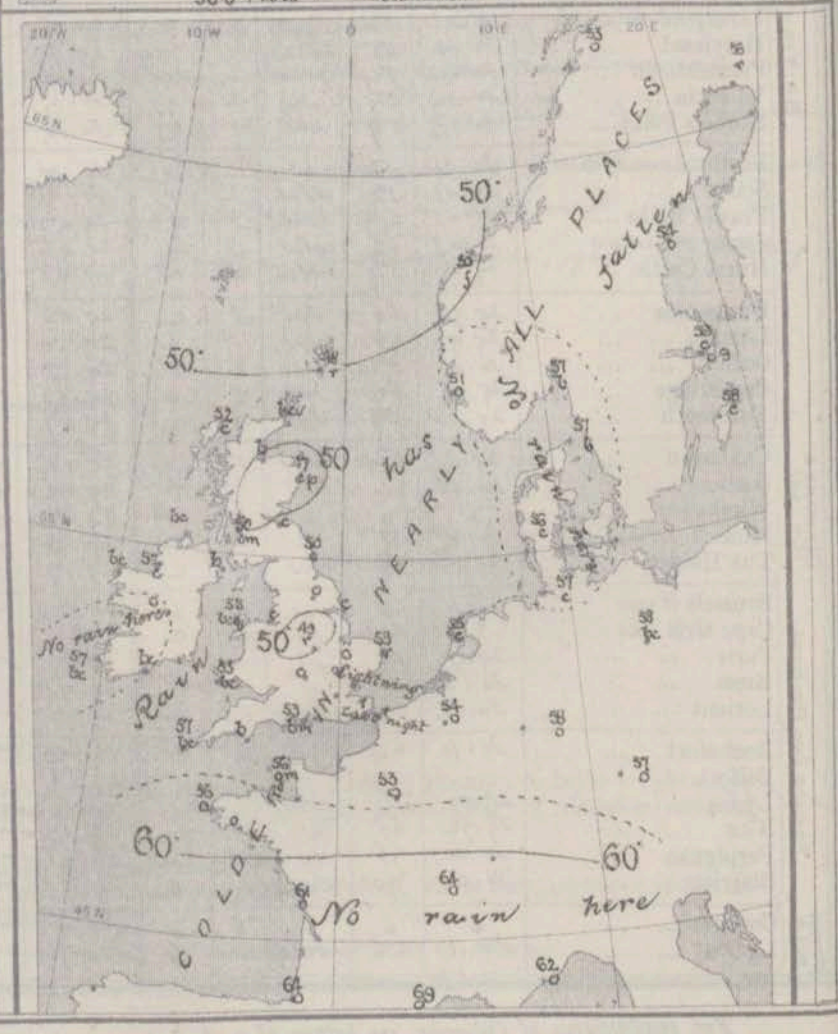
RAINFALL—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0·5 in. or more are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of July.)

STATIONS.	TEMPERATURE. Daily Max.	Daily Min.	at 8 a.m. Dry.	Wet.	RAINFALL (Inches.)
Sumburgh Head	57·6	48·3	53·6	52·0	2·09
Stornoway	60·2	49·5	56·0	54·0	3·02
Wick	62·2	49·2	56·1	53·8	2·25
Nairn	64·7	51·4	57·2	53·6	2·57
Aberdeen	64·4	51·1	58·0	54·4	2·74
Leith	67·1	51·7	58·6	55·3	2·84
Shields	64·4	52·9	58·6	55·4	2·63
York	68·5	52·1	59·4	56·2	2·57
Loughborough	72·1	53·0	62·0	58·2	2·34
Ardrossan	63·9	53·2	57·5	54·8	2·91
Donaghadee	63·1	51·6	57·4	55·6	2·67
Holyhead	63·9	54·7	58·2	55·9	2·32
Liverpool	66·1	54·4	59·6	55·9	2·99
Parsonstown	66·4	51·9	58·3	54·8	3·01
Valencia	64·1	53·6	58·7	56·3	3·91
Roche's Point	66·7	53·3	58·7	55·8	3·16
Pembroke	62·9	55·0	58·1	55·9	2·31
Scilly	64·5	56·3	60·1	58·0	2·29
Jersey	68·8	56·3	62·2	59·2	2·21
Hurst Castle	67·9	55·7	61·3	58·8	2·15
Dover	67·2	56·9	62·6	58·8	1·82
LONDON	73·0	54·1	62·3	58·1	2·17
Oxford	69·9	53·7	60·2	56·8	2·51
Cambridge	72·3	52·4	61·4	57·9	2·30
Yarmouth	66·8	55·2	61·2	58·1	2·68

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 in the west and south of Ireland. Lowest 29·4 ins. and less in a depression lying over the southern part of the Gulf of Bothnia. Gradients slight. Barometer falling a little in France and the southern parts of England, and somewhat more decidedly in Sweden, but rising elsewhere.
TEMPERATURE	Highest 69° at Perpignan, 64° at Biarritz and Lyons, 63° at Lisbon, 61° at Nice, and 61° at Rochefort. Lowest 47° at Aberdeen, 48° at Lumburgh Head, 49° at Loughborough and 50° at Christiansund, Nairn, Shields, Aldrossan & Parsonstown. The readings are below 55° in nearly all parts of the United Kingdom.
WIND	Light or moderate from the N.ward over the greater parts of the United Kingdom, France, the Netherlands & the North Sea. Light from NE in the north of Scandinavia; moderate from the W.ward in Denmark and the south of Sweden.
WEATHER	Fine in nearly all the more western, south western and northern parts of the United Kingdom, but dull over our Midland, eastern, and southeastern counties, as well as at most of the continental stations. Rain was falling in some parts of England and also in the Shetlands. Since yesterday morning rain has fallen in most parts of our Islands. Solar halos were seen yesterday in the south of England, and lightning occurred at Dungeness at night.
SEA	Moderate to smooth generally, but rather rough at Cape Gris Nez.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The high-pressure system recently noticed to the southward of our Islands has disappeared, but a new one is beginning to show itself off the west of Ireland, and is inclined to spread eastwards. The indications are therefore somewhat more favourable than of late.

FORECASTS

For the 24 hours ending at NOON on 12TH JULY 1890.

DISTRICTS.	FORECASTS.	DISTRICTS.	FORECASTS.
0 SCOTLAND NORTH 1 SCOTLAND EAST	NW.ly winds, light; fair generally, but local showers.	6 SCOTLAND WEST 7 ENGLAND N.W.	Same as No. 0. and 1.
2 ENGLAND N.E. 3 ENGLAND EAST 4 MIDLAND COUNTIES	Same as No. 5.	8 ENGLAND S.W. 9 IRELAND NORTH 10 IRELAND SOUTH	N.ly winds, light or moderate; fair generally.
5 ENGLAND SOUTH	N.ly winds, light; weather improving, but cloudy at first, with 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: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Skudesnaes ...	29.63	57	53	NNW	1	c	3
Sumburgh Head	29.83	52	49	N	3	c	3
Stornoway	29.97	52	51	N	2	o	3
Aberdeen	29.93	53	48	NW	3	c	3
Shields	29.94	53	50	E	2	o	3
Ardrossan	29.95	58	50	W	3	o	2
Malin Head ...	30.01	55	51	NNW	2	o	2
Mullaghmore ...	30.05	55	51	WNW	2	o	2
Belmullet	30.07	55	50	NNW	1	o	*

	BAR:	THER: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Holyhead	30.03	58	53	NW	1	o g	1
Valencia	30.07	59	53	NNW	2	c	2
Scilly	30.06	61	58	W	1	c	2
Jersey	30.06	64	56	NNW	3	fr	3
Dungeness	29.99	64	59	WSW	3	fr	1
London	29.99	65	56	WNW	2	c	*
Yarmouth	29.96	60	55	NNE	3	bc	3
Rochefort	30.13	66	64	W	4	o	?

GENERAL REMARKS ON THE WEATHER OVER EUROPE

DURING THE PAST 24 HOURS.

Weather in morning fine over northern and central Russia and many of the Mediterranean stations, and finer than of late over the British Islands, but very unsettled elsewhere – overcast in most places, dull and rainy in very many localities. Rain in most parts of northwestern Europe later, but not affecting the southeast of England till night. Amount recorded at Stockholm 0·8 ins.

Temperature in morning again above 70° over the extreme southern and southeastern countries, and in southern and central Russia, as high as 80° at Barcelona, and 78° at La Galle, much lower elsewhere. Below 60° over British Islands and Scandinavia, and as low as 49° at Stornoway and Aberdeen, 50° at Sumburgh Head and Wick, and 51° at Christiansund. Daily maxima 60° to 67° over England, 66° at Leith, rather higher over Germany, below 80° at most French stations, but touching 88° at Perpignan.

Wind Light NW. over the British Islands, W. to NW. over the Netherlands and north of France, S. over Germany, the Baltic and Sweden. Very variable elsewhere, but chiefly NE. over Spain. Very light in force as a whole. Slight cyclonic circulation observed near Scilly later.

Barometer highest 30·0 ins. to 30·1 ins. and more over the Mediterranean, southwestern Europe, the northwest of France and southwest of the British Islands, and exceeding 29·8 ins. over northern Russia; lowest 29·5 ins. and less in a complex depression over Scandinavia, 29·7 ins. and less over southern Russia and the Caucasus. Gradients moderate over the North Sea. Slight elsewhere. Rising in north later, but local disturbances appearing over the southwest and southeast of England.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

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

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

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

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DAILY WEATHER REPORT.

for Saturday 12th July. 1890.

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

	STATIONS.	YESTERDAY EVENING. Barom: Reading at 32° F. and Sea Level.	Temp. Dry.	Wind. Direc.	Wind. Force (0 to 12.)	Weather.	8 A.M. TO DAY. Barometer. Reading at 32° F. and Sea Level.	Barometer. Difference from 8 a.m. yesterday.	Shade Temp. Dry.	Shade Temp. Wet.	Shade Temp. Difference from 8 a.m. yesterday.	Wind. Direc.	Wind. Force (0 to 12.)	Weather.	Sea. (0 to 9.)	PAST 24 HOURS. Shade Temp. Max.	Shade Temp. Min.	Amount of Rainfall.
SCANDINAVIA.	Haparanda ...	29.43	55	SW	4	o	29.47	-.11	55	53	-1	SW	6	bc	•	68	50	0.20
	Hernösand ...	29.52	55	W	2	b	29.55	+.25	54	49	0	?	1	b	•	63	50	0.20
	Stockholm ...	29.60	58	SSE	2	b	29.71	+.22	60	55	+1	WSW	2	c	•	68	54	0.04
	Wisby	29.74	56	SSW	4	b	29.74	+.14	59	55	+1	SW	4	o	•	66	54	—
	Bodö	29.38	50	N	6	r	29.41	-.24	46	45	-7	W	6	r		?	45	0.32
	Christiansund	29.68	51	NW	4	r	29.65	-.04	51	48	+1	NE	2	f	3	54	46	0.04
	Skudesnaes ...	29.71	51	NW	5	c	29.66	-.09	51	47	0	NW	2	c	2	•	46	—
	Christiania Fjord (Færder)	29.55	55	SSE	3	bc	29.48	-.05	58	54	+1	NE	3	bc	2	63	55	—
	Skagen (The Scaw)	29.56	54	SW	2	o	29.60	+.01	56	49	-1	W	6	bc	5	61	50	—
	Fanö	29.78	52	WNW	3	c	29.78	0.0	56	50	0	WNW	4	c	*	59	48	—
	Sumburgh Head	29.82	50	NW	3	b	29.72	-.16	50	47	+2	NNW	1	b	3	53	44	0.02
	Stornoway ...	29.95	56	NW	3	bc	29.75	-.27	54	53	+2	W	3	c	3	56	45	—
	Wick	29.51	55	NW	2	bc	29.75	-.22	55	51	+1	NW	2	bc	1	59	40	—
	Nairn	29.52	56	?	0	c	29.78	-.22	52	49	+2	WSW	1	b	1	62	43	0.12
	Aberdeen ...	29.95	51	S	2	c	29.80	-.19	53	48	+6	E	1	c	1	59	47	0.01
BRITISH ISLANDS.	Leith	29.95	56	E	2	c	29.81	-.18	53	48	+1	W	1	m	•	62	44	—
	Shields	29.56	54	NNE	2	b	29.85	-.11	51	48	+1	W	3	c	2	56	45	—
	Spurn Head ...	29.95	54	NNE	4	b	29.90	-.01	54	51	-1	WSW	2	bc	3	59	48	—
	York	29.97	57	ENE	1	bc	29.90	-.06	54	50	+1	W	2	bc	•	60	46	0.03
	Loughborough	29.98	51	WSW	1	o	29.96	+.01	53	50	+4	W	2	cw	•	58	43	0.10
	Ardrossan ...	29.96	55	W	4	c	29.83	-.17	52	49	+2	SW	3	o	2	61	49	—
	Malin Head ...	30.02	55	NNW	3	c	29.76	-.25	48	48	-5	SSE	3	o r	1	56	48	0.07
	Mullaghmore ...	30.07	55	NNW	3	c	29.76	-.33	52	50	0	SSE	4	o r q	2	59	50	0.22
	Belmullet ...	30.09	55	WSW	2	o	29.74	-.38	56	56	+1	WSW	2	o r	•	58	53	0.25
	Donaghadee ...	30.01	58	NNE	5	b	29.85	-.17	52	51	-2	WSW	1	r	0	61	50	0.01
	Liverpool (Bidston)	29.99	58	NW	2	c	29.91	-.05	54	50	+2	WSW	3	o	3	58	48	0.03
	Holyhead ...	30.02	54	NNW	4	b	29.90	-.09	54	50	-1	SW	3	o q	2	56	48	0.01
	Parsonstown ...	30.05	53	?	0	o	29.86	-.23	49	49	-1	?	0	r	•	63	48	0.13
	Valencia	30.15	58	NW	2	cr	29.84	-.33	58	57	+1	SW	2	r	2	60	51	0.73
	Roche's Point ...	30.08	60	NNW	4	bc	29.89	-.21	55	55	+2	SW	4	r	4	61	50	0.20
	Pembroke (St. Ann's Hd.)	30.05	55	N	3	b	29.98	-.02	54	52	+1	W	3	o q f	3	57	51	—
	Scilly	30.10	57	NW	4	b	30.03	+.02	57	55	0	WSW	3	o	2	55	51	—
	Prawle Point ...	30.00	56	NNW	3	b	30.03	+.06	53	50	-6	W	2	o f	1	63	47	0.01
	Jersey (St. Aubin's)	29.95	58	WNW	3	b m	30.06	+.10	57	53	+1	W	3	c m	3	61	51	—
	Hurst Castle ...	29.96	57	NNE	3	c f	30.01	+.08	56	55	+3	WSW	2	m	1	64	48	0.02
	Dungeness ...	29.88	55	NNE	4	c f	29.98	+.12	56	51	+4	N	1	bc	1	60	40	0.01
	London	29.94	57	NNE	3	c	29.98	+.08	54	51	0	S	2	b	•	58	43	0.05
	Oxford	30.00	52	NNE	3	o	29.98	+.05	52	50	+1	W	1	c	•	59	45	—
	Cambridge ...	29.96	55	N	1	c	29.95	+.05	55	53	+3	SW	1	o	•	60	42	0.10
	Yarmouth ...	29.91	55	N	3	c	29.94	+.07	55	50	+2	NW	2	bc	3	55	42	0.25
GERMANY & HOLLAND.	Cuxhaven ...	29.82	53	N	3	c	29.84	-.01	56	54	-1	N	3	c	•	59	?	—
	Berlin	29.79	59	NNW	3	r	29.76	-.16	53	53	-5	NW	3	r	•	66	52	.24
	Wiesbaden ...	*	*	*	*	*	29.86	0.0	55	52	-3	N	2	c	•	63	54	0.28
	Munich	29.83	56	SW	3	o	29.86	-.07	54	53	-3	NW	2	r	•	70	52	0.95
	The Helder ...	29.86	54	N	2	c	29.91	+.04	54	50	-1	N	1	c	2	57	52	—
FRANCE AND BELGIUM.	Brussels (9 a.m.)	*	*	*	*	*	29.95	+.11	53	51	-1	N	1	r	•	57	49	0.20
	Cape Gris Nez		53	N	6	o			54	50	+2	N	4	b	3	59	50	0.04
	Paris	29.85	55	NE	2	o	30.01	+.14	52	50	-1	NW	2	o	•	65	46	0.08
	Brest	30.08	59	N	3	c	30.07	+.05	55	55	+1	N	3	o	2	63	50	—
	Lorient	30.01	59	NNW	4	c	30.12	+.17	52	50	-2	NW	2	c	3	63	50	—
	Rochefort ...	30.01	62	N	5	o	30.14	+.15	56	54	-5	N	4	b	2	68	48	—
	Belfort	29.80	60	NW	1	o	29.88		59	51		W	1	o	•	67	50	0.67
	Lyons	29.85	57	E	1	r	29.95	+.07	53	51	-11	NNW	1	o	•	72	52	0.47
	Nice	29.71	65	ENE	2	bc	29.71	-.16	61	59	-1	NE	3	r	1	77	59	0.04
	Perpignan ...	29.88	63	WSW	2	r	29.94	+.01	60	53	-5	W	3	o	•	77	55	0.67
	Biarritz	30.01	63	NNW	5	o	30.09	+.10	57	54	-7	SSW	3	r	3	68	55	0.08
PENINSULA.	Corunna	*	*	*	*	*												
	Lisbon	29.97	63	N	6	b	30.03	-.04	62	53	-1	N	5	b	5	70	57	—

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 July, 1890.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP.

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

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

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

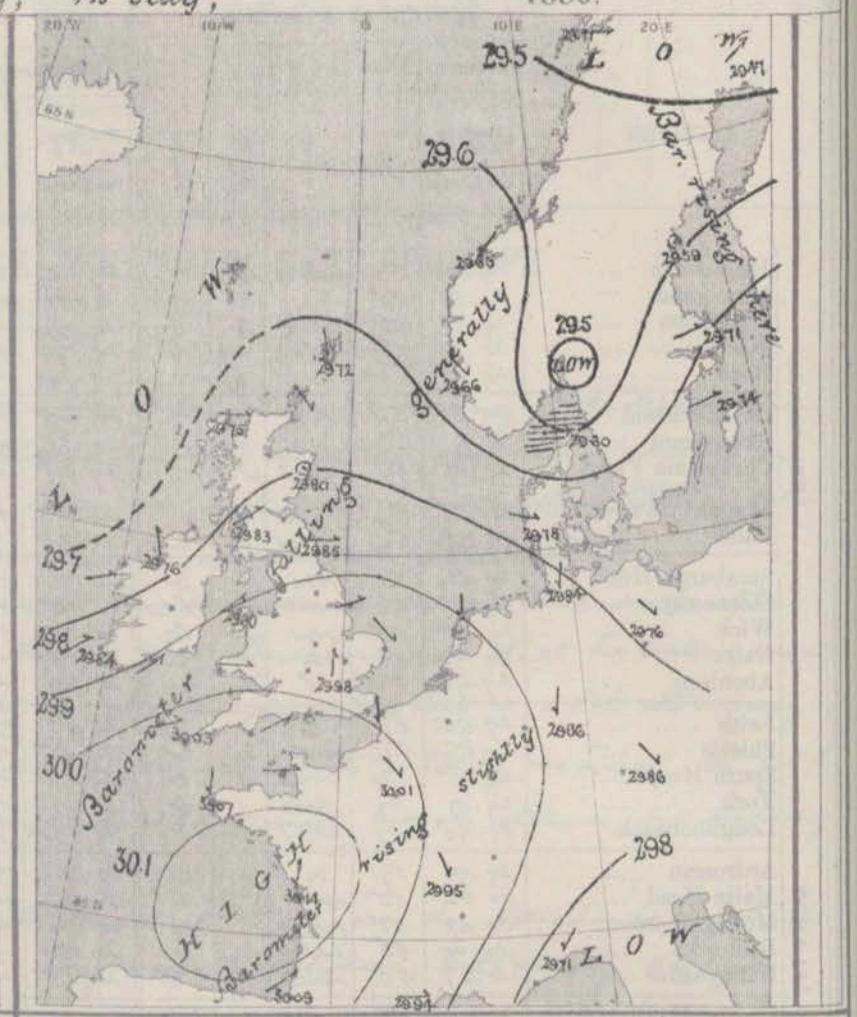
SEA DISTURBANCE—Where considerable, is shewn thus:

= Rough. = High.

MEAN HEIGHT OF THE BAROMETER

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

STATIONS.	MEAN READINGS.
	ins.
Sumburgh Head	29 · 794
Stornoway	29 · 797
Wick	29 · 810
Nairn	29 · 821
Aberdeen	29 · 831
Leith	29 · 850
Shields	29 · 876
York	29 · 910
Loughborough	29 · 936
Ardrossan	29 · 862
Donaghadee	29 · 881
Holyhead	29 · 918
Liverpool	29 · 913
Parsonstown	29 · 921
Valencia	29 · 939
Roche's Point	29 · 938
Pembroke	29 · 942
Scilly	29 · 984
Jersey	30 · 009
Hurst Castle	29 · 974
Dover	29 · 970
LONDON	29 · 967
Oxford	29 · 953
Cambridge	29 · 947
Yarmouth	29 · 943



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.

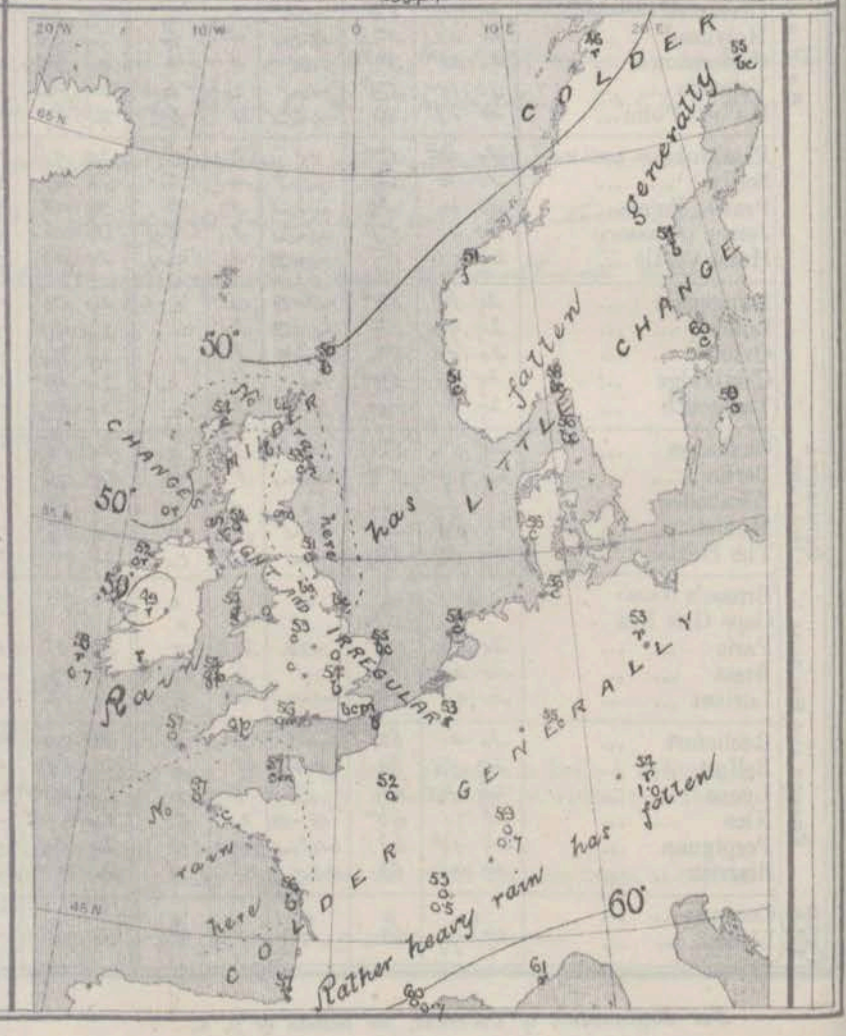
RAINFALL—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0·5 in. or more are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of July.)

STATIONS.	TEMPERATURE. Daily Max.	Daily Min.	at 8 a.m. Dry.	Wet.	RAINFALL. (Inches.)
Sumburgh Head	57 · 8	48 · 3	53 · 6	52 · 0	2 · 09
Stornoway	60 · 2	49 · 5	56 · 0	54 · 0	3 · 02
Wick	62 · 2	49 · 2	56 · 1	53 · 8	2 · 25
Nairn	64 · 7	51 · 4	57 · 2	53 · 6	2 · 57
Aberdeen	64 · 4	51 · 1	58 · 0	54 · 4	2 · 74
Leith	67 · 1	51 · 7	58 · 6	55 · 3	2 · 84
Shields	64 · 4	52 · 9	58 · 6	55 · 4	2 · 63
York	68 · 5	52 · 1	59 · 4	56 · 2	2 · 57
Loughborough	72 · 1	53 · 0	62 · 0	58 · 2	2 · 34
Ardrossan	63 · 9	53 · 2	57 · 5	54 · 8	2 · 91
Donaghadee	63 · 1	51 · 6	57 · 4	55 · 6	2 · 67
Holyhead	63 · 9	54 · 7	58 · 2	55 · 9	2 · 32
Liverpool	66 · 1	54 · 4	59 · 6	55 · 9	2 · 99
Parsonstown	66 · 4	51 · 9	58 · 3	54 · 8	3 · 01
Valencia	64 · 1	53 · 6	58 · 7	56 · 3	3 · 91
Roche's Point	66 · 7	53 · 3	58 · 7	55 · 8	3 · 16
Pembroke	62 · 9	55 · 0	58 · 1	55 · 9	2 · 31
Scilly	64 · 5	56 · 3	60 · 1	58 · 0	2 · 29
Jersey	68 · 8	56 · 3	62 · 2	59 · 2	2 · 21
Hurst Castle	67 · 9	55 · 7	61 · 3	58 · 8	2 · 15
Dover	67 · 2	56 · 9	62 · 6	58 · 8	1 · 82
LONDON	73 · 0	54 · 1	62 · 3	58 · 1	2 · 17
Oxford	69 · 9	53 · 7	60 · 2	56 · 8	2 · 51
Cambridge	72 · 3	52 · 4	61 · 4	57 · 9	2 · 30
Yarmouth	66 · 8	55 · 2	61 · 2	58 · 1	2 · 68

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 in an anticyclone lying over the Bay of Biscay and the west of France. Lowest 29·5 ins. and less in the north of Scandinavia & also in a small depression lying over the Christiania Fiord. Gradients slight. Barometer rising at many of the Continental stations, but falling in most parts of the United Kingdom,—briskly in Ireland.
TEMPERATURE	Highest 62° at Lisbon, 61° at Nice, 60° at Stockholm and Perpignan and 59° at Ushy and Belfort. Lowest 48° at Malin Head, 49° at Parsonstown, 50° at Lambrigg Hand and 51° at Shadsnacs and Shields. At Paris the reading was only 52°, at Berlin and Lyons 53, and in London 54°. The grass minimum in London last night was as low as 33°.
WIND	Light or moderate from the SW^ard or WNW^ard over the greater part of the United Kingdom, but S^ly in the N. of Ireland. Light from the NW^ward in France and Germany, and also in the west of Norway; SW^ly in Sweden.
WEATHER	Fine in the northern and eastern parts of Great Britain, as well as in Scandinavia, Denmark & the W. of France. Dull elsewhere, with rain at all the Irish stations, and also in Germany and the south of France. Solar halos were reported in the south of England. Since yesterday morning rain has fallen in most parts of western and central Europe, the largest amounts being 1·0 inch at Munich, and 0·4 inch at Valencia Island, Belfort and Perpignan.
SEA	Slight or smooth generally, but rather rough at the Scaw and also at Lisbon.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The depression which is approaching our northwest coasts will probably move eastwards, and the rainy weather now prevailing in the west is likely to become general.

FORECASTS

For the 24 hours ending at NOON on 13TH JULY 1890.

DISTRICTS.	FORECASTS.	DISTRICTS.	FORECASTS.
0 SCOTLAND NORTH 1 SCOTLAND EAST	Wind backing to the S^ward or SE^ward; dull, rainy.	6 SCOTLAND WEST	Same as Nos. 0. and 1.
2 ENGLAND N.E. 3 ENGLAND EAST 4 MIDLAND COUNTIES	Same as No. 5.	7 ENGLAND N.W. 8 ENGLAND S.W. 9 IRELAND NORTH 10 IRELAND SOUTH	SW^ly to W^ly winds, freshening; dull and rainy at first, some improvement later.
5 ENGLAND SOUTH	S^ly to SW^ly winds, freshening; fair to dull 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: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Skudesnaes ...	29.74	56	49	NW	6	c	3
Sumburgh Head	29.85	50	49	NW	5	c	5
Stornoway	30.01	53	52	N	0	c	2
Aberdeen	29.97	58	49	NW	2	c	2
Shields	29.97	54	49	NE	3	c	3
Ardrossan	29.99	58	52	W	2	b	1
Malin Head ...	30.04	56	50	NNW	3	b	2
Mullaghmore ...	30.05	58	52	NW	4	bcu	2
Belmullet	30.13	57	50	WNW	2	0	*

	BAR:	THER: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Holyhead	30.01	54	49	N	5	c g	4
Valencia	30.18	60	55	NW	3	bcv	3
Scilly	30.06	56	52	N	4	bc	2
Jersey	29.97	61	54	NW	3	b	3
Dungeness	29.85	56	51	NNE	4	c	2
London	29.92	55	52	N	3	0	*
Yarmouth	29.88	54	52	NNE	4	c	4
Rochefort	29.99	65	61	WNW	4	bc	

GENERAL REMARKS ON THE WEATHER OVER EUROPE

DURING THE PAST 24 HOURS.

Weather in morning fine and bright over the greater part of Spain, the southern and eastern shores of the Mediterranean, Austria and the Balkan Peninsula, fair in the west of our Islands; dull and very unsettled elsewhere, with rain in several places. Rain falling subsequently over nearly the whole of the British Islands, France and Germany, – heavily at Valencia Island, Munich, and over the southern part of France.

Temperature fallen fast in the south of Russia, and less quickly over our Islands, varying between 70° and 78° over those southern and southeastern districts mentioned above in which the weather was fine and bright, much lower elsewhere. Below 60° all over northwestern Europe, and as low as 47° at Aberdeen, 48° at Sumburgh Head, 49° at Loughborough and 50° at many other of our northern and northeastern stations. Daily maxima below 65° over our Islands, below 70° over the northern parts of Germany and France, and below 80° even in the south of France.

Wind Light from the N^and. over the United Kingdom and the Channel; N^ly. to NW^ly. over the Bay of Biscay and Spain, NW^ly. in Norway, W^ly. over Austria, north Germany and the Baltic Provinces – S^ly. to SE^ly. over Finland. Very variable elsewhere. Backing towards W. and SW. on our northern and northwestern coasts later.

Barometer highest 29.9 ins. to 30.1 ins. and more over the United Kingdom, Spain and adjacent parts of the Atlantic, and exceeding 29.8 ins. over northern and northeastern Russia; lower between those regions. Lowest 29.4 ins. and less in a depression over the Gulf of Bothnia, and below 29.9 ins. over the east of France, Sardinia, Corsica, and Dalmatia. Beginning to fall in the north and west of our Islands later, but to rise slightly in the south and east.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

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

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

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

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DAILY WEATHER REPORT.

for Sunday 13th JULY 1890.

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

	STATIONS.	YESTERDAY EVENING. Barom.: Reading at 32° F. and Sea Level.	Temp. Dry.	Wind. Direc.	Wind. Force (0 to 12.)	Weather.	8 A.M. TO DAY. Barometer. Reading at 32° F. and Sea Level.	Barometer. Difference from 8 a.m. yesterday.	Shade Temp. Dry.	Shade Temp. Wet.	Shade Temp. Difference from 8 a.m. yesterday.	Wind. Direc.	Wind. Force (0 to 12.)	Weather.	Sea. (0 to 9.)	PAST 24 HOURS. Shade Temp. Max.	Shade Temp. Min.	Amount of Rainfall.
SCANDINAVIA.	Haparanda ...	29.58	56	SW	2	bc	29.61	+ .14	56	55	+ 1	SW	4	o	*	61	50	0.24
	Hernösand ...	29.61	53	L	0	bc	29.63	+ .04	54	49	0	S	4	b	*	59	45	—
	Stockholm ...	29.70	56	S	2	o	29.75	+ .04	58	50	— 2	WSW	4	b	*	64	50	—
	Wisby	29.44	55	S	2	c	29.48	+ .04	55	50	— 4	W	4	b	*	64	52	0.08
	Bodö	29.62	45	W	2	o	29.63	+ .22	49	45	+ 3	NW	2	c	1	?	41	0.05
	Christiansund	29.61	52	NNE	4	o	29.65	.20	52	48	+ 1	NNE	3	c	3	63	48	—
	Skudesnaes ...	29.71	52	WNW	2	c	29.78	+ .07	52	49	+ 1	SSE	4	b	3	59	46	—
	Christiania Fjord (Færder)																	
	Skagen (The Skaw)	29.68	52	W	4	bc	29.99	+ .19	55	51	— 1	WSW	5	bc	4	59	50	—
	Fanö	29.85	53	WSW	3	c	29.85	+ .07	59	54	+ 3	SW	5	c	*	59	52	—
BRITISH ISLANDS.	Sumburgh Head	29.68	50	L	0	c	29.58	— .14	52	49	+ 2	SE	3	o	3	53	47	—
	Stornoway ...	29.44	55	E	3	c	29.33	— .42	52	52	— 2	SE	5	r	4	57	49	0.52
	Wick	29.68	53	SE	1	bc	29.40	— .35	51	51	— 4	SE	2	rw	1	56	46	0.34
	Nairn	29.63	58	E	2	c	29.46	— .32	52	52	0	L	0	r	1	62	48	0.34
	Aberdeen ...	29.71	52	ESE	2	c	29.50	— .24	52	51	— 1	S	2	r	2	58	50	0.19
	Leith	29.70	55	W	1	o	29.53	— .28	56	54	+ 3	S	1	r	*	61	51	0.17
	Shields	29.74	57	SW	2	o	29.63	— .22	56	55	+ 5	SSW	2	d	2	59	49	0.05
	Spurn Head ..	29.81	56	SSW	3	o	29.45	— .15	59	56	+ 3	SW	3	o	3	60	53	0.02
	York	29.81	54	S	1	r	29.77	— .18	59	57	+ 5	S	2	c	*	60	52	0.05
	Loughborough	29.85	53	WSW	3	r	29.77	— .17	60	57	+ 7	WSW	3	o	*	60	52	0.03
	Ardrossan ...	29.67	52	S	2	r	29.53	— .30	55	54	+ 3	SSW	4	dm	4	61	49	0.41
	Malin Head ...	29.63	56	WSW	3	o	29.44	— .32	59	58	+ 11	SW	5	op	3	59	48	0.25
	Mullaghmore ...	29.71	57	W	5	o	29.53	— .23	59	58	+ 7	SW	5	od	4	59	51	0.27
	Belmullet ...	29.75	57	W	2	o	29.52	— .22	58	58	+ 2	WSW	5	ow	*	58	55	0.06
	Donaghadee ...	29.67	60	WSW	1	c	29.59	— .26	61	60	+ 9	WSW	4	c	2	61	50	0.14
	Liverpool (Bidston)	29.78	54	SSE	2	o	29.73	— .18	61	57	+ 7	SW	3	o	3	61	52	0.13
	Holyhead ...	29.74	54	SW	5	r	29.71	— .19	58	56	+ 4	SSW	5	emq	5	58	51	0.22
	Parsonstown ...	29.76	61	WSW	1	c	29.68	— .18	60	59	+ 11	SW	2	o	*	62	48	0.05
	Valencia	29.85	60	W	2	o	29.72	— .12	58	57	0	SSW	5	om	5	60	55	0.03
	Roche's Point ...	29.80	62	NW	3	c	29.78	— .11	58	57	+ 3	SW	4	rm	4	63	54	0.10
	Pembroke (St. Ann's Hd.)	29.79	56	SSW	4	f	29.81	— .17	56	56	+ 2	SSW	4	fd	3	57	52	0.05
	Scilly	29.86	58	WSW	3	m	29.88	— .15	58	58	+ 1	WSW	4	f	2	59	53	0.09
	Prawle Point ...	29.91	52	S	4	f	29.90	— .13	55	55	+ 2	W	4	f	3	56	51	0.11
	Jersey (St. Aubin's)	30.01	57	W	4	o	29.97	— .09	58	57	+ 1	W	3	ofd	3	61	54	0.07
	Hurst Castle ...	29.93	58	WSW	5	c	29.89	— .12	59	57	+ 3	SW	5	c	3	61	54	—
	Dungeness ...	29.89	58	SW	4	o	29.89	— .09	57	56	+ 1	SW	5	d	4	60	55	—
	London	29.90	58	WSW	2	c	29.86	— .12	59	57	+ 5	WSW	2	o2p	*	62	55	—
	Oxford	29.87	55	SW	3	o	29.84	— .14	61	58	+ 9	SW	3	c	*	62	52	0.01
	Cambridge ...	29.87	58	SW	1	o	29.83	— .12	60	57	+ 5	SW	1	o	*	63	51	0.02
	Yarmouth ...	29.85	59	SSW	1	c	29.83	— .11	57	55	+ 2	SW	4	c	3	60	52	0.02
GERMANY & HOLLAND.	Cuxhaven ...	29.89	53	NNW	3	b	29.93	+ .09	53	52	— 3	SSW	2	o	*	57	51	—
	Berlin	29.91	58	S	2	c	30.00	+ .24	59	54	+ 6	WSW	2	c	*	61	52	0.04
	Wiesbaden ...	*	*	*	*	*	30.05	+ .19	56	53	+ 1	SE	1	b	*	63	50	—
	Munich	29.97	48	NW	2	r	30.06	+ .20	47	46	— 7	SW	4	o	*	54	45	1.83
	The Helder ...	29.91	56	WSW	1	c	29.88	— .03	58	54	+ 4	SW	3	o	3	61	54	—
FRANCE AND BELGIUM.	Brussels (9 a.m.)	*	*	*	*	*	29.98	+ .03	59	53	+ 6	SSW	2	b	*	64	45	0.04
	Cape Gris Nez	?	57	WSW	4	c	?	?	59	55	+ 5	WSW	4	o	4	61	50	—
	Paris	30.01	61	WNW	1	o	30.04	+ .03	56	53	+ 4	SW	2	o	*	64	49	0.04
	Brest	29.97	57	WSW	5	r	29.98	— .09	63	57	+ 6	N	1	o		?	50	0.04
	Lorient	30.05	56	WSW	4	r	29.94	— .13	58	55	+ 6	W	3	f	3	59	52	0.01
	Rochefort ...	30.15	63	NW	4	c	30.12	— .02	61	61	+ 5	W	5	r	2	64	54	—
	Belfort	29.93	61	S	1	o	30.09	+ .21	62	50	+ 3	S	1	bc	*	69	51	0.16
	Lyons	29.97	55	N	2	c	30.07	+ .12	55	42	+ 2	NNW	3	b	*	64	49	0.08
	Nice	29.60	60	SE	2	c	29.73	+ .02	56	52	— 5	ENE	5	bc	1	68	55	0.20
	Perpignan ...	29.99	67	NW	5	bc	30.09	+ .15	62	53	+ 2	NW	4	b	*	69	55	—
	Biarritz	30.16	62	NNW	4	c	30.15	+ .06	61	55	+ 4	S	3	c	2	77	55	—
PENINSULA.	Corunna	*	*	*	*	*	30.12	— .07	66	60	— 1	NE	1	b	1	70	52	—
	Lisbon	29.98	71	N	5	b	30.01	— .02	70	64	+ 8	NNE	4	b	2	87	68	—

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, 13th July, 1890.

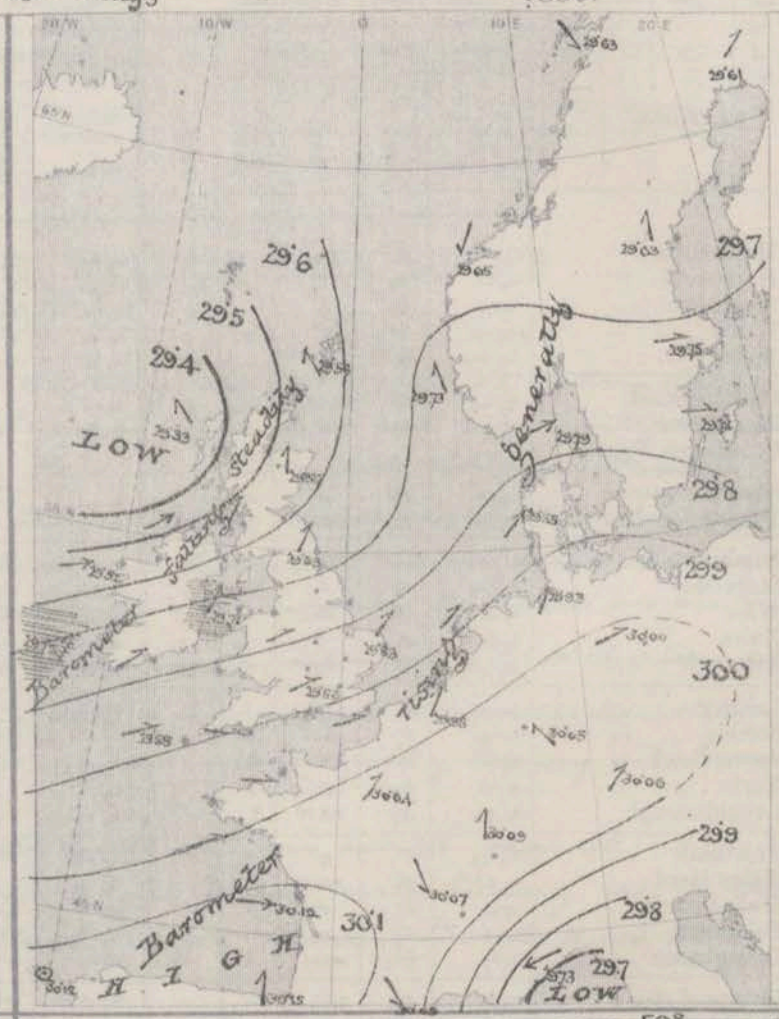
BAROMETER, WIND AND SEA.

EXPLANATION OF MAP.

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

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

SEA DISTURBANCE—Where considerable, is shewn thus:
= Rough. = High.



MEAN HEIGHT OF THE BAROMETER

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

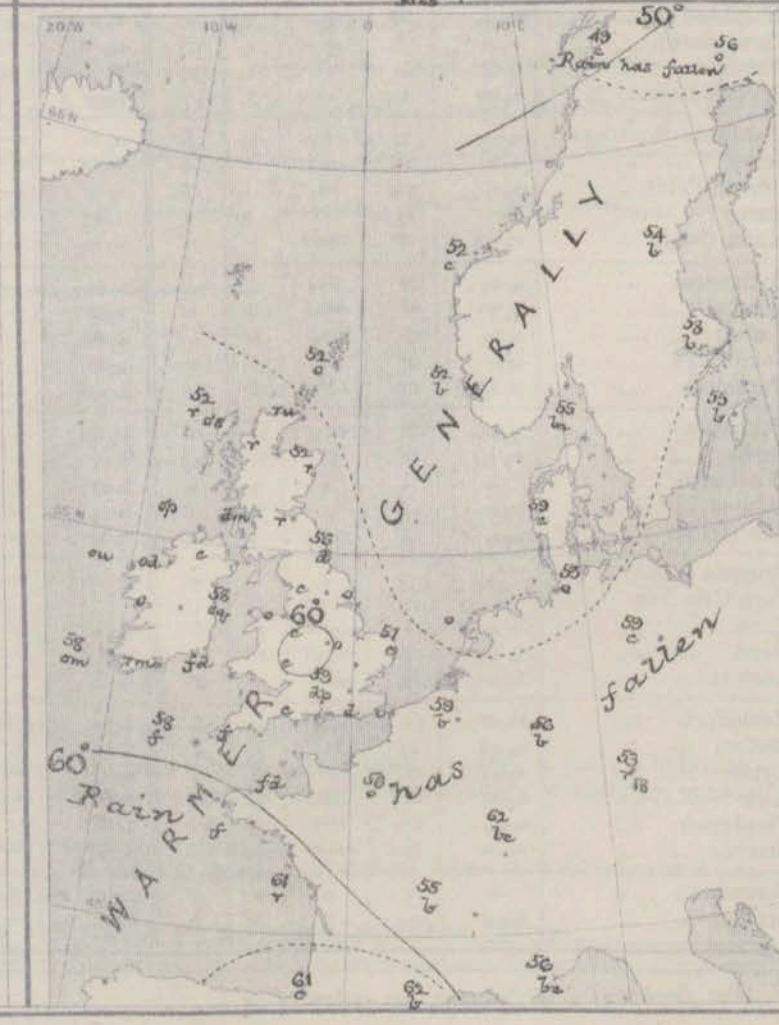
STATIONS.	MEAN READINGS.
	ins.
Sumburgh Head	29·794
Stornoway	29·797
Wick	29·810
Nairn	29·821
Aberdeen	29·831
Leith	29·850
Shields	29·876
York	29·910
Loughborough	29·936
Ardrossan	29·862
Donaghadee	29·881
Holyhead	29·918
Liverpool	29·913
Parsonstown	29·921
Valencia	29·959
Roche's Point	29·938
Pembroke	29·942
Scilly	29·984
Jersey	30·002
Hurst Castle	29·974
Dover	29·970
LONDON	29·967
Oxford	29·953
Cambridge	29·947
Yarmouth	29·943

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 July.)

STATIONS.	TEMPERATURE. Daily Max.	Daily Min.	at 8 a.m. Dry.	Wet.	RAINFALL (Inches.)
Sumburgh Head	57·8	48·3	53·6	52·0	2·09
Stornoway	60·2	49·5	56·0	54·0	3·02
Wick	62·2	49·2	56·1	53·8	2·25
Nairn	64·7	51·4	57·2	53·6	2·57
Aberdeen	61·4	51·1	58·0	54·4	2·74
Leith	67·1	51·7	58·6	55·3	2·84
Shields	64·4	52·9	58·6	55·4	2·63
York	68·5	52·1	59·4	56·2	2·57
Loughborough	72·1	53·0	62·0	58·2	2·34
Ardrossan	63·9	53·2	57·5	54·8	2·91
Donaghadee	63·1	51·6	57·4	55·6	2·67
Holyhead	63·9	54·7	58·2	55·9	2·32
Liverpool	66·1	54·4	59·6	55·9	2·99
Parsonstown	66·4	51·9	58·3	54·8	3·01
Valencia	64·1	53·6	58·7	56·3	3·91
Roche's Point	66·7	53·3	58·7	55·8	3·16
Pembroke	62·9	55·0	58·1	55·9	2·31
Scilly	64·5	56·3	60·1	58·0	2·29
Jersey	68·8	56·3	62·2	59·2	2·21
Hurst Castle	67·9	55·7	61·3	58·8	2·15
Dover	67·2	56·9	62·6	58·8	1·82
LONDON	73·0	54·1	62·3	58·1	2·17
Oxford	69·9	53·7	60·2	56·8	2·51
Cambridge	72·3	52·4	61·4	57·9	2·30
Yarmouth	66·8	55·2	61·2	58·1	2·68

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 northern parts of the Spanish Peninsula and the southern parts of the Bay of Biscay.
Lowest, 29·4 in: and less, in a depression lying off the west of Scotland; 29·7 in: and less, over the northern parts of Scandinavia.
Gradients moderate in the west and north of our Islands, but slight elsewhere.
Barometer falling over the United Kingdom and the west of France;—briskly on our northwest coasts, but rising elsewhere.

TEMPERATURE

Highest, 70° at Lisbon, 66° at Corunna, 63° at Brest, and 62° at Belfast and Perpignan.
Lowest, 47° at Munich, 48° at Hadi, 51° at Wick, and 52° at Christiansund, Skudesnaes, Lumbugh Head, Stornoway, Nairn, and Aberdeen.
The maxima registered over our Islands yesterday were very little above 60° in any locality.

WIND

SW^ly over Ireland, England, the Netherlands, Germany and Denmark; fresh in force on our western coasts.
SE^ly in Scotland, variable in the west of Norway, S^ly in the north of Sweden.
Chiefly N^ly (NE. to NW) in the south of France, and also at Corunna and Lisbon.

WEATHER

Dull in our Islands and the north of France, with fog over the British and English Channels and rain at all the Scotch stations.
Fine in most other localities. Brilliant colour and zenithal halo with bright prismatic rays seen at Lutterworth yesterday.
Since yesterday morning rain has fallen in most parts of Western and Central Europe, the largest amounts being 1·8 in. at Munich, and 0·5 in. at Stornoway.

SEA

Moderate to smooth generally, but rather rough at Holyhead and Valencia.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

FORECASTS

For the 24 hours ending at NOON on 14TH JULY 1890.

DISTRICTS.	FORECASTS.	DISTRICTS.	FORECASTS.
0 SCOTLAND NORTH	NONE ISSUED	6 SCOTLAND WEST	NONE ISSUED
1 SCOTLAND EAST		7 ENGLAND N.W.	
2 ENGLAND N.E.		8 ENGLAND S.W.	
3 ENGLAND EAST		9 IRELAND NORTH	
4 MIDLAND COUNTIES		10 IRELAND SOUTH	
5 ENGLAND SOUTH		WARNINGS	NONE ISSUED.

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

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

YESTERDAY'S 2 P.M. REPORTS.

	BAR.	THER. D.	THER. W.	WIND D.	WIND F.	WEA	SEA
Skudesnaes ...	29.67	59	51	W	4	c	2
Sumburgh Head	29.71	51	49	NNW	1	c	3
Stornoway	29.69	57	56	S	3	bc	3
Aberdeen	29.74	53	49	SE	2	c	2
Shields	29.77	59	50	NW	3	c	2
Ardrossan	29.74	52	51	SSW	3	r	1
Malin Head ...	29.65	58	57	W	4	o	2
Mullaghmore ...	29.72	58	56	W	5	om	4
Belmullet	29.77	57	55	WNW	2	o	*

	BAR.	THER. D.	THER. W.	WIND D.	WIND F.	WEA.	SEA
Holyhead	29.81	52	51	SSW	5	dm	4
Valencia	29.85	60	55	WNW	3	om	4
Scilly	29.89	57	57	SSW	4	md	2
Jersey	30.04	61	56	W	4	o	3
Dungeness	29.94	60	54	SW	4	bc	3
London	29.91	61	55	W	2	o	*
Yarmouth	29.88	58	54	SSE	3	om	2
Rochefort	30.07	63	55	NW	4	c	2

GENERAL REMARKS ON THE WEATHER OVER EUROPE

DURING THE PAST 24 HOURS.

Weather fine in the northern and eastern parts of Great Britain, as well as in Scandinavia, Denmark, Russia, and the greater part of Southern Europe. Cloudy or overcast elsewhere, with rain in Ireland, the southwest of England, Belgium and the south of France. Solar halos reported in many parts of England. Rain falling during day over nearly the whole of the United Kingdom; thunderstorms occurring in Austria, Italy, and Tunis.

Temperature highest, 81° at Constantinople and Tunis, 80° at Brest, 78° at Sfax, and 77° at Rome, Brindisi, Reggio, and Palermo; above 70° in Russia and as high as 73° even at Archangel. Lowest 48° at Malin Hd., 49° at Parsemouth, and 50° at Sumburgh Hd. and Le Mans; below 55° in nearly all parts of the United Kingdom and France. Daily maxima very little above 60° in any part of Western Europe, but thermometer rising above 80° in Austria, Italy and Algeria.

Wind light or moderate from the SWwd or Wwd over the greater part of our Islands as well as in Sweden and the north of Russia, but light from the Swd in the north of Ireland. Light from NW. in Germany, France, and Algeria, and from N. in Spain and Central Italy; Ewd in Poland and Austria; variable in the south of Russia. Subsequently veering to the Wwd in Ireland; strong cyclonic circulation setting in over Italy, the south of France, and the neighbouring parts of the Mediterranean.

Barometer highest 30.1 in. and upwards, in an anticyclone lying over the Bay of Biscay, the west of France, and the north of Spain, 29.9 in. and upwards, over Southeastern Europe. Lowest, 29.5 in. and less, over the north of Scandinavia; 29.7 in. and less, in a depression lying off the northwest of our Islands, and also in small disturbances lying over the Gulf of Genoa and to the southward of Sardinia. Depression in northwest subsequently spreading eastwards over Scotland.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

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

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

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

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

DAILY WEATHER REPORT.

for Monday 14th JULY 1890.

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

	STATIONS.	YESTERDAY EVENING. Barom: Reading at 32° F. and Sea Level.	Temp. Dry.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	8 A.M. TO DAY. Barometer. Reading at 32° F. and Sea Level.	Barometer. Difference from 8 a.m. yesterday.	Shade Temp. Dry.	Shade Temp. Wet.	Shade Temp. Difference from 8 a.m. yesterday.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	Sea. (0 to 9.)	PAST 24 HOURS. Shade Temp. Max.	Shade Temp. Min.	Amount of Rainfall.
SCANDINAVIA.	Haparanda ...	29.62	54	SSW	2	b	29.61	·00	56	55	0	S	2	c	*	61	50	—
	Hernösand ...	29.67	54	Z	0	b	29.69	+ ·06	56	51	+ 2	S	2	c	*	63	46	—
	Stockholm ...	29.85	57	WSW	4	b	29.89	+ ·14	62	56	+ 4	SW	4	bc	*	66	50	—
	Wisby	29.86	57	SW	4	b	29.93	+ ·15	63	56	+ 8	S	6	c	*	64	52	—
	Bodö	29.67	48	NNW	2	c	29.53	— ·10	51	46	+ 2	N	2	b	1	?	41	—
	Christiansund	29.65	56	E	3	bc	29.32	— ·33	54	53	+ 2	WSW	3	r	2	?	54	0·35
	Skudesnaes ...	29.58	55	SSE	7	r	29.52	— ·21	56	55	+ 4	SSE	7	r	4	56	54	0·32
	Christiania Fjord (Færder)																	
	Skagen (The Scaw)	29.78	56	S	2	o	29.76	— ·03	60	59	+ 5	SW	2	c	2	61	49	0·24
	Fanö	29.86	58	SSW	5	r	29.83	— ·02	60	59	+ 1	S	5	c	*	61	55	0·08
BRITISH ISLANDS.	Sumburgh Head	29.29	52	SE	3	r	29.24	— ·34	52	52	0	WNW	1	r	3	52	48	0·77
	Stornoway ...	29.22	57	W	6	bc	29.27	— ·06	54	54	+ 2	W	4	o	4	62	50	0·08
	Wick	29.25	64	SW	1	bc	29.28	— ·12	54	53	+ 3	SW	1	o	1	64	47	0·30
	Nairn	29.28	65	W	4	bc	? 29.31	— ·15	54	54	+ 2	WSW	2	ep	1	67	52	0·47
	Aberdeen ...	29.40	67	SSW	4	bc	29.30	— ·26	60	57	+ 8	S	3	c	4	69	50	0·07
	Leith	29.45	67	SW	4	bc	29.38	— ·15	58	54	+ 2	WSW	4	o	*	70	56	0·02
	Shields	29.58	66	SW	5	b	29.43	— ·20	62	58	+ 6	WSW	4	ep	2	69	49	—
	Spurn Head ...	29.69	68	SW	5	bc	29.44	— ·11	64	59	+ 7	SW	7	bc	5	72	55	—
	York	29.67	69	SSW	3	b	29.59	— ·13	61	56	+ 2	W	6	o	*	72	57	—
	Loughborough	29.77	66	SW	3	o	29.73	— ·06	62	56	+ 2	WSW	5	c	*	75	59	—
	Ardrossan ...	29.46	60	SSW	5	b	29.47	— ·06	55	52	0	WSW	4	ep	3	60	52	0·16
	Malin Head ...	29.36	61	SSW	5	o	29.46	+ ·02	54	51	— 5	W	5	ep	3	64	51	0·53
	Mullaghmore ...	29.40	62	SSW	6	o	29.34	+ ·01	54	52	— 5	SW	5	opg	3	65	51	0·62
	Belmullet ...	29.38	59	SSW	5	o	29.53	+ ·01	55	53	— 3	WSW	4	a	*	60	52	0·55
	Donaghadee ...	29.51	63	WSW	4	bc	29.57	— ·02	56	54	— 5	W	3	o	1	69	53	0·07
	Liverpool (Bidston)	29.68	66	SSW	4	c	29.64	— ·09	60	54	— 1	WSW	6	bc	4	67	55	—
	Holyhead ...	29.66	58	SSW	6	o	29.66	— ·05	59	56	+ 1	SW	5	bcmq	5	61	54	0·04
	Parsonstown ...	29.34	65	SW	2	o	29.64	— ·04	54	53	— 6	Z	0	c	*	70	52	0·07
	Valencia	29.51	60	S	8	o	29.69	— ·03	57	55	— 1	SW	4	o	5	62	53	0·33
	Roche's Point ...	29.66	60	SW	4	c	29.74	— ·04	56	52	— 2	W	4	bc	4	61	54	0·20
	Pembroke (St. Ann's Hd.)	29.75	57	SSW	4	f	29.77	— ·04	57	55	+ 1	SW	5	c	6	59	56	0·02
	Scilly	29.82	60	SSW	5	f	29.83	— ·05	58	57	0	SW	3	o	3	62	56	—
	Prawle Point ...	29.88	56	SW	5	f	29.88	— ·02	56	56	+ 1	SSW	4	og	3	58	54	0·05
	Jersey (St. Aubin's)	29.97	63	SSW	3	o	29.96	— ·01	60	60	+ 4	S	3	og	3	64	57	—
	Hurst Castle ...	29.91	58	SW	5	c	29.90	+ ·01	59	59	0	WSW	7	omd	4	62	58	0·03
	Dungeness ...	29.90	60	WSW	6	c	29.88	— ·01	59	58	+ 2	WSW	6	og	4	63	56	0·02
	London	29.85	63	S	3	o	29.85	— ·01	62	58	+ 3	SW	5	c	*	69	59	—
	Oxford	29.83	61	SW	4	o	29.82	— ·02	62	57	+ 1	SW	4	c	*	70	58	—
	Cambridge ...	29.83	63	S	1	c	29.79	— ·04	65	59	+ 5	SW	3	bc	*	74	58	—
	Yarmouth ...	29.81	67	S	4	b	29.76	— ·07	63	60	+ 6	WSW	5	c	3	69	57	—
GERMANY & HOLLAND.	Cuxhaven ...	29.95	60	SW	3	b	29.95	+ ·02	58	57	+ 5	SSW	3	bc	*	65	?	—
	Berlin	30·07	63	WSW	2	bc	30·12	+ ·12	63	55	+ 4	SSW	3	b	*	70	52	—
	Wiesbaden ...	*	*	*	*	*	30·13	+ ·08	58	54	+ 2	Z	0	b	*	70	48	—
	Munich	30·19	53	SW	2	bc	30·23	+ ·17	56	53	+ 9	E	4	b	*	61	41	0·08
	The Helder ...	29.89	61	SW	3	c	?	?	62	60	+ 4	SW	4	o	3	66	57	—
FRANCE AND BELGIUM.	Brussels (9 a.m.)	*	*	*	*	*	29.99	+ ·01	63	59	+ 4	SSW	2	o	*	67	59	—
	Cape Gris Nez	?	59	WSW	4	c	?	?	59	59	0	SW	5	f	5	?	55	—
	Paris	30·04	64	SSE	2	o	30·05	+ ·01	63	61	+ 7	SSW	2	o	*	65	?	—
	Brest	29.97	59	SW	4	m	29.94	— ·04	58	57	— 5	SW	3	m	4	63	54	—
	Lorient	30·01	59	SW	2	m	29.99	·00	58	58	0	SSW	1	f	2	61	57	—
	Rochefort ...	29.80	65	W	3	o	30·09	— ·03	63	61	+ 2	SE	3	b	2	75	54	—
	Belfort														*			
	Lyons	?	66	N	2	b	30·12	+ ·05	60	55	+ 5	NNW	1	b	*	69	51	—
	Nice	29.86	70	WSW	2	b	29.99	+ ·26	69	56	+ 13	ENE	2	b	1	75	?	—
	Perpignan ...	30·02	75	W	3	b	30·07	— ·02	69	63	+ 7	Z	0	b	*	77	56	—
	Biarritz	30·06	69	ENE	3	b	29.93	— ·22	67	61	+ 6	SSE	4	b	1	77	59	—
PENINSULA.	Corunna	*	*	*	*	*	29.97	— ·15	67	64	+ 1	WNW	2	b	0	73	55	—
	Lisbon	29.91	78	NNW	3	b	29.95	— ·06	73	56	+ 3	Z	0	b	2	90	68	—

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 July, 1890.

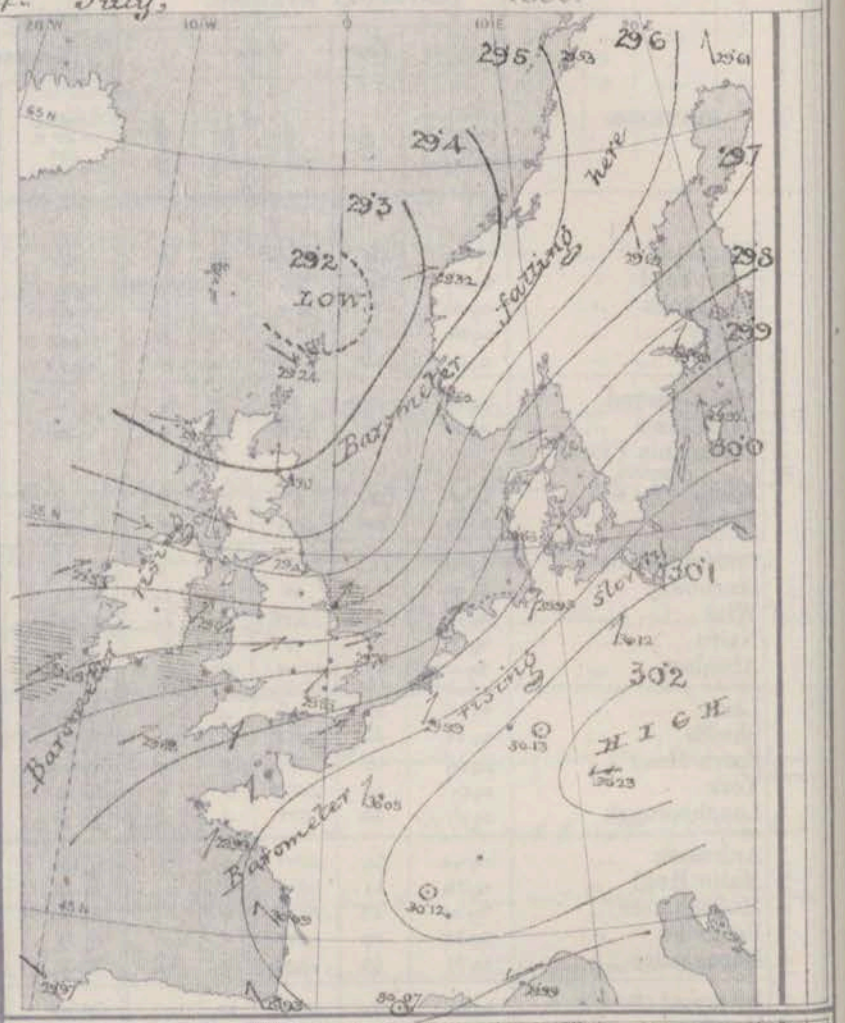
BAROMETER, WIND AND SEA.

EXPLANATION OF MAP.

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

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

SEA DISTURBANCE—Where considerable, is shewn thus:
= Rough. = High.



MEAN HEIGHT OF THE BAROMETER

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

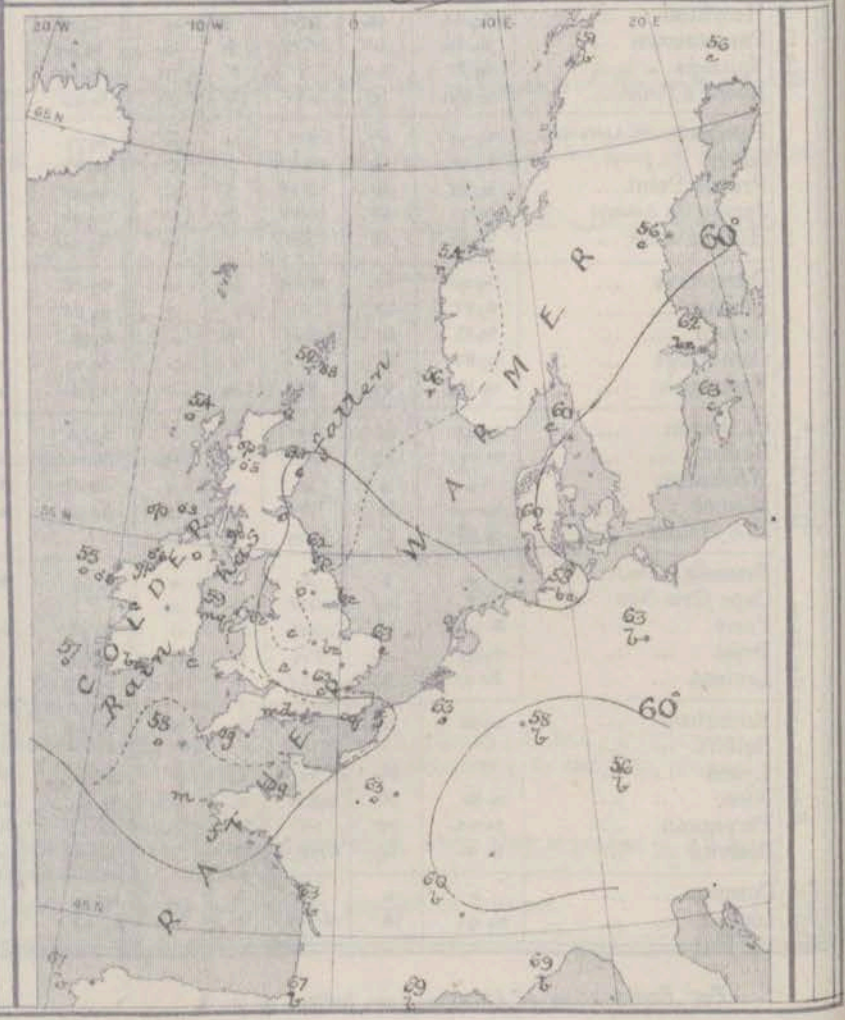
STATIONS.	MEAN READINGS. ins.
Sumburgh Head	29·794
Stornoway	29·797
Wick	29·810
Nairn	29·821
Aberdeen	29·831
Leith	29·859
Shields	29·876
York	29·910
Loughborough	29·936
Ardrossan	29·862
Donaghadee	29·881
Holyhead	29·918
Liverpool	29·913
Parsonstown	29·921
Valencia	29·939
Roche's Point	29·938
Pembroke	29·942
Scilly	29·984
Jersey	30·009
Hurst Castle	29·974
Dover	29·970
LONDON	29·967
Oxford	29·953
Cambridge	29·947
Yarmouth	29·943

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 shewn 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 July.)

STATIONS.	TEMPERATURE. Daily Max.	Daily Min.	at 8 a.m. Dry.	at 8 a.m. Wet.	RAINFALL. (Inches.)
Sumburgh Head	57·8	48·3	53·6	52·0	2·09
Stornoway	60·2	49·5	56·0	54·0	3·02
Wick	62·2	49·2	56·1	53·8	2·25
Nairn	64·7	51·4	57·2	53·6	2·57
Aberdeen	64·4	51·1	58·0	54·4	2·74
Leith	67·1	51·7	58·6	55·3	2·84
Shields	64·4	52·9	58·6	55·4	2·63
York	68·5	52·1	59·4	56·2	2·57
Loughborough	72·1	53·0	62·0	58·2	2·34
Ardrossan	63·9	53·2	57·5	54·8	2·91
Donaghadee	63·1	51·6	57·4	55·6	2·67
Holyhead	63·9	54·7	58·2	55·9	2·32
Liverpool	66·1	54·4	59·6	55·9	2·99
Parsonstown	66·4	51·9	58·3	54·8	3·91
Valencia	64·1	53·6	58·7	56·3	3·91
Roche's Point	66·7	53·3	58·7	55·8	3·16
Pembroke	62·9	55·0	58·1	55·9	2·31
Scilly	64·5	56·3	60·1	58·0	2·29
Jersey	68·8	56·3	62·2	59·2	2·21
Hurst Castle	67·9	55·7	61·3	58·8	2·15
Dover	67·2	56·9	62·6	58·8	1·82
LONDON	73·0	54·1	62·3	58·1	2·17
Oxford	69·9	53·7	60·2	56·8	2·51
Cambridge	72·3	52·4	61·4	57·9	2·30
Yarmouth	66·8	55·2	61·2	58·1	2·68

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

GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30·0 ins. to 30·2 ins. and more over France and Central Europe.
Lowest, 29·2 ins. and less near the Shetland Islands, and 29·3 ins. and less over the north of Scotland.
Gradients slight over the Continent, moderate over the United Kingdom.
Barometer rising in the southwest and south, falling in the extreme north – rise spreading northwards.

TEMPERATURE

Highest, 73° at Lisbon, 69° at Perpignan and Nice, 63° at Paris, Brussels, Berlin, Derby and Yarmouth.
Lowest, 51° at Bodö, 52° at Christiansund, 54° in the north of Ireland.
It rose to between 70° and 75° over our northeastern, eastern and midland counties yesterday and to 69° in London, and did not fall below 53° in London all night.

WIND

S. fresh to strong over Scandinavia and the eastern shores of the North Sea; SW. to W. moderate to strong and squally in our islands; SE. moderate to light in the west of France.

WEATHER

Fine and bright over Germany and the south of France, cloudy, more or less, elsewhere with showers in several parts of our islands.

SEA

Rough at several of our western stations, moderate on our other coasts, smooth or slight over the Bay of Biscay.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The weather though not settled, is inclined to improve over England by the spreading northwestward of the high pressure system over Germany and France.

FORECASTS

For the 24 hours ending at NOON on 15th JULY 1890.

DISTRICTS.	FORECASTS.
0 SCOTLAND NORTH	W. and SW. winds, moderate to fresh, showery.
1 SCOTLAND EAST.	SW. breezes, strong to moderate; some showers, bright intervals.
2 ENGLAND N.E.	
3 ENGLAND EAST	SW. breezes, fresh to moderate; slight showers locally, fair as a whole.
4 MIDLAND COUNTIES	
5 ENGLAND SOUTH	
6 SCOTLAND WEST	Same as No. 0.
7 ENGLAND N.W.	
8 ENGLAND S.W.	Same as Nos. 1 and 2.
↑ 9 IRELAND NORTH	SW. and S. winds, fresh to strong; showery.
↑ 10 IRELAND SOUTH	
WARNINGS	The SOUTH CONE is still flying over the western parts of Nos. 9 and 10, but has been lowered elsewhere.

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

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

YESTERDAY'S 2 P.M. REPORTS.

	BAR:	THER: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Skudesnaes ...	29.68	56	52	SSE	6	o	3
Sumburgh Head							
Stornoway	29.22	62	59	W	5	bc	5
Aberdeen							
Shields							
Ardrossan							
Malin Head ...	29.40	62	60	SW	5	o	2
Mullaghmore ...							
Belmullet	29.45	59	58	SW	5	o	*

	BAR:	THER: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Holyhead	29.69	58	57	SSW	6	o	5
Valencia							
Scilly							
Jersey	29.99	61	59	WSW	3	o	3
Dungeness	29.90	60	58	WSW	6	o	4
London							*
Yarmouth							
Rochefort	30.15	?72	66	W	4	c	?

GENERAL REMARKS ON THE WEATHER OVER EUROPE

DURING THE PAST 24 HOURS.

Weather rainy in the north and northwest of our Islands, as well as over the Gulf of Finland, and at many of the German and Austrian stations; foggy over the Bristol and the western parts of the English Channels. Fair or fine in most other localities, but a thunderstorm reported at Rome. Improvement taking place later in the northern parts of the United Kingdom, but rain falling in the west, and fog continuing at the mouth of the Channel.

Temperature highest 81° at Brindisi, 78° at Constantinople, 77° at Malta, and 75° at Spa. above 70° over the whole of Algeria, eastern Europe and the central parts of the Mediterranean and also over central Russia. Lowest 47° at Munich, 49° at Bodö, 51° at Wick and Breslau, and 52° at Christiansund, Skudesnaes, Sumburgh Head Stornoway Nairn and Aberdeen; below 60° in the south of France. Thermometer subsequently rising above 70° over the central and eastern parts of Great Britain, and reaching 75° at Loughborough.

Winds SW.ly over Ireland, England, the Netherlands, Germany and Denmark; fresh in force on our western coasts, SE.ly in Scotland, and S.ly over the northern parts of Sweden and Russia, variable in the west of Norway, N.ly in the north and east of Germany, and also over the Iberian Peninsula. cyclonic circulation reported over Italy, the south of France and the adjacent parts of the Mediterranean; NW.ly winds strong to a gale in Corsica. Subsequently backing to the S. in the west of Ireland and increasing to a gale in the west of Ireland.

Barometer highest 30.1 ins. and upwards over Spain and the southwest of France. Lowest 29.4 ins. and less in a depression lying off the west of Scotland, low 29.7 ins. and less in three other disturbances lying respectively over the Gulf of Genoa, the northern parts of the Adriatic, and over Hungary. Depression off the west of Scotland subsequently travelling northwards, but new disturbance approaching our western coasts.

SUMMARY OF CHANGES IN THE WEATHER OVER THE BRITISH ISLANDS AND THEIR NEIGHBOURHOOD FROM THE 6TH TO 12TH JULY 1890

The weather of the past week has remained in an exceedingly unsettled state, with copious falls of rain in all parts of the Kingdom, and a very low temperature. The rainfall experienced in Scotland on the 7th was especially heavy.

Barometrical pressure has been almost continuously high over Spain and the south of France, while numerous cyclonic disturbances have advanced over our Islands from the Atlantic.

The first a large and rather deep system appeared off the west of Ireland on the morning of the 7th, and subsequently travelled northeastwards to the Berwickshire coast. It afterwards took a more northerly course but on reaching the neighbourhood of the Shetlands it moved in an east-southeasterly direction to the south of Norway, where it apparently dispersed. Its progress was attended by strong SW.ly gales at some of our southwestern and southern stations, and by considerable falls of rain in most districts, the amounts measured in Scotland on the morning of the 8th and 9th being particularly large.

The second, a much smaller and shallower system, appeared off our southwest coasts on the morning of the 9th and afterwards travelled eastwards across the south of England, producing decided falls of rain over our S.ern district generally.

The third, also small and shallow, pursued a very similar course on the night of the 10th, and occasioned further falls of rain in the south.

The fourth a somewhat larger disturbance appeared off our NW. coast on the morning of the 12th, and afterwards spread eastwards over Scotland. Very little rain fell in the S. and SE. but some considerable amounts were reported in the north.

The prevailing winds have been mostly from between SW. and NW, & accepting on the night of the 7th they were usually light or moderate in force.

Temperature has been very low for the time of year, especially at the beginning and end of the week when the daily maxima were below 60° over a considerable portion of the Kingdom. On the night of the 11th the thermometer on the grass in London fell to 35°.

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 JULY 1890.

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

	STATIONS.	YESTERDAY EVENING. Barom: Reading at 32° F. and Sea Level.	Temp. Dry.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	8 A.M. TO DAY. Barometer. Reading at 32° F. and Sea Level.	Barometer. Difference from 8 a.m. yesterday.	Shade Temp. Dry.	Shade Temp. Wet.	Shade Temp. Difference from 8 a.m. yesterday.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	Sea. (0 to 6.)	PAST 24 HOURS. Shade Temp. Max.	Shade Temp. Min.	Amount of Rainfall.
SCANDINAVIA.	Haparanda ...	29.57	55	SW	4	o	29.46	— .15	59	57	+ 3	SW	6	o	*	59	48	—
	Hernösand ...	29.61	56	S	4	o	29.59	— .10	59	54	+ 3	S	4	c	*	61	45	—
	Stockholm ...	29.86	61	W	2	o	29.91	+ .02	66	58	+ 4	WSW	8	bc	*	72	48	—
	Wisby	29.93	60	SSW	8	b	29.94	+ .01	59	61	+ 4	SSW	4	bc	*	70	52	—
	Bodö	29.37	55	Z	o	o	29.35	— .18	50	49	— 1	SW	2	r	1	59	46	0.08
	Christiansund	29.33	55	NE	2	f	29.54	+ .22	56	52	+ 2	SW	7	o	4	56	52	0.35
	Skudesnaes ...	29.57	54	WSW	6	o	29.72	+ .20	56	54	0	SSE	6	o	4	?	54	0.12
	Christiania Fjord (Færder)																	
	Skagen (The Scaw)	29.77	59	SW	5	o	29.86	+ .10	58	59	— 2	S	2	m	2	61	54	0.08
	Fanö	29.91	59	SSW	4	c	29.87	+ .04	60	60	0	S	3	r	*	63	50	0.20
BRITISH ISLANDS.	Sumburgh Head	29.34	54	WSW	3	o	29.49	+ .25	54	51	+ 2	SW	4	b	4	55	49	0.05
	Stornoway ...	29.41	57	W	4	c	29.56	+ .29	53	53	— 1	SW	2	o	2	59	49	0.42
	Wick	29.42	58	NW	1	bc	29.56	+ .28	59	54	+ 5	W	3	bc	1	63	46	0.04
	Nairn	29.47	59	WSW	2	c	29.58	+ .27	58	53	+ 4	WSW	3	bc	1	62	50	—
	Aberdeen ...	29.54	61	SSW	3	bc	29.64	+ .34	59	53	— 1	WSW	3	bc	3	64	50	0.01
	Leith	29.58	61	W	2	c	29.68	+ .30	59	53	+ 1	W	3	bc	*	66	52	0.07
	Shields	29.68	62	SSW	3	c	29.74	+ .31	59	56	— 3	NW	1	op	2	66	53	—
	Spurn Head ...	29.76	65	SSW	4	c	29.80	+ .26	60	56	— 4	WSW	3	bc	3	68	56	—
	York	29.74	63	W	3	c	29.81	+ .22	60	54	— 1	W	3	bc	*	65	51	—
	Loughborough	29.80	65	SW	4	c	29.86	+ .13	64	57	+ 2	WSW	3	b	*	70	56	—
	Ardrossan ...	29.59	55	SSW	3	p	29.69	+ .22	55	53	0	SW	4	o	3	57	52	0.26
	Malin Head ...	29.52	56	WSW	4	bep	29.63	+ .17	55	52	+ 1	SW	5	bep	2	60	51	0.07
	Mullaghmore ...	29.56	58	SW	5	c	29.71	+ .17	55	52	+ 1	WSW	6	c	5	61	51	0.07
	Belmullet ...	29.56	57	WSW	4	b	29.75	+ .22	58	54	+ 3	W	4	bc	*	59	53	0.04
	Donaghadee ...	29.61	59	WSW	3	bc	29.73	+ .16	58	55	+ 2	WSW	3	b	1	66	49	0.03
	Liverpool (Bidston)	29.73	60	SW	5	c	29.82	+ .18	59	54	— 1	WSW	2	b	3	64	52	0.01
	Holyhead ...	29.71	58	SSW	5	ome	29.81	+ .15	58	55	— 1	WSW	5	bur	5	62	53	—
	Parsonstown ...	29.66	59	Z	0	c	29.80	+ .16	56	53	+ 2	SW	1	c	*	62	48	0.29
	Valencia	29.71	59	SW	5	cm	29.86	+ .17	59	55	+ 2	WSW	3	om	4	61	52	0.03
	Roche's Point ...	29.74	59	SW	5	c	29.86	+ .12	58	55	+ 2	W	3	b	3	61	52	—
	Pembroke (St. Ann's Hd.)	29.80	57	SSW	5	o	29.89	+ .12	56	54	— 1	SSW	3	bep	4	60	54	0.03
	Scilly	29.80	58	N	1	f	29.92	+ .09	60	58	+ 2	WSW	2	b	2	60	54	0.10
	Prawle Point ...	29.87	56	SSW	3	f	29.93	+ .05	58	59	+ 2	WNW	1	bc	1	58	51	0.10
	Jersey (St. Aubin's)	29.89	66	SE	1	b	29.95	— .01	60	59	— 2	W	3	od	3	69	57	—
	Hurst Castle ...	29.90	60	WSW	4	c	29.91	+ .01	63	60	+ 4	W	3	bc	2	63	58	0.01
	Dungeness ...	29.90	65	W	3	bc	29.86	— .02	65	61	+ 6	W	2	b	1	66	56	—
	London	29.88	63	SSW	3	o	29.87	+ .02	63	60	+ 1	W	1	c	*	67	59	—
	Oxford	29.86	58	S	2	o	29.88	+ .06	61	57	— 1	SW	3	b	*	69	58	0.27
	Cambridge ...	29.84	63	SW	1	o	29.86	+ .07	64	60	— 1	WSW	1	bc	*	73	58	0.02
	Yarmouth ...	29.82	69	SSW	4	bc	29.84	+ .08	63	60	0	WSW	2	o	1	73	60	—
GERMANY & HOLLAND.	Cuxhaven ...	29.95	63	SW	2	c	29.93	— .02	65	63	+ 7	S	3	c	*	69	?	—
	Berlin	30.08	70	S	2	b	30.09	— .03	66	61	+ 3	SE	3	b	*	79	57	—
	Wiesbaden ...	*	*	*	*	*	30.06	— .07	64	60	+ 6	Z	0	b	*	77	54	—
	Munich	30.18	58	NE	3	b	30.17	— .06	60	57	+ 4	E	2	b	*	68	45	—
	The Helder ...																	
FRANCE AND BELGIUM.	Brussels (9 a.m.)	*	*	*	*	*	29.88	— .11	74	64	+ 11	S	2	b	*	74	62	—
	Cape Gris Nez	?	65	SW	2	b	?	?	66	64	+ 4	SW	1	bc	1	66	55	—
	Paris	29.97	77	SSE	2	b	29.92	— .13	69	63	+ 6	S	2	bc	*	79	61	—
	Brest	29.90	59	SW	3	o	29.93	— .01	58	59	0	N	1	o	2	61	52	—
	Lorient	29.92	65	NW	1	b	29.95	— .04	57	57	— 1	Z	0	f	3	68	55	—
	Rochefort ...	29.95	86	SE	3	b	29.98	— .11	64	62	+ 1	NW	4	o	2	93	57	—
	Belfort	30.05	67	SW	2	b	30.05		65	55		SW	1	b	*	79	65	—
	Lyons	30.01	75	E	1	b	30.05	— .07	64	60	+ 4	ESE	1	b	*	78	59	—
	Nice	30.01	73	SW	3	b	30.08	+ .09	70	59	+ 1	Z	0	b	0	82	61	—
	Perpignan ...	30.02	75	SE	1	o	30.07	.00	64	64	— 5	NE	2	o	*	79	56	—
	Biarritz	29.84	92	ESE	3	b	29.99	+ .06	66	62	— 1	NW	3	o	2	100	63	?
PENINSULA.	Corunna	*	*	*	*	*												
	Lisbon	29.99	68	WNW	3	b	30.13	+ .18	62	57	— 11	NNE	3	bc	2	83	57	—

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, 15th July, 1890.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP.

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

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

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

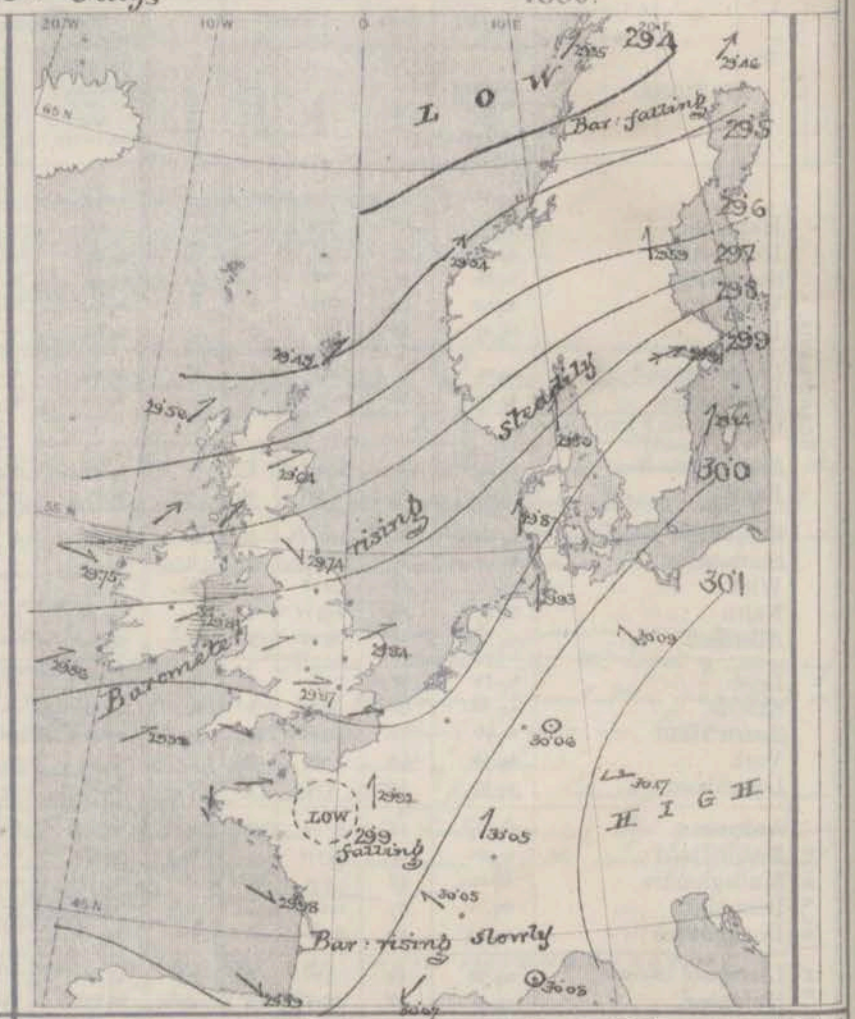
SEA DISTURBANCE—Where considerable, is shewn thus:

= Rough. = High.

MEAN HEIGHT OF THE BAROMETER

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

STATIONS.	MEAN READINGS. (ins.)
Sumburgh Head	29·794
Stornoway	29·797
Wick	29·810
Nairn	29·821
Aberdeen	29·831
Leith	29·859
Shields	29·876
York	29·910
Loughborough	29·936
Ardrossan	29·862
Donaghadee	29·881
Holyhead	29·918
Liverpool	29·913
Parsonstown	29·921
Valencia	29·939
Roche's Point	29·938
Pembroke	29·942
Scilly	29·984
Jersey	30·009
Hurst Castle	29·974
Dover	29·979
LONDON	29·967
Oxford	29·953
Cambridge	29·947
Yarmouth	29·943



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.

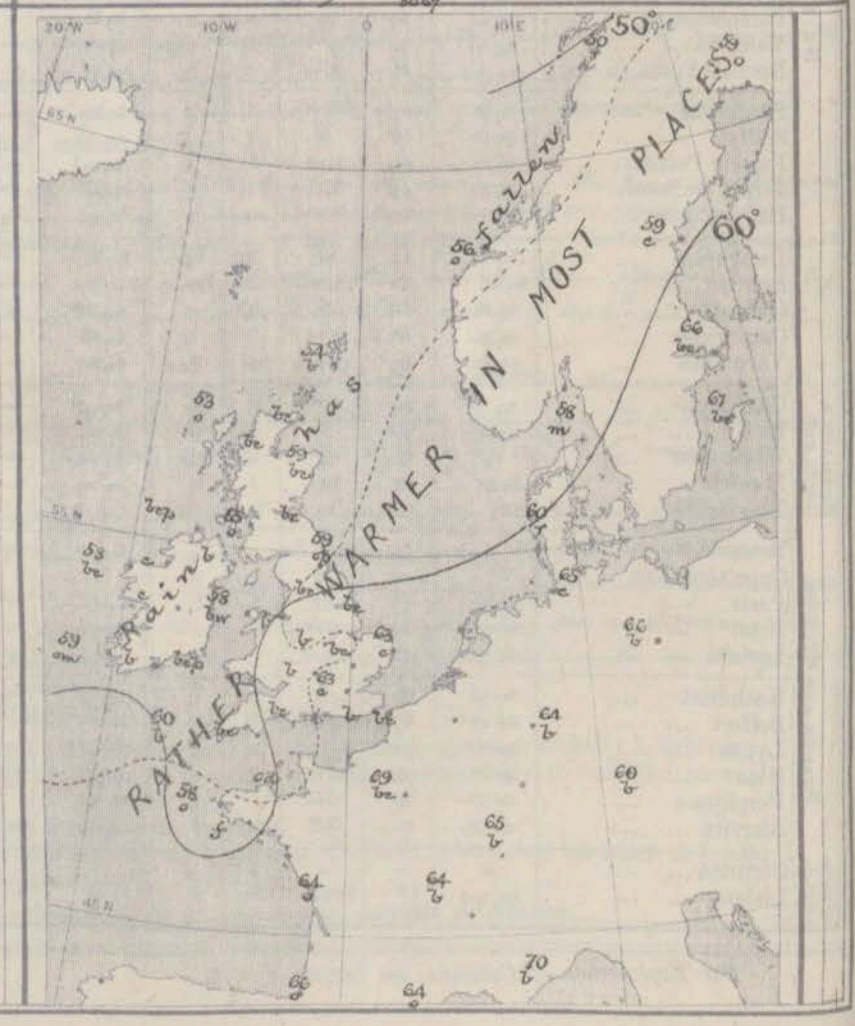
RAINFALL—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0·5 in. or more are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of July.)

STATIONS.	TEMPERATURE. Daily Max.	Daily Min.	at 8 a.m. Dry.	at 8 a.m. Wet.	RAINFALL (Inches.)
Sumburgh Head	57·8	48·3	53·6	52·0	2·09
Stornoway	60·2	49·5	56·0	54·0	3·02
Wick	62·2	49·2	56·1	53·8	2·25
Nairn	64·7	51·4	57·2	53·6	2·57
Aberdeen	64·4	51·1	58·0	54·4	2·74
Leith	67·1	51·7	58·6	55·3	2·84
Shields	64·4	52·9	58·0	55·4	2·65
York	68·5	52·1	59·4	56·2	2·57
Loughborough	72·1	53·0	62·0	58·2	2·34
Ardrossan	63·0	53·2	57·5	54·8	2·91
Donaghadee	63·1	51·6	57·4	55·6	2·67
Holyhead	63·0	54·7	58·2	55·9	2·32
Liverpool	66·1	54·4	59·6	55·9	2·99
Parsonstown	66·4	51·9	58·3	54·8	3·01
Valencia	64·1	53·6	58·7	56·3	3·91
Roche's Point	66·7	53·3	58·7	55·8	3·16
Pembroke	62·9	55·0	58·1	55·9	2·31
Scilly	64·5	56·3	60·1	58·0	2·29
Jersey	68·8	56·3	62·2	59·2	2·24
Hurst Castle	67·9	55·7	61·3	58·8	2·15
Dover	67·2	56·9	62·6	58·8	1·82
LONDON	73·0	54·1	62·3	58·1	2·17
Oxford	69·9	53·7	60·2	56·8	2·51
Cambridge	72·3	52·4	61·4	57·9	2·30
Yarmouth	66·8	55·2	61·2	58·1	2·68

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



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest 30.0 ins. to 30.1 ins. and more, both in Germany, the south of France & over the Spanish Peninsula.
Lowest 29.4 ins. and less over Lapland, 29.5 ins. and less off the north of Scotland, and about 29.9 ins. in a local disturbance near Paris.
Gradients are slight generally and mainly favourable for W.ly winds.
Barometer is apparently rising on all our coasts.

TEMPERATURE

Highest 70° at Nice, 69° at Paris, 66° at Stockholm, 64° at Loughborough.
Lowest 50° at Bodö, 53° at Stornoway, 55° at Malin Head and Ardrossan, 56° at Pembroke.
The daily maxima recorded over England yesterday varied from 65° to 70°.

WIND

Very light from the W.ward at our southern stations, moderate W.ly and SW.ly over the more northern parts of the Kingdom. Very variable and light over France, E.ly and SE.ly over Germany, S.ly on the eastern shores of the North Sea.

WEATHER

Fair over the United Kingdom generally – quite clear at several stations, cloudy at others. Drizzling rain was reported at Jersey this morning. Rainfall yesterday was considerable at Cayford, Parsonstown and Stornoway.

SEA

Moderate in the west and north, slight or smooth elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

Some further improvement in the weather seems likely to occur over our Islands during the coming day.

FORECASTS

For the 24 hours ending at NOON on 16th JULY 1890.

DISTRICTS.	FORECASTS.	DISTRICTS.	FORECASTS.
0 SCOTLAND NORTH	South Westerly winds, moderate; some showers.	6 SCOTLAND WEST	South Westerly breezes, moderate; some showers.
1 SCOTLAND EAST	South westerly breezes, light; slight local showers, but fair as a whole.	7 ENGLAND N.W.	------- D° ---------- D° -------- D° ------
2 ENGLAND N.E.	------- D° ---------- D° -------- D° ------	8 ENGLAND S.W.	South Westerly breezes, moderate; fair as a whole, but local showers possible
3 ENGLAND EAST	Same as No. 5.	9 IRELAND NORTH	---------- D° ---------- D° ---------- D° ----
4 MIDLAND COUNTIES	Same as No. 5.	10 IRELAND SOUTH	---------- D° ---------- D° ---------- D° ----
5 ENGLAND SOUTH	Westerly and South westerly breezes, light; possibly some local showers, but fair as a whole. Warmer.	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: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Skudesnaes ...	29.49	55	55	SSE	8	rf	5
Sumburgh Head	29.29	53	52	WSW	2	o	3
Stornoway	29.38	56	55	W	5	r	5
Aberdeen							
Shields	29.63	63	55	SW	4	o	2
Ardrossan	29.58	57	54	SSW	3	c	2
Malin Head ...	29.51	58	53	SW	5	o	3
Mullaghmore ...	29.55	59	55	SW	6	cpq	4
Belmullet	29.55	56	53	WSW	6	b	*

	BAR:	THER: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Holyhead	29.72	61	57	SW	5	bmq	5
Valencia	29.71	61	57	SW	6	cm	5
Scilly	29.82	57	57	S	4	r	3
Jersey	29.95	68	64	SE	3	b	3
Dungeness	29.92	65	61	SW	4	c	3
London	29.88	67	62	SW	3	c	*
Yarmouth	29.81	71	62	SSW	4	bc	2
Rochefort	30.01	90	75	SE	3	b	?

GENERAL REMARKS ON THE WEATHER OVER EUROPE

DURING THE PAST 24 HOURS.

Continental information not yet received.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

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

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

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

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

DAILY WEATHER REPORT.

for Wednesday 16th JULY 1890.

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

	STATIONS.	YESTERDAY EVENING. Barom: Reading at 32° F. and Sea Level.	Temp. Dry.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	8 A.M. TO DAY. Barometer. Reading at 32° F. and Sea Level.	Barometer. Difference from 8 a.m. yesterday.	Shade Temp. Dry.	Shade Temp. Wet.	Shade Temp. Difference from 8 a.m. yesterday.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	Sea. (0 to 6.)	PAST 24 HOURS. Shade Temp. Max.	Shade Temp. Min.	Amount of Rainfall.
SCANDINAVIA.	Haparanda ...	29.52	56	SW	4	b	29.57	+ .11	59	56	0	S	2	bc	*	59	52	—
	Hernösand ...	29.68	58	SSW	2	b	29.67	+ .08	62	56	+ 3	WSW	4	c	*	73	52	—
	Stockholm ...	29.88	62	S	6	o	29.85	— .06	63	57	— 3	SW	3	o	*	72	57	0.08
	Wisby	29.88	66	S	6	b	29.87	— .07	63	60	— 4	WSW	4	c	*	72	59	0.04
	Bodö	29.63	49	W	2	o	29.73	+ .38	49	45	— 1	WNW	2	bc	1	52	46	0.04
	Christiansund	29.63	54	SE	2	r	29.75	+ .21	54	52	— 2	WNW	1	r	3	59	52	0.20
	Skudesnaes ...	29.78	55	SSW	4	bc	29.96	+ .24	56	53	0	WSW	4	o	4	57	54	—
	Christiania Fjord (Færder)																	
	Skagen (The Scaw)	29.82	56	NW	1	o	29.45	+ .09	58	57	0	NW	2	b	2	59	52	0.20
	Fanö	29.93	56	W	4	o	30.03	+ .16	62	58	+ 2	W	2	b	*	64	54	0.71
BRITISH ISLANDS.	Sumburgh Head	29.62	52	WSW	3	o	29.99	+ .50	51	50	— 3	WNW	1	c	3	56	48	0.01
	Stornoway ...	29.82	56	N	3	bc	30.05	+ .49	54	53	+ 1	Z	0	c	2	58	50	0.04
	Wick	29.77	53	N	4	o	30.05	+ .49	53	51	— 6	NW	1	o	0	60	42	0.28
	Nairn	29.79	58	SW	2	c	30.06	+ .48	55	51	— 3	WSW	1	bc	0	63	40	0.01
	Aberdeen ...	29.79	57	NE	1	bc	30.05	+ .41	57	51	— 2	NE	1	c	1	64	45	0.16
	Leith	29.82	60	W	3	bc	30.09	+ .41	57	54	— 2	NE	1	cm	*	66	46	—
	Shields	29.87	68	SW	2	c	30.06	+ .32	59	54	0	NW	2	bc	2	67	48	—
	Spurn Head ...	29.92	63	W	3	bc	30.07	+ .27	60	57	0	WNW	1	bm	2	68	55	—
	York	29.92	65	W	3	b	30.10	+ .29	61	57	+ 1	WNW	1	b	*	70	51	—
	Loughborough	29.96	68	W	2	c	30.11	+ .25	60	56	— 4	W	1	bem	*	71	48	—
	Ardrossan ...	29.85	61	WSW	4	b	30.09	+ .40	55	53	0	SW	1	c	1	62	46	—
	Malin Head ...	29.86	59	W	3	b	30.08	+ .45	55	53	0	N	1	o	1	60	52	0.33
	Mullaghmore ...	29.92	59	WNW	3	bv												
	Belmullet ...	29.93	58	WNW	2	c	30.13	+ .38	57	53	— 1	NNE	2	b	*	60	50	—
	Donaghadee ...	29.90	60	NE	2	b	30.10	+ .37	58	56	0	NE	2	bc	1	69	56	0.01
	Liverpool (Bidston)	29.95	65	W	3	bc	30.08	+ .26	63	56	+ 4	ESE	1	bc	2	67	53	—
	Holyhead ...	29.95	58	SW	4	c	30.08	+ .27	60	57	+ 2	SW	3	b	2	63	54	0.05
	Parsonstown ...	29.94	62	Z	0	bc	30.13	+ .33	56	54	0	Z	0	b	*	65	47	0.04
	Valencia	30.00	62	W	2	bem	30.12	+ .26	58	55	— 1	Z	0	c	0	62	46	—
	Roche's Point ...	29.99	60	W	2	bc	30.10	+ .24	57	54	— 1	NW	1	b	2	64	50	—
	Pembroke (St. Ann's Hd.)	30.01	59	WSW	3	c	30.10	+ .21	57	55	+ 1	S	2	c	2	60	54	—
	Scilly	30.06	62	WNW	2	b	30.07	+ .15	58	58	— 2	E	3	o	2	64	56	—
	Prawle Point ...	30.05	58	W	3	b	30.11	+ .18	59	57	+ 1	E	2	bc	1	60	51	—
	Jersey (St. Aubin's)	30.07	64	WNW	3	cgm	30.11	+ .16	63	60	+ 3	NE	2	om	2	66	58	—
	Hurst Castle ...	30.03	62	WSW	4	c	30.12	+ .21	62	60	— 1	NW	2	b	1	66	52	—
	Dungeness ...	29.95	63	WSW	4	c	30.07	+ .21	65	58	0	NNW	2	b	1	67	56	—
	London	29.98	70	W	3	bc	30.09	+ .22	62	57	— 1	WSW	2	bc	*	73	50	—
	Oxford	30.02	60	SW	3	b	30.11	+ .23	59	54	— 2	SW	1	b	*	69	49	—
	Cambridge ...	29.97	70	W	1	b	30.11	+ .25	63	51	— 1	N	1	b	*	73	50	—
	Yarmouth ...	29.95	64	ENE	2	b	30.08	+ .24	62	60	— 1	N	2	bm	1	69	55	—
GERMANY & HOLLAND.	Cuxhaven ...	29.89	64	W	2	b	30.05	+ .12	61	59	— 4	N	2	b	*	76	59	—
	Berlin														*			
	Wiesbaden ...	*	*	*	*	*	30.05	— .01	72	68	+ 8	N	1	c	*	82	61	—
	Munich														*			
	The Helder ...	29.98	62	NW	1	b	30.08		63	61		W	1	b	1	68	55	—
FRANCE AND BELGIUM.	Brussels (9 a.m.)	*	*	*	*	*	30.07	+ .19	68	63	— 6	SSE	1	bc	*	80	59	—
	Cape Gris Nez	?	61	SW	3	b	?	?	63	59	— 3	N	1	o	1	68	57	—
	Paris	30.00	70	N	2	o	30.11	+ .19	62	58	— 7	NW	1	b	*	87	56	0.03
	Brest	30.05	60	NE	1	o	30.09	+ .26	57	56	— 1	ESE	3	f	2	63	52	—
	Lorient	30.05	62	WNW	1	f	30.08	+ .13	60	60	+ 3	SSW	1	f	4	66	57	—
	Rochefort ...	30.11	64	NW	4	o	30.17	+ .19	64	64	0	NE	2	m	2	72	57	—
	Belfort	30.05	67	NW	1	b	30.06	+ .01	66	63	+ 1	NW	2	o	*	81	52	—
	Lyons	29.97	78	S	2	c	30.10	+ .05	69	64	+ 5	N	1	b	*	86	62	—
	Nice	30.06	73	SW	2	b	30.04	— .04	75	61	+ 5	E	2	b	0	79	64	—
	Perpignan ...	30.03	73	E	2	b	30.04	— .03	69	67	+ 5	Z	0	b	*	73	59	—
	Biarritz	30.11	67	NW	3	o	30.06	+ .07	64	60	— 2	ESE	3	o	2	73	63	—
PENINSULA.	Corunna	*	*	*	*	*												
	Lisbon	30.10	65	NNW	4	b	30.10	— .03	66	61	+ 4	NNE	1	bc	2	77	59	—

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

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

WEATHER CHARTS

for 8 a.m. on Wednesday, 16th July, 1890.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP.

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

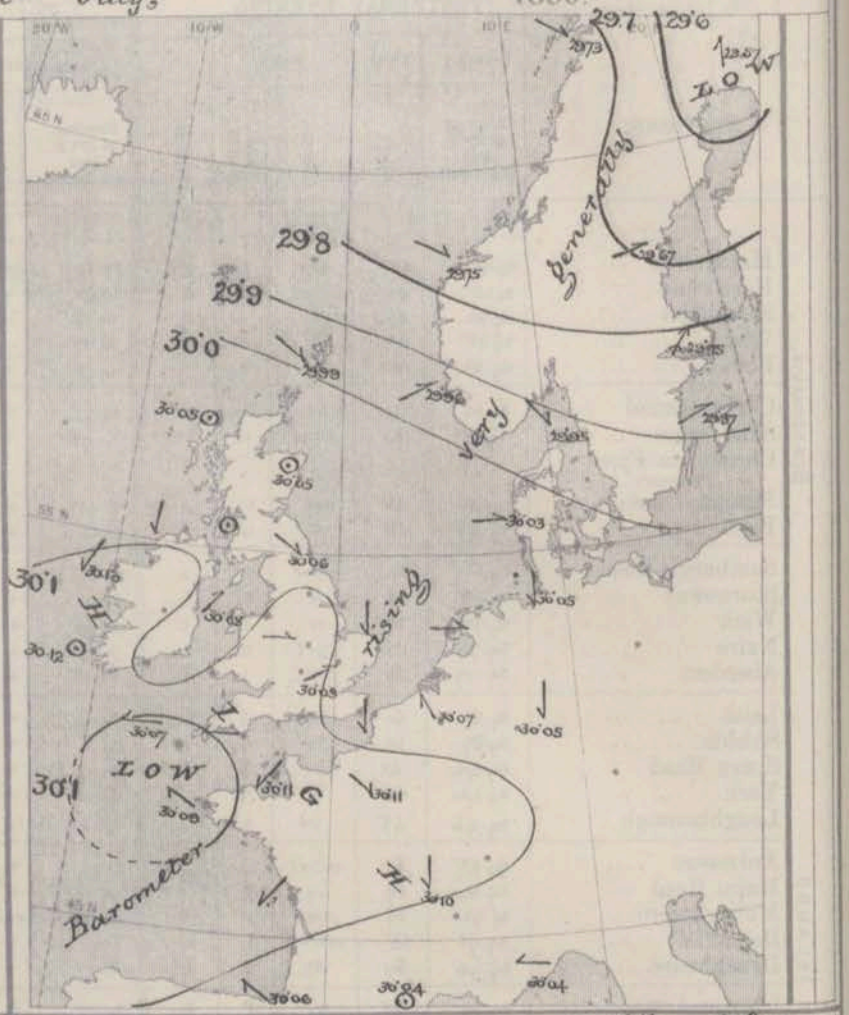
WIND - Arrows shew the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—
= forces above 10; = forces 8 to 10;
= forces 5 to 7; = forces 1 to 4.
= dead calm.

SEA DISTURBANCE—Where considerable, is shewn thus:
= Rough. = High.

MEAN HEIGHT OF THE BAROMETER

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

STATIONS.	MEAN READINGS.
	ins.
Sumburgh Head	29·794
Stornoway	29·797
Wick	29·819
Nairn	29·821
Aberdeen	29·831
Leith	29·850
Shields	29·876
York	29·910
Loughborough	29·936
Ardrossan	29·862
Donaghadee	29·881
Holyhead	29·918
Liverpool	29·913
Parsonstown	29·921
Valencia	29·939
Roche's Point	29·938
Pembroke	29·942
Scilly	29·984
Jersey	30·009
Hurst Castle	29·974
Dover	29·970
LONDON	29·967
Oxford	29·953
Cambridge	29·947
Yarmouth	29·943



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.

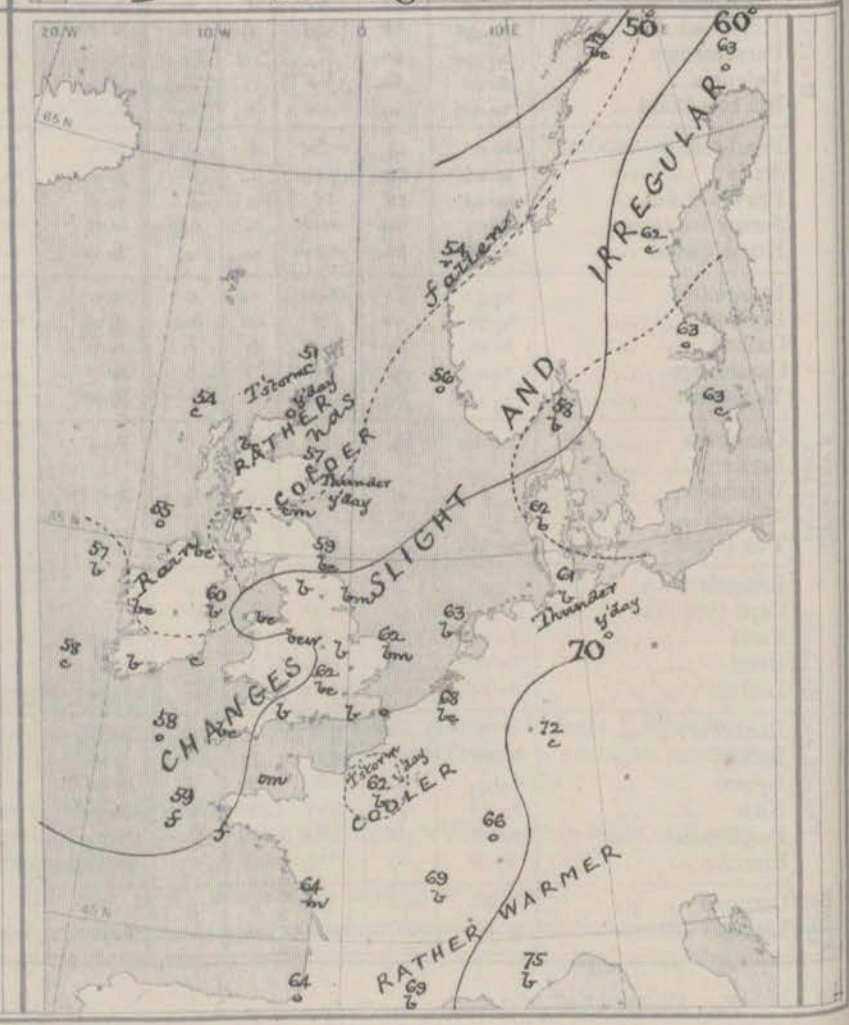
RAINFALL—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0·5 in. or more are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of July.)

STATIONS.	TEMPERATURE. Daily Max.	Daily Min.	at 8 a.m. Dry.	Wet.	RAINFALL. (Inches.)
Sumburgh Head	57·8	48·3	53·6	52·0	2·09
Stornoway	60·2	49·5	56·0	54·0	3·02
Wick	62·2	49·2	56·1	53·8	2·25
Nairn	64·7	51·4	57·2	53·6	2·57
Aberdeen	64·4	51·1	58·0	54·4	2·74
Leith	67·1	51·7	58·6	55·3	2·81
Shields	64·4	52·9	58·6	55·4	2·63
York	68·5	52·1	59·4	56·2	2·57
Loughborough	72·1	53·0	62·0	58·2	2·34
Ardrossan	63·9	53·2	57·5	54·8	2·91
Donaghadee	63·1	51·6	57·4	55·6	2·67
Holyhead	63·9	54·7	58·2	55·9	2·32
Liverpool	66·1	54·4	59·6	55·9	2·99
Parsonstown	66·4	51·9	58·3	54·8	3·01
Valencia	64·1	53·6	58·7	56·3	3·91
Roche's Point	66·7	53·3	58·7	55·8	3·16
Pembroke	62·9	55·0	58·1	55·9	2·31
Scilly	64·5	56·3	60·1	58·0	2·29
Jersey	68·8	56·3	62·2	59·2	2·21
Hurst Castle	67·9	55·7	61·3	58·8	2·15
Dover	67·2	56·9	62·6	58·8	1·82
LONDON	73·0	54·1	62·3	58·1	2·17
Oxford	69·9	53·7	60·2	56·8	2·51
Cambridge	72·3	52·4	61·4	57·9	2·30
Yarmouth	66·8	55·2	61·2	58·1	2·68

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



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30·1 ins. and more, over the greater part of Ireland, England, and France.
Lowest, 29·6 ins. and less, over the eastern part of Lapland, and slightly above 30·0 ins. over the south of France.
Gradients slight and irregular over some western parts of our area.
Barometer still rising in the north, steady in the south of our Islands, falling slightly over Spain.

TEMPERATURE

Highest, 75° at Nice, 72° at Wiesbaden, 69° at Lyons, 63° at Stockholm, 62° at Paris, in London, and at Hernösand.
Lowest, 49° at Bodö, 51° at Sumburgh Head, 54° at Christiansund, 55° at Andenes and Malin Hd.
It rose to between 69° and 73° in the shade over England yesterday, but fell to between 48° and 50° again in the night. On the grass in London it went down to 41°.

WIND

Very light and variable over the United Kingdom, W. and SW. at the Scandinavian stations.
NW. to NE. over France.

WEATHER

Fine and bright in many places, but very dull and foggy about the mouth of the Channel and on the coasts of Brittany.
Rainfall yesterday was considerable at Paris, Malin Hd., Wick and Bodö, and at two of these stations (Paris and Wick) thunderstorms occurred.

SEA

Very little disturbed.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

No important change is indicated.

FORECASTS

For the 24 hours ending at NOON on 17th JULY 1890.

DISTRICTS.	FORECASTS.	DISTRICTS.	FORECASTS.
0 SCOTLAND NORTH 1 SCOTLAND EAST 2 ENGLAND N.E.	Varying airs; fair generally. Warmer.	6 SCOTLAND WEST 7 ENGLAND N.W.	W. and SW. breezes, light; fair as a whole.
3 ENGLAND EAST 4 MIDLAND COUNTIES 5 ENGLAND SOUTH	Varying SW. airs; fair generally.	8 ENGLAND S.W.	E. and Variable airs; weather rather uncertain.
		9 IRELAND NORTH 10 IRELAND SOUTH	Varying airs; fair generally.
		WARNINGS	NONE ISSUED.

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

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

YESTERDAY'S 2 P.M. REPORTS.

	BAR:	THER: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Skudesnaes ...	29.75	57	55	SSE	6	c	4
Sumburgh Head	29.55	55	53	SW	4	c	4
Stornoway	29.72	57	56	N	3	c	3
Aberdeen	29.72	59	54	NW	1	c	2
Shields	29.80	65	56	WSW	4	c	2
Ardrossan	29.78	62	57	SW	3	bc	3
Malin Head ...							
Mullaghmore ...	29.87	60	56	W	5	bc	3
Belmullet	29.88	60	55	NW	2	bc	*

	BAR:	THER: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Holyhead	29.91	62	57	SW	4	b	4
Valencia	29.96	61	57	W	3	cw	3
Scilly	30.00	63	61	WSW	2	b	2
Jersey	30.03	65	60	WNW	3	b	2
Dungeness	29.93	65	61	WSW	3	bc	2
London	29.94	67	62	W	3	b	*
Yarmouth	29.90	65	61	NE	3	bv	1
Rochefort	30.04	65	64	NW	4	o	?

GENERAL REMARKS ON THE WEATHER OVER EUROPE

DURING THE PAST 24 HOURS.

Weather fine over the greater part of our Islands and the Continent, but dull in Scandinavia and Finland, with rain at Bodö. Showers falling later at some of our western and northern stations, and thunderstorms occurring in Scotland, as well as at Paris.

Temperature highest 81° at Palma, 79° at Nicolaieff, Constantinople and Algiers, and 78° at Barcelona and Odessa, above 70° over the greater part of southern and eastern Europe, and above 60° at many of the English stations. Lowest 50° at Bodö, 53° at Stornoway, 54° at Sumburgh Head, and 55° at Ardrossan, Malin Head and Mullaghmore. Subsequently rising a little above 70° over the inland parts of England, and exceeding 80° in France.

Wind light to fresh from the W^ly or SW^ly over our Islands; light from S. over the Netherlands, Denmark and the Baltic; strong from the SW^ly over Scandinavia and Finland. Light from the NW^ly at many of the French, Spanish and Italian stations, and from the NE^ly in Austria; and variable over the southern parts of Germany and Russia. Subsequently veering to the NW^ly in the northwest of our Islands.

Barometer highest 30.2 ins. and upwards in an anticyclone lying over central Russia, 30.1 ins. and upwards in another system lying over the west and south of the Iberian Peninsula. Lowest 29.4 ins. and less over the north of Norway; 29.8 ins. and less over Asia Minor. Steady rise of barometer taking place over western Europe during day, and anticyclone over Spain spreading northwards.

Remarks on the weather for the 24 hours ending at 8 am on 15th July 1890.

Weather fine over the eastern and central parts of Great Britain, as well as at many of the continental stations, but dull and showery in the west and north of our Islands, and rainy in Austria and the west of Norway. Showers falling later in many parts of Great Britain, but weather improving at our western and northern stations, as well as in Austria.

Temperature highest 78° at Constantinople, 77° at Palma and Brindisi, 75° at Barcelona, Odessa and Nicolaieff, and 74° at Oporto, San Fernando and Moscow. Below 55° in the extreme north and northwest of our Islands, as well as in the west of Norway, Poland and some parts of Germany and Austria; the lowest readings of all being 51° at Bodö and Prague, and 52° at Sumburgh Head, Warsaw and Cracow. Thermometer rising during day to a little above 70° over eastern England, to 80° or more in Italy, and to 90° or more in the west of France and the central parts of Spain and Algeria.

Wind moderate to strong from the SW^ly or W^ly over the greater part of the United Kingdom, and from the S^ly over Scandinavia and Denmark. Light from the SE^ly or E^ly in the west and south of France, and from the NW^ly over Austria, Italy and Tunis, variable in Spain and Algeria; calm in the south of Russia. No important change occurring during day.

Barometer highest 30.1 ins. to 30.2 ins. and more in an elongated anticyclone extending from the Baltic provinces to central France. Lowest 29.2 ins. and less in a small depression lying to the northward of the Shetlands; 29.8 ins. and less in shallow disturbances lying respectively over Montenegro and Asia Minor. Depression in north subsequently travelling away northeastward, but shallow system appearing over central Spain.

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 JULY 1890.

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

	STATIONS.	YESTERDAY EVENING. Barom: Reading at 32° F. and Sea Level.	Temp. Dry.	Wind. Direc.	Wind. Force (0 to 12.)	Weather.	8 A.M. TO DAY. Barometer. Reading at 32° F. and Sea Level.	Barometer. Difference from 8 a.m. yesterday.	Shade Temp. Dry.	Shade Temp. Wet.	Shade Temp. Difference from 8 a.m. yesterday.	Wind. Direc.	Wind. Force (0 to 12.)	Weather.	Sea. (0 to 6.)	PAST 24 HOURS. Shade Temp. Max.	Shade Temp. Min.	Amount of Rainfall.
SCANDINAVIA.	Haparanda ...	29.72	59	WNW	2	c	29.81	+ .24	59	57	0	SW	2	c	*	63	50	—
	Hernösand ...	29.86	56	SW	2	c	29.91	+ .24	60	55	— 2	NNW	2	c	*	72	52	0.04
	Stockholm ...	29.99	62	W	4	b	29.98	+ .13	62	56	— 1	WSW	2	b	*	72	52	—
	Wisby	29.92	60	S	4	b	29.97	+ .10	62	54	— 1	WSW	4	b	*	72	59	—
	Bodö	29.84	50	E	0	c	29.86	+ .13	48	45	— 1	SW	4	c	2	54	45	0.08
	Christiansund	29.97	52	NW	3	0	29.99	+ .24	51	48	— 3	S	4	c	3	55	48	0.28
	Skudesnaes ...	30.10	53	NW	4	b	30.13	+ .17	54	50	— 2	SE	1	c	2	57	45	—
	Christiania Fjord (Færder)	29.90	60	SW	5	b	30.00	+ .12	58	51	0	NNW	2	b	3	61	55	—
	Skagen (The Scaw)	30.01	55	W	5	b	30.04	+ .09	57	53	— 1	W	5	bc	4	63	50	—
	Fanö	30.13	54	NW	2	b	30.13	+ .10	57	52	— 5	E	3	c	*	64	50	—
BRITISH ISLANDS.	Sumburgh Head	30.07	54	W	1	b	30.04	+ .05	54	51	+ 3	SSE	1	b	1	57	46	—
	Stornoway ...	30.10	53	N	3	r	30.03	— .02	52	52	— 1	W	2	c	2	57	40	0.11
	Wick	30.10	54	NW	1	c	30.04	— .01	57	55	+ 4	S	1	bc	0	57	40	—
	Nairn	30.08	59	ENE	1	bc	30.06	.00	56	50	+ 1	WSW	1	bc	1	63	46	—
	Aberdeen ...	30.14	53	SE	3	c	30.07	+ .02	60	56	+ 3	ESE	2	c	2	60	51	0.01
	Leith	30.09	59	NE	2	bc	30.06	— .03	55	54	— 2	NE	1	o	*	61	53	—
	Shields	30.10	56	ESE	2	r	30.05	— .01	54	53	— 5	E	0	r	2	61	53	0.08
	Spurn Head ...	30.08	58	E	3	c	29.98	— .09	57	56	— 3	ENE	3	o†	3	63	56	0.05
	York	30.10	61	E	1	r	30.02	— .08	56	56	— 5	E	1	†	*	70	54	0.71
	Loughborough	30.07	68	WSW	1	o	30.00	— .11	61	59	+ 1	ENE	1	o	*	75	57	0.08
	Ardrossan ...	30.09	59	SW	1	bc	30.06	— .03	56	53	+ 1	NW	1	b	1	63	48	—
	Malin Head ...	30.12	58	NNW	2	bc	30.09	+ .01	55	51	0	NW	1	bcw	1	58	50	—
	Mullaghmore ...	30.14	58	NW	4	bv	30.12		56	51		NW	1	b	1	62	45	—
	Belmullet ...	30.17	58	NNW	1	b	30.12	— .01	55	52	— 2	WSW	1	o	*	60	44	—
	Donaghadee ...	30.11	60	NE	3	c	30.08	— .02	56	53	— 2	NE	4	b	3	64	54	—
	Liverpool (Bidston)	30.10	58	NW	1	r	30.02	— .06	57	56	— 6	NNE	1	o	1	68	55	0.44
	Holyhead ...	30.10	58	NNW	1	og	30.03	— .05	56	55	— 4	N	2	og	1	66	55	0.01
	Parsonstown ...	30.09	61	E	0	c	30.10	— .03	54	52	— 2	E	0	b	*	67	47	—
	Valencia	30.12	60	N	3	cm	30.12	.00	57	53	— 1	N	3	bc	2	64	50	—
	Roche's Point ...	30.09	58	W	1	c	30.07	— .03	59	55	+ 2	N	3	b	3	61	51	—
	Pembroke (St. Ann's Hd.)	30.08	55	NW	2	r	30.00	— .10	56	56	— 1	NNE	3	rg	2	60	53	0.42
	Scilly	30.02	54	NE	4	r	29.95	— .12	56	56	— 2	NNE	3	m	2	58	53	1.37
	Prawle Point ...	30.04	55	NE	3	r	29.93	— .18	57	57	— 2	NE	3	rb	2	63	54	0.15
	Jersey (St. Aubin's)	30.02	60	E	1	c	29.90	— .21	66	63	+ 3	WNW	1	cgm	1	72	61	0.01
	Hurst Castle ...	30.06	64	WSW	2	c	29.95	— .17	63	61	+ 1	ENE	1	cm	1	69	60	—
	Dungeness ...	30.05	66	E	0	b	29.93	— .14	65	62	0	NE	2	m	1	70	59	—
	London	30.05	70	SSE	1	cgm	29.97	— .12	63	60	+ 1	NW	1	ogm	*	76	58	0.01
	Oxford	30.05	65	SW	1	o	29.97	— .14	64	59	+ 5	WNW	1	c	*	72	59	—
	Cambridge ...	30.05	70	NE	1	c	29.98	— .13	63	61	0	E	1	o	*	75	56	—
	Yarmouth ...	30.09	64	NE	2	bm	29.98	— .10	61	60	— 1	ENE	2	bc	2	65	58	0.03
GERMANY & HOLLAND.	Cuxhaven ...	30.14	62	N	1	b	30.14	+ .09	61	59	0	E	2	b	*	65	60	—
	Berlin	30.06	72	WNW	4	b	30.11	+ .10	66	59	+ 4	NNE	3	b	*	82	61	—
	Wiesbaden ...	*	*	*	*	*	30.04	— .01	68	65	— 4	E	0	bc	*	82	61	0.59
	Munich	30.11	71	SW	2	c	30.10		69	62		E	0	b	*	81	61	0.04
	The Helder ...	30.10	64	NE	2	c	30.02	— .06	63	60	0	E	1	c	1	68	61	—
FRANCE AND BELGIUM.	Brussels (9 a.m.)	*	*	*	*	*	29.96	— .11	73	67	+ 5	SW	1	b	*	79	60	—
	Cape Gris Nez	?	69	W	2	b	?	?	66	63	+ 3	NE	1	c	0	73	57	—
	Paris	30.03	75	ESE	1	b	29.96	— .15	70	65	+ 8	E	0	b	*	78	61	—
	Brest	29.99	62	S	1	o	29.93	— .16	60	58	+ 3	E	0	o	1	64	52	—
	Lorient	30.02	66	WNW	2	b	29.91	— .17	59	59	— 1	WNW	2	b	2	66	59	—
	Rochefort ...	30.04	71	WNW	3	b	29.95	— .22	65	64	+ 1	NW	4	b	2	82	59	—
	Belfort	29.93	65	E	2	o	29.93	— .13	62	57	— 4	E	1	bc	*	78	57	0.35
	Lyons	30.01	78	NNW	1	b	30.00	— .10	71	66	+ 2	SE	2	b	*	82	? 62	—
	Nice	30.00	72	SSW	4	b	30.02	— .02	72	61	— 3	S	2	b	1	82	63	—
	Perpignan ...	29.98	73	N	3	b	30.00	— .04	67	65	— 2	W	1	o	*	78	61	—
	Biarritz	29.93	73	NNE	3	b	29.99	— .07	66	66	+ 2	NW	4	o	2	86	64	—
PENINSULA.	Corunna	*	*	*	*	*												
	Lisbon	30.10	69	NW	3	o	30.16	+ .06	64	64	— 2	N	3	c	?	77	61	—

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

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

WEATHER CHARTS

for 8 a.m. on Thursday, 17th July, 1890.

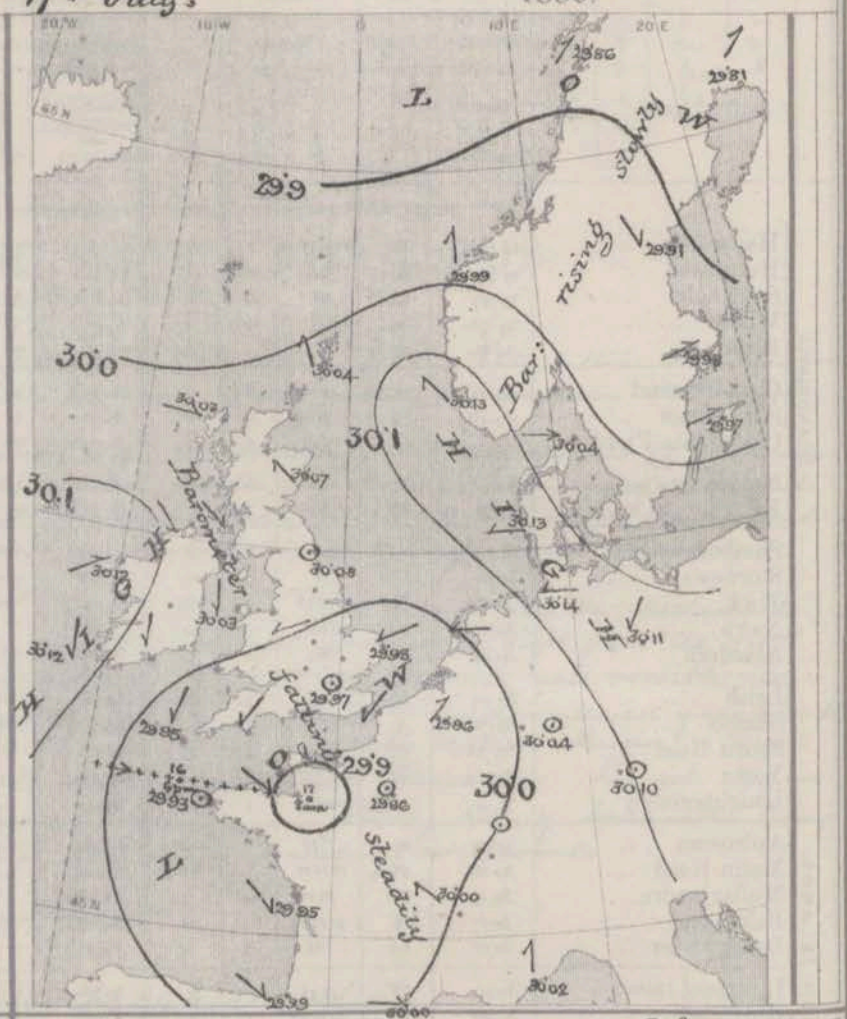
BAROMETER, WIND AND SEA.

EXPLANATION OF MAP.

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

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

SEA DISTURBANCE—Where considerable, is shewn thus:
= Rough. = High.



MEAN HEIGHT OF THE BAROMETER

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

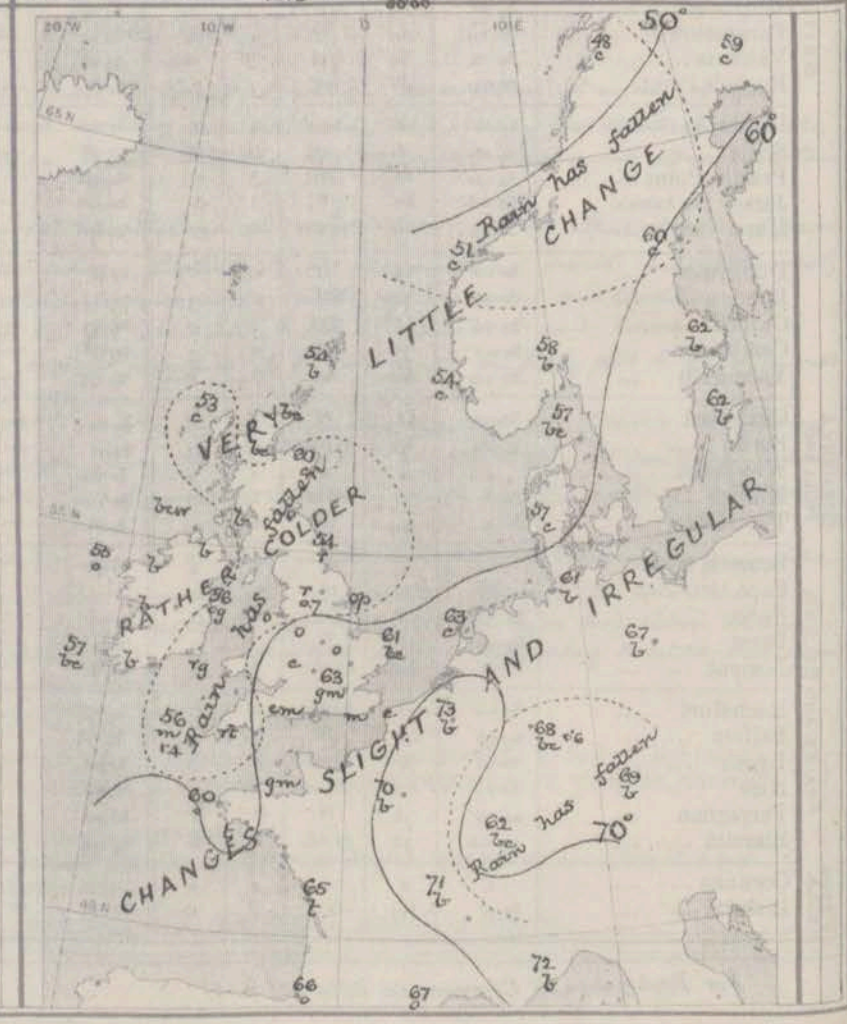
STATIONS.	MEAN READINGS.
	ins.
Sumburgh Head	29·794
Stornoway	29·797
Wick	29·810
Nairn	29·824
Aberdeen	29·831
Leith	29·850
Shields	29·876
York	29·910
Loughborough	29·936
Ardrossan	29·862
Donaghadee	29·881
Holyhead	29·918
Liverpool	29·913
Parsonstown	29·921
Valencia	29·939
Roche's Point	29·938
Pembroke	29·942
Scilly	29·984
Jersey	30·009
Hurst Castle	29·974
Dover	29·970
LONDON	29·967
Oxford	29·953
Cambridge	29·947
Yarmouth	29·943

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 shewn 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 July.)

STATIONS.	TEMPERATURE. Daily Max.	Daily Min.	at 8 a.m. Dry.	at 8 a.m. Wet.	RAINFALL. (Inches.)
Sumburgh Head	57·8	48·3	53·6	52·0	2·09
Stornoway	60·2	49·5	54·0	54·0	3·02
Wick	62·2	49·2	56·1	53·8	2·25
Nairn	64·7	51·4	57·2	53·0	2·57
Aberdeen	64·4	51·1	58·0	54·4	2·74
Leith	67·1	51·7	58·6	55·3	2·84
Shields	64·4	52·9	58·6	55·4	2·63
York	68·5	52·1	59·4	56·2	2·57
Loughborough	72·1	53·0	62·0	58·2	2·34
Ardrossan	63·9	53·2	57·5	54·8	2·91
Donaghadee	63·4	51·6	57·4	55·6	2·67
Holyhead	63·9	54·7	58·2	55·9	2·32
Liverpool	66·1	54·4	59·6	55·9	2·99
Parsonstown	66·4	51·9	58·3	54·8	3·01
Valencia	64·1	52·6	58·7	56·3	3·91
Roche's Point	66·7	53·3	58·7	56·8	3·16
Pembroke	62·9	55·0	58·1	55·9	2·31
Scilly	64·5	56·3	60·1	58·0	2·29
Jersey	68·8	56·3	62·2	59·2	2·21
Hurst Castle	67·9	55·7	61·3	58·8	2·15
Dover	67·2	56·9	62·6	58·8	1·82
LONDON	73·0	54·1	62·3	58·1	2·17
Oxford	69·9	53·7	60·2	56·8	2·51
Cambridge	72·5	52·4	61·4	57·9	2·30
Yarmouth	66·8	55·2	61·2	58·1	2·68

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

GENERAL SITUATION AT 8 A.M.

PRESSURE	Highest 30.1 ins. and more over Portugal and the west of Ireland, as well as over Germany and the eastern shores of the North Sea; 30.0 ins. and more in a "col" over Scotland and the North of England. Lowest 29.9 ins. and less in the central part of the depression over the north of France. Gradients slight and irregular; Barometer falling in most places, but apparently rising in Norway and Sweden.
TEMPERATURE	Highest 73° at Brussels, 71° to 72° in the south of France, 70° at Paris, 69° at Munich, 67° at Berlin, 64° at Cuxhaven, 62° at Stockholm. Lowest 48° at Bodö, 53° at Stornoway, 54° at Lumburgh Head and Skudesnaes. It rose during yesterday to between 70° and 76° over England, and to between 75° and 86° over France. The night was warm and close over England, cold in the north of Scotland.
WIND	Chiefly NE$^{\frac{3}{4}}$ over England, and N$^{\frac{3}{4}}$ in Ireland; NW$^{\frac{3}{4}}$ over the Bay of Biscay, very variable over France, Germany and Scotland, S$^{\frac{3}{4}}$ in the north of Norway.
WEATHER	Fair generally over Ireland, Scotland, Denmark and Germany; dull and unsettled over England, the west of France, with rain in several places thunder in others. The rainfall measured this morning was 1.4 ins. at Scilly, 0.7 in at York, 0.4 in at Liverpool & Belfort, & 0.6 in at Wiesbaden.
SEA	Very little disturbed.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

Rain and thunder seems likely to be experienced over the greater part of France and England during the coming day.

FORECASTS

For the 24 hours ending at NOON on 18th JULY 1890.

DISTRICTS.	FORECASTS.	DISTRICTS.	FORECASTS.
0 SCOTLAND NORTH 1 SCOTLAND EAST	Light variable winds; fair generally.	6 SCOTLAND WEST 7 ENGLAND N.W.	Varying N$^{\frac{3}{4}}$ airs; fine generally.
2 ENGLAND N.E.	NE$^{\frac{3}{4}}$ winds, light; some rain at times	8 ENGLAND S.W.	Same as No. 5.
3 ENGLAND EAST	Same as No. 5.	9 IRELAND NORTH 10 IRELAND SOUTH	N$^{\frac{3}{4}}$ breezes, light; fair generally.
4 MIDLAND COUNTIES	Same as No. 2.		
5 ENGLAND SOUTH	NE$^{\frac{3}{4}}$ winds, light; rain and thunder at times. very close.	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. D.	THER. W.	WIND D.	WIND F.	WEA.	SEA
Skudesnaes ...	30·06	57	52	NW	6	c	3
Sumburgh Head	30·06	55	51	W	1	c	2
Stornoway	30·09	56	56	NW	3	c	3
Aberdeen	30·13	55	51	SE	2	cp	3
Shields	30·10	57	55	E	1	cp	2
Ardrossan	30·10	59	55	SW	2	bc	2
Malin Head ...	30·12	57	53	NNW	1	o	1
Mullaghmore ...	30·13	60	55	WNW	4	bv	2
Belmullet	30·16	60	52	NW	1	b	*

	BAR.	THER. D.	THER. W.	WIND D.	WIND F.	WEA.	SEA
Holyhead	30·11	60	57	NW	1	c	2
Valencia	30·13	61	56	NW	3	c	3
Scilly	30·05	55	55	NNE	4	r	2
Jersey	30·08	70	64	ESE	2	bc	2
Dungeness	30·08	68	61	SW	2	b	1
London	30·09	75	64	W	2	cm	*
Yarmouth	30·10	62	60	ENE	2	f	1
Rochefort	30·10	78	72	SSW	3	c	?

GENERAL REMARKS ON THE WEATHER OVER EUROPE

DURING THE PAST 24 HOURS.

Weather in morning fine and bright over southwestern, southern, central and eastern Europe, fair over the greater part of the British Islands also, but cloudy in places, cloudy over Scandinavia and Finland, with rain at several stations.

Rain later in many parts of England, Germany and some parts of France — amounts large at Scilly, Liverpool, York, Wiesbaden and Belfort. Sky assuming unsettled appearance in the south of England and over France generally.

Temperature changing fitfully and very irregularly distributed. Morning readings exceeding 80° at Odessa and Nicolaieff, and exceeding 70° all over southern Europe as well as at Constantinople, Buda Pesth, over north Germany and the Baltic Provinces. Much lower over northwestern Europe, as low as 49° at Bodö, 51° at Sumburgh Head, and 52° to 55° over the greater part of Scotland and Ireland. Daily maxima 70° to 76° over England, very variable (64° to 86°) over France and Germany.

Wind W.⅓ to SW.⅓ over northern Europe and blowing a gale at Stockholm, extremely variable elsewhere and light — except at Corunna, where it was strong from SSE. Cyclonic circulation of light winds over England and France later, NW.⅓ breezes in the north of Scotland.

Barometer highest 30·1 ins. to 30·2 ins. and more over central Russia, and varying between 30·0 ins. and 30·1 ins. over Germany, France, Spain, Ireland and south of England. Distribution over latter regions, however, very irregular. Lowest 29.6 ins. and less in a depression over Lapland, 30·0 ins. and less over the north of Spain. Large shallow depression advancing over Ireland, England and France later.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

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

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

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

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

DAILY WEATHER REPORT.

for Friday 18th JULY 1890.

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

	STATIONS.	YESTERDAY EVENING. Barom.: Reading at 32° F. and Sea Level.	Temp. Dry.	Wind. Direc.	Wind. Force (0 to 12.)	Weather.	8 A.M. TO DAY. Barometer. Reading at 32° F. and Sea Level.	Barometer. Difference from 8 a.m. yesterday.	Shade Temp. Dry.	Shade Temp. Wet.	Shade Temp. Difference from 8 a.m. yesterday.	Wind. Direc.	Wind. Force (0 to 12.)	Weather.	Sea. (0 to 6.)	PAST 24 HOURS. Shade Temp. Max.	Shade Temp. Min.	Amount of Rainfall.
SCANDINAVIA.	Haparanda ...	29.79	55	L	0	bc	29.78	— .03	57	50	— 2	W	2	b	*	66	45	—
	Hernösand ...	29.90	58	L	0	b	29.89	— .02	57	50	— 3	NE	2	b	*	79	48	—
	Stockholm ...	29.94	62	SW	2	b	29.87	— .11	66	58	+ 4	ESE	2	c	*	73	52	—
	Wisby	29.92	60	SSW	2	b	29.87	— .10	59	58	— 3	S	2	r	*	70	55	0.04
	Bodö	29.75	51	SW	2	0	29.69	— .17	45	44	— 3	SW	4	r	2	52	45	0.47
	Christiansund	29.91	58	WSW	6	c	29.85	— .14	53	49	+ 2	SW	3	c	3	57	48	—
	Skudesnaes ...	30.02	55	NW	1	c	29.75	— .35	56	50	+ 2	N	1	0	2	62	52	—
	Christiania Fjord (Færder)	29.92	59	S	3	b	29.78	— .22	58	56	0	SSE	2	r	2	63	55	—
	Skagen (The Scaw)	29.96	54	L	0	bc	29.74	— .30	56	54	— 1	S	1	r	1	64	50	0.04
	Fanö	29.90	58	E	4	c	29.66	— .47	60	60	+ 3	SE	4	c	*	66	55	0.20
BRITISH ISLANDS.	Sumburgh Head	29.96	53	SSE	1	bc	29.81	— .23	53	51	— 1	NE	1	c	1	58	48	—
	Stornoway ...	29.92	54	W	2	r	29.75	— .28	51	51	— 2	SE	5	r	4	57	49	0.25
	Wick	29.94	55	L	0	0	29.80	— .24	55	54	— 2	E	1	0	0	62	48	0.04
	Nairn	29.90	61	E	1	c	29.79	— .27	53	52	— 3	L	0	r	1	65	51	0.37
	Aberdeen ...	29.94	54	S	3	c	29.80	— .27	52	52	— 8	SE	2	cd	2	61	52	0.12
	Leith	29.91	60	N	1	c	29.79	— .27	55	51	0	W	1	c	*	63	50	—
	Shields	29.93	53	NE	2	d	29.79	— .26	54	53	0	NW	2	0	2	55	51	0.11
	Spurn Head ...	29.82	58	NE	3	0	29.76	— .22	56	54	— 1	NNW	4	0	4	61	54	0.01
	York	29.89	58	NE	2	0	29.80	— .22	57	55	+ 1	NNE	1	0	*	62	53	0.07
	Loughborough	29.84	66	NNE	2	0	29.84	— .16	60	55	— 1	WNW	3	cw	*	72	55	0.07
	Ardrossan ...	29.93	61	NW	2	b	29.80	— .26	56	53	0	L	0	0	0	64	49	—
	Malin Head ...	29.95	59	WNW	2	b	29.77	— .32	55	53	0	S	3	0	1	60	53	—
	Mullaghmore ...	30.00	58	W	4	bv	29.77	— .35	56	54	0	SE	2	cm	2	60	53	0.03
	Belmullet ...	30.00	58	WSW	2	bc	29.79	— .39	58	57	+ 3	W	1	0	*	61	54	0.07
	Donaghadee ...	29.97	60	NNE	5	b	29.84	— .24	57	54	+ 1	WSW	2	c	1	63	55	—
	Liverpool (Bidston)	29.89	61	NW	3	0	29.85	— .17	57	53	0	WNW	3	bc	3	65	54	—
	Holyhead ...	29.94	57	N	3	b	29.86	— .17	58	54	+ 2	SW	2	cg	1	59	50	—
	Parsonstown ...	30.00	60	SW	2	c	29.86	— .30	53	53	— 1	SE	1	r	*	65	49	0.16
	Valencia	30.05	58	WNW	2	bcv	29.84	— .28	59	58	+ 2	W	3	cm	4	61	50	0.15
	Roche's Point ...	30.03	62	NNW	3	bc	29.84	— .23	57	57	— 2	WSW	3	r	4	65	51	0.15
	Pembroke (St. Ann's Hd.)	29.93	59	N	4	bc	29.93	— .07	55	53	— 1	WSW	3	p	3	61	51	0.01
	Scilly	29.94	58	NNW	4	c	30.00	+ .05	56	55	0	WSW	4	0	2	59	53	0.01
	Prawle Point ...	29.86	60	NW	2	p	29.97	+ .04	58	56	+ 1	WNW	3	bc	2	63	50	0.21
	Jersey (St. Aubin's)	29.87	62	W	3	cgm	29.99	+ .09	60	57	— 6	WNW	4	b	3	71	56	1.35
	Hurst Castle ...	29.81	61	WNW	1	rm	29.90	— .05	58	57	— 5	WNW	2	m	1	66	57	1.41
	Dungeness ...	29.76	65	WSW	1	c	29.81	— .12	58	58	— 7	NW	2	r	2	67	58	0.49
	London	29.77	65	N	1	ogtr	29.84	— .13	57	55	— 6	WSW	2	c	*	74	55	1.79
	Oxford	29.79	61	NNE	1	r	29.87	— .10	57	54	— 7	WNW	2	c	*	70	54	0.90
	Cambridge ...	29.79	66	N	1	r	29.82	— .16	56	55	— 7	NW	1	0	*	71	54	1.01
	Yarmouth ...	29.90	62	NNE	3	cm	29.72	— .26	56	56	— 5	WNW	3	0	2	65	56	0.47
GERMANY & HOLLAND.	Cuxhaven ...	29.96	64	E	3	b	29.73	— .41	63	61	+ 2	SW	4	b	*	69	61	0.20
	Berlin	29.91	79	ESE	3	bc	29.78	— .33	75	69	+ 9	WSW	2	b	*	84	66	—
	Wiesbaden ...	*	*	*	*	*	29.94	— .10	71	64	+ 3	SW	3	bc	*	81	64	—
	Munich	30.02	73	L	0	bc	30.03	— .07	71	64	+ 2	W	5	b	*	81	59	—
	The Helder ...	29.76	68	S	2	b	29.63	— .39	62	60	— 1	SW	5	r	4	72	61	0.08
FRANCE AND BELGIUM.	Brussels (9 a.m.)	*	*	*	*	*	29.84	— .12	61	58	— 12	SSW	3	0	*	84	59	0.71
	Cape Gris Nez	?	64	SSW	3	bc	?	?	58	58	— 8	W	6	f	5	73	57	0.35
	Paris	29.87	72	WSW	2	bc	29.96	.00	63	60	— 7	SW	3	0	*	84	58	1.02
	Brest	29.91	60	N	1	m	30.03	+ .10	57	56	— 3	NNW	3	b	3	64	55	—
	Lorient	29.91	63	SW	1	0	30.08	+ .17	57	55	— 2	NW	4	b	4	66	55	0.08
	Rochefort ...	30.08	66	W	5	c	30.13	+ .18	64	63	— 1	W	4	c	2	73	55	0.08
	Belfort	29.91	86	NW	1	b	29.92	— .01	62	51	0	NW	1	c	*	84	54	—
	Lyons	29.87	84	S	4	b	30.08	+ .08	64	60	— 7	NNW	2	0	*	89	64	—
	Nice	30.01	74	SSW	4	b	29.96	— .06	76	66	+ 4	ENE	1	b	1	82	66	—
	Perpignan ...	29.98	77	E	2	b	30.12	+ .12	68	61	+ 1	W	4	bc	*	78	66	—
	Biarritz	30.12	66	NW	4	0	30.21	+ .22	64	58	— 2	NW	5	c	3	70	61	—
PENINSULA.	Corunna	*	*	*	*	*												
	Lisbon	30.13	64	NNW	5	b	30.15	— .01	63	57	— 1	N	5	b	4	73	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 Friday, 18th July 1890.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP.

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

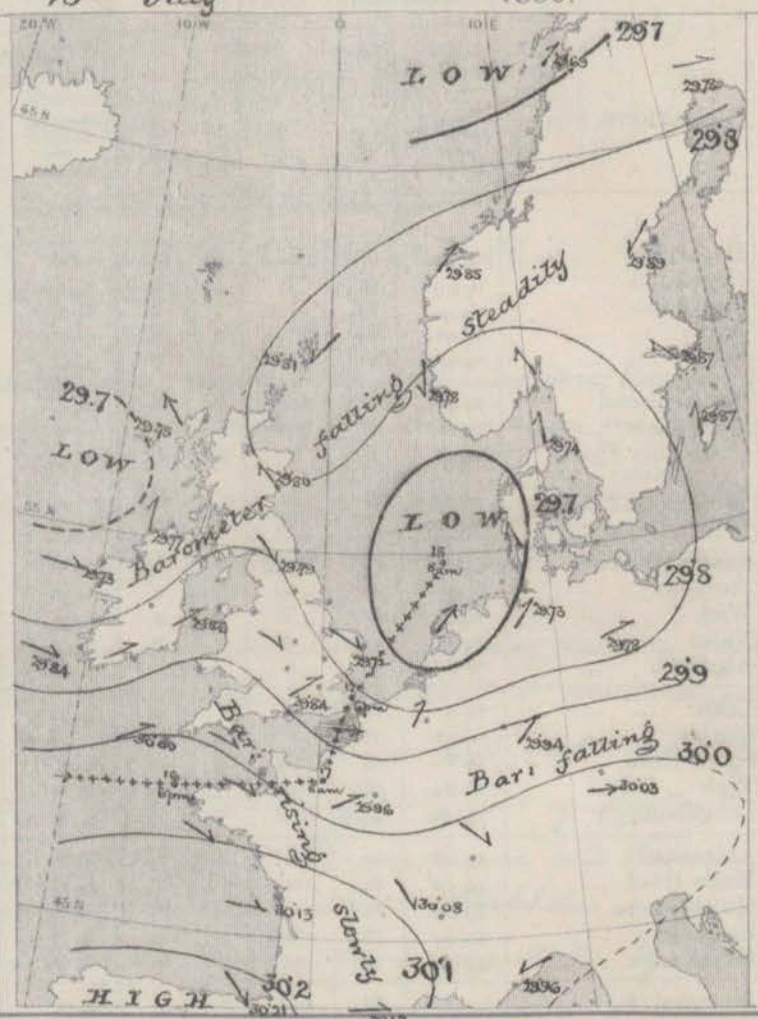
WIND - Arrows shew the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—
= forces above 10; = forces 8 to 10;
= forces 5 to 7; = forces 1 to 4.
= dead calm.

SEA DISTURBANCE—Where considerable, is shewn thus:
= Rough. = High.

MEAN HEIGHT OF THE BAROMETER

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

STATIONS.	MEAN READINGS. ins.
Sumburgh Head	29·794
Stornoway	29·797
Wick	29·810
Nairn	29·821
Aberdeen	29·831
Leith	29·850
Shields	29·876
York	29·919
Loughborough	29·936
Ardrossan	29·862
Donaghadee	29·881
Holyhead	29·918
Liverpool	29·913
Parsonstown	29·921
Valencia	29·939
Roche's Point	29·938
Pembroke	29·942
Scilly	29·984
Jersey	30·009
Hurst Castle	29·974
Dover	29·970
LONDON	29·967
Oxford	29·953
Cambridge	29·947
Yarmouth	29·943



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

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

WEATHER is shown by Letters of the Beaufort Scale.

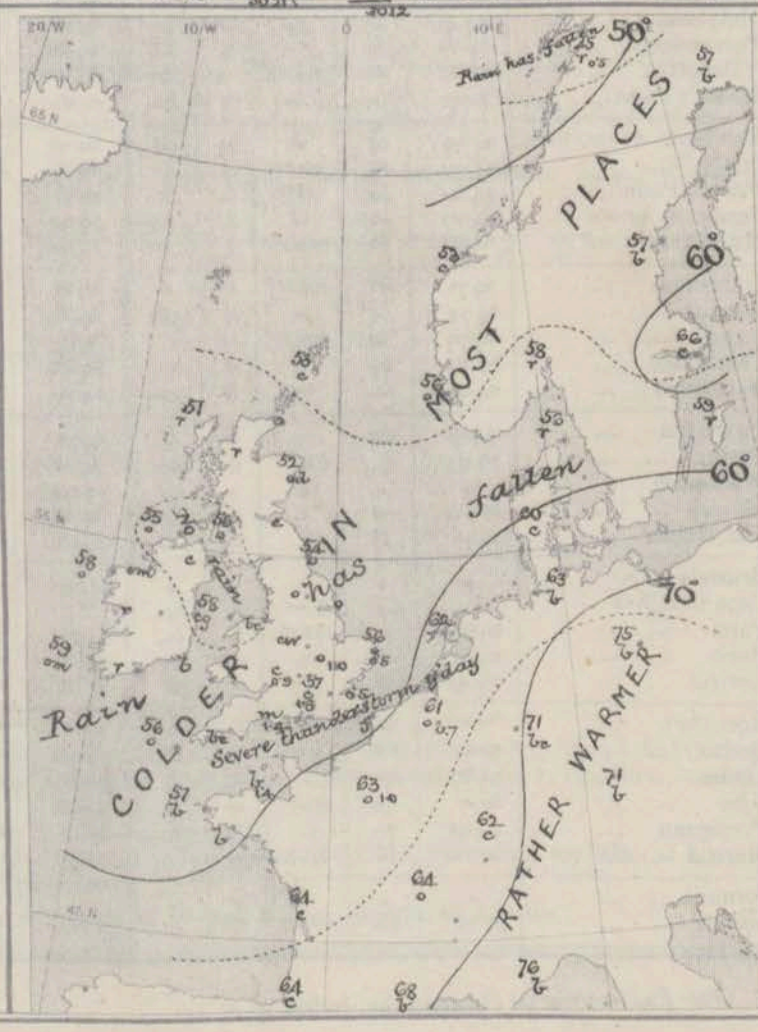
RAINFALL—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0·5 in. or more are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of July.)

STATIONS.	TEMPERATURE. Daily Max.	Daily Min.	at 8 a.m. Dry.	Wet.	RAINFALL. (Inches.)
Sumburgh Head	57·8	48·3	53·6	52·0	2·09
Stornoway	60·2	49·5	56·0	54·0	3·02
Wick	62·2	49·2	56·1	53·8	2·25
Nairn	61·7	51·4	57·2	53·6	2·57
Aberdeen	64·4	51·1	58·0	54·4	2·74
Leith	67·1	51·7	58·6	55·3	2·84
Shields	64·4	52·9	58·5	55·4	2·63
York	68·5	52·1	59·4	56·2	2·57
Loughborough	72·1	53·0	62·0	58·2	2·34
Ardrossan	63·9	53·2	57·5	54·8	2·91
Donaghadee	63·1	51·6	57·4	55·0	2·67
Holyhead	63·9	54·7	58·2	55·9	2·32
Liverpool	66·1	54·4	59·6	55·9	2·99
Parsonstown	66·4	51·9	58·3	54·8	3·01
Valencia	64·1	53·6	58·7	56·3	3·91
Roche's Point	66·7	53·3	58·7	55·8	3·16
Pembroke	62·9	55·0	58·1	55·9	2·31
Scilly	64·5	56·3	60·1	58·0	2·29
Jersey	68·8	56·3	62·2	59·2	2·21
Hurst Castle	67·9	55·7	61·3	58·8	2·15
Dover	67·2	56·9	62·6	58·8	1·82
LONDON	73·0	54·1	62·3	58·1	2·17
Oxford	69·9	53·7	60·2	56·8	2·51
Cambridge	72·3	52·4	61·4	57·9	2·30
Yarmouth	66·8	55·2	61·2	58·1	2·68

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



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30.2 in. to 30.0 in. over the Bay of Biscay, Spain and the greater part of France.
Lowest, 29.7 in. and less in a depression over the North Sea, and apparently in the new depression off our northwestern coasts.
Gradients moderate for 6th winds over the southern half of our area, slight and very variable in the north.
Barometer rising somewhat in the south, falling in the west and north.

TEMPERATURE

Highest, 76° at Nice, 75° at Berlin, 71° at Munich and Wiesbaden
Lowest, 45° at Bodö, 51° at Stornoway, 52° at Aberdeen and 53° at Parsonstown; below 60° over Scotland and Ireland generally.
It rose to between 70° and 74° over England yesterday; over our southern counties the air was very close and oppressive.

WIND

Mainly W.ly over the southern half of our area, very variable elsewhere; SE.ly in Scotland, SE.ly to S.ly on the eastern shores of the North Sea.

WEATHER

Fair, for the time being, over the southwestern parts of England, rainy in Ireland, Scotland, and over the North Sea; very unsettled generally. Severe thunderstorms occurred yesterday over France and the South and southeast of England. The largest rainfalls were, 1.8 in. in London, 1.4 in at Hurst Castle and Jersey, 1.0 in at Cambridge and Paris and 0.9 in. at Oxford.

SEA.

Moderate in the southwest and south, slight or smooth elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The new disturbance seems likely to cause much rain in the west and north, and smaller quantities in the south and east.

FORECASTS

For the 24 hours ending at NOON on 19th JULY 1890.

DISTRICTS.	FORECASTS.
0 SCOTLAND NORTH	SE.ly to SW.ly winds; rainy, and thundery at times.
1 SCOTLAND EAST	
2 ENGLAND N.E.	
3 ENGLAND EAST	NW.ly to SW.ly winds; unsettled, rain at times. Bright intervals.
4 MIDLAND COUNTIES	
5 ENGLAND SOUTH	
6 SCOTLAND WEST	Same as No. 0 and 2.
7 ENGLAND N.W.	S.ly and SW.ly winds; unsettled, very rainy at times.
8 ENGLAND S.W.	
9 IRELAND NORTH	
10 IRELAND SOUTH	
WARNINGS	NONE ISSUED.

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

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

YESTERDAY'S 2 P.M. REPORTS.

	BAR:	THER: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Skudesnaes ...	30·09	61	53	W	2	c	2
Sumburgh Head	30·00	57	50	Z	0	c	0
Stornoway	29·97	57	57	SW	3	c	3
Aberdeen	29·99	57	54	SE	2	cm	1
Shields	29·99	54	53	E	2	r	2
Ardrossan	29·98	63	55	NW	2	b	1
Malin Head ...	30·04	58	53	NW	2	c	0
Mullaghmore ...	30·05	59	54	WNW	2	bv	2
Belmullet	30·08	59	54	W	2	b	*

	BAR:	THER: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Holyhead	29·99	58	55	N	4	b	2
Valencia	30·12	61	55	NW	3	bc	3
Scilly	29·94	57	56	N	4	o	2
Jersey	29·88	62	61	WNW	2	o	2
Dungeness	29·85	63	61	E	1	rZL	1
London	29·84	72	66	NNE	2	og	*
Yarmouth	29·90	64	62	ENE	1	b	2
Rochefort	30·06	73	67	NW	4	bc	?

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

Weather fine over Ireland, Scotland, and nearly the whole of the Continent. Dull and unsettled in England and the west of France, with rain in many places and thunderstorms at Raz de Point, Lorient, and Rochefort. Smart thunderstorms occurring later over the whole of the south of England and the north of France, with very heavy rain in places; rain also setting in in the Hebrides.

Temperature highest 89° at Trieste, 81° at Barcelona, Aumale, and Constantinople, and 80° at La Calle; above 70° in Belgium, Italy, Austria, and the southern parts of France and Russia. Lowest 48° at Bodo, 51° at Christiansund, 53° at Stornoway, and 54° at Skudesnaes, Sumburgh Hd., Shields, and Parsonstown. Rising during day to 70° or more at several of the English stations and to 80° or more over Germany and Central France, the highest reading of all being 89° at Lyons.

Wind light from the NE.ly over the greater part of England, from the N.ly in Ireland, and from the NW.ly in the west of France. Variable in Scotland, SW.ly over Finland and the greater part of Scandinavia, light from NE. in the south of Russia, and from NW. in Austria, Italy, and the central parts of the Mediterranean; S.ly in Algeria. Subsequently backing to the W.ly in the extreme west and north of our Islands, and also over the English Channel.

Barometer highest, 30·1 ins: and upwards, in three distinct areas, one lying to the westward of our Islands and Portugal, another over Germany, Denmark, and the eastern parts of the North Sea, and a third over Central Russia. Lowest, 29·8 ins: and less, over the White-Sea and also over Asia Minor; 29·9 ins: and less, in a well defined but shallow depression lying over the north of France. Depression subsequently moving northeastwards to the Straits of Dover; new disturbance beginning to approach the northwest 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 Saturday 19th JULY, 1890.

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

	STATIONS.	YESTERDAY EVENING. Barom: Reading at 32° F. and Sea Level.	Temp. Dry.	Wind. Direc.	Force. (0 to 12.)	Weather.	8 A.M. TO DAY. Barometer. Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Shade Temp. Dry.	Wet.	Difference from 8 a.m. yesterday.	Wind. Direc.	Force. (0 to 12.)	Weather.	Sea. (0 to 6.)	PAST 24 HOURS. Shade Temp. Max.	Min.	Amount of Rainfall.
SCANDINAVIA.	Haparanda ...	29.67	57	SW	2	c	29.58	− .20	51	50	0	WNW	2	b	*	63	46	—
	Hernösand ...	29.70	54	L	0	r	29.69	− .20	54	48	− 3	N	6	c	*	66	46	0.08
	Stockholm ...	29.64	57	L	0	o	29.58	− .19	57	55	− 9	NE	4	o	*	68	52	0.75
	Wisby	29.63	62	S	4	b	29.59	− .28	62	57	+ 3	SW	6	bc	*	70	55	0.12
	Bodö	29.66	46	WSW	6	o	29.75	+ .06	47	45	+ 2	WSW	4	bc	2	48	43	0.47
	Christiansund	29.80	53	N	3	b	29.87	+ .02	52	46	− 1	N	3	c	2	55	45	—
	Skudesnaes ...	29.71	54	NW	6	c	29.78	.00	54	50	− 2	NW	6	o	4	54	52	—
	Christiania Fjord (Færder)	29.62	55	NNE	5	o	29.61	− .17	56	52	− 2	NNE	8	o	3	58	54	0.87
	Skagen (The Scaw)	29.37	59	E	2	r	29.55	− .19	55	54	− 1	NE	6	m	5	59	52	1.30
	Fanö	29.67	55	NW	6	c	29.78	+ .12	59	54	− 1	NW	4	c	*	66	54	—
BRITISH ISLANDS.	Sumburgh Head	29.85	54	NE	2	b	29.97	+ .16	52	49	− 1	N	3	b	3	56	46	—
	Stornoway ...	29.84	56	NE	4	o	30.06	+ .31	55	54	+ 4	E	3	c	3	57	48	0.04
	Wick	29.85	57	E	1	b	30.06	+ .26	53	49	− 2	NE	2	c	1	62	? 39	—
	Nairn	29.83	55	E	1	o	30.05	+ .26	54	50	+ 1	E	1	bc	1	56	50	0.38
	Aberdeen ...	29.84	53	E	2	o	30.04	+ .24	52	50	0	N	2	c	3	56	45	0.06
	Leith	29.79	57	NE	1	o	30.03	+ .24	59	54	+ 4	E	3	bc	*	63	52	0.05
	Shields	29.81	55	E	2	o	29.95	+ .16	55	52	+ 1	NNE	3	c	4	59	51	0.06
	Spurn Head ...	29.70	57	NE	3	o	29.88	+ .12	54	52	− 2	NNE	4	o	4	61	53	0.38
	York	29.81	61	W	1	o	29.93	+ .13	55	54	− 2	N	2	o	*	65	51	0.27
	Loughborough	29.80	59	S	1	o	29.89	+ .05	54	53	− 6	NNE	3	o	*	69	53	0.48
	Ardrossan ...	29.81	55	L	0	c	30.00	+ .20	59	53	+ 3	W	3	b	2	59	53	0.09
	Malin Head ...	29.78	56	E	3	o	30.04	+ .27	56	54	+ 1	NNW	2	o	0	60	53	0.03
	Mullaghmore ...	29.78	60	NNW	3	o	30.05	+ .28	58	55	+ 2	NNE	2	o	2	61	56	—
	Belmullet ...	29.80	58	N	1	o	30.09	+ .36	59	55	− 1	NW	1	o	*	61	54	0.04
	Donaghadee ...	29.80	56	SSW	2	o	30.01	+ .17	59	56	0	NE	3	b	1	63	54	0.07
	Liverpool (Bidston)	29.80	55	ESE	1	r	29.94	+ .09	59	54	0	NNE	2	o	3	62	52	0.25
	Holyhead ...	29.77	55	E	3	rmg	29.97	+ .11	59	55	− 1	N	4	cgm	3	60	54	0.12
	Parsonstown ...	29.77	61	L	0	o	30.01	+ .21	59	57	+ 6	L	0	c	*	61	52	0.26
	Valencia	29.89	59	WNW	4	omq	30.08	+ .24	58	57	− 1	W	1	o	2	60	55	0.28
	Roche's Point ...	29.78	62	NW	4	c	30.03	+ .19	62	58	+ 5	N	3	b	3	64	55	0.10
	Pembroke (St. Ann's Hd.)	29.79	56	WSW	3	o	29.97	+ .04	59	55	+ 2	N	4	bc	3	58	53	0.25
	Scilly	29.90	58	WSW	4	f	29.97	− .03	58	57	+ 2	NW	4	o	3	59	54	0.24
	Prawle Point ...	29.87	56	W	5	f	29.91	− .06	60	59	+ 2	NW	5	bc	3	60	53	0.37
	Jersey (St. Aubin's)	30.01	62	SW	5	ogmd	29.94	− .05	59	58	− 1	W	5	ogm	3	63	57	0.26
	Hurst Castle ...	29.89	56	SW	6	md	29.85	− .05	59	59	+ 1	NNW	3	cg	4	67	56	0.20
	Dungeness ...	29.88	59	W	6	o	29.72	− .09	59	59	+ 1	WSW	6	rq	?	67	?	0.20
	London	29.90	60	SW	2	or	29.79	− .05	57	56	0	NNW	3	or	*	68	55	0.47
	Oxford	29.83	55	SSE	1	r	29.85	− .02	56	54	− 1	NNW	4	og	*	66	55	0.49
	Cambridge ...	29.85	61	W	1	r	29.82	.00	55	54	− 1	N	2	r	*	68	53	0.56
	Yarmouth ...	29.84	57	NNE	2	bc	29.74	+ .02	55	55	− 1	NE	8	o	6	61	54	1.09
GERMANY & HOLLAND.	Cuxhaven ...	29.70	58	W	4	r	29.83	+ .10	58	57	− 5	W	2	bc	*	70	58	0.08
	Berlin	29.83	66	WSW	3	bc	29.90	+ .12	60	56	− 15	W	3	o	*	84	57	—
	Wiesbaden ...	*	*	*	*	*	29.97	+ .03	63	59	− 8	SW	2	o	*	72	59	0.04
	Munich	30.14	59	SW	1	r	30.08	+ .05	63	58	− 8	SW	4	c	*	77	55	0.47
	The Helder ...	29.87	57	WNW	2	o	29.79	+ .16	57	56	− 5	S	1	r	1	61	55	0.79
FRANCE AND BELGIUM.	Brussels (9 a.m.)	*	*	*	*	*									*			
	Cape Gris Nez																	
	Paris	30.04	65	WNW	3	c	29.93	− .03	59	58	− 4	SW	3	c	*	71	55	0.24
	Brest	30.01	59	WSW	4	r	30.02	− .01	59	57	0	WNW	3	o	4	63	52	0.04
	Lorient	30.10	58	WSW	5	r	30.02	− .06	58	57	+ 1	WNW	4	o	4	63	57	0.35
	Rochefort ...	30.26	64	WNW	5	bc	30.15	+ .02	63	63	− 1	WSW	5	?	3	68	55	0.08
	Belfort	30.09	68	NW	1	b	30.05	+ .13	59	50	− 3	NW	1	b	*	84	54	0.12
	Lyons	30.11	70	WNW	2	bc	30.13	+ .05	60	55	− 4	ESE	1	o	*	74	53	0.04
	Nice	29.86	80	L	0	b	29.96	.00	67	64	− 9	SW	1	b	0	82	61	—
	Perpignan ...	30.14	74	W	4	c	30.17	+ .05	67	59	− 1	NW	4	bc	*	78	60	—
	Biarritz	30.28	66	N	3	o	30.28	+ .07	61	58	− 3	WSW	3	b	2	70	57	—
PENINSULA.	Corunna	*	*	*	*	*												
	Lisbon	30.13	66	NNW	5	b	30.13	− .02	70	59	+ 7	N	4	b	?	75	64	—

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

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

WEATHER CHARTS

for 8 a.m. on Saturday, 19th July, 1890.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP.

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

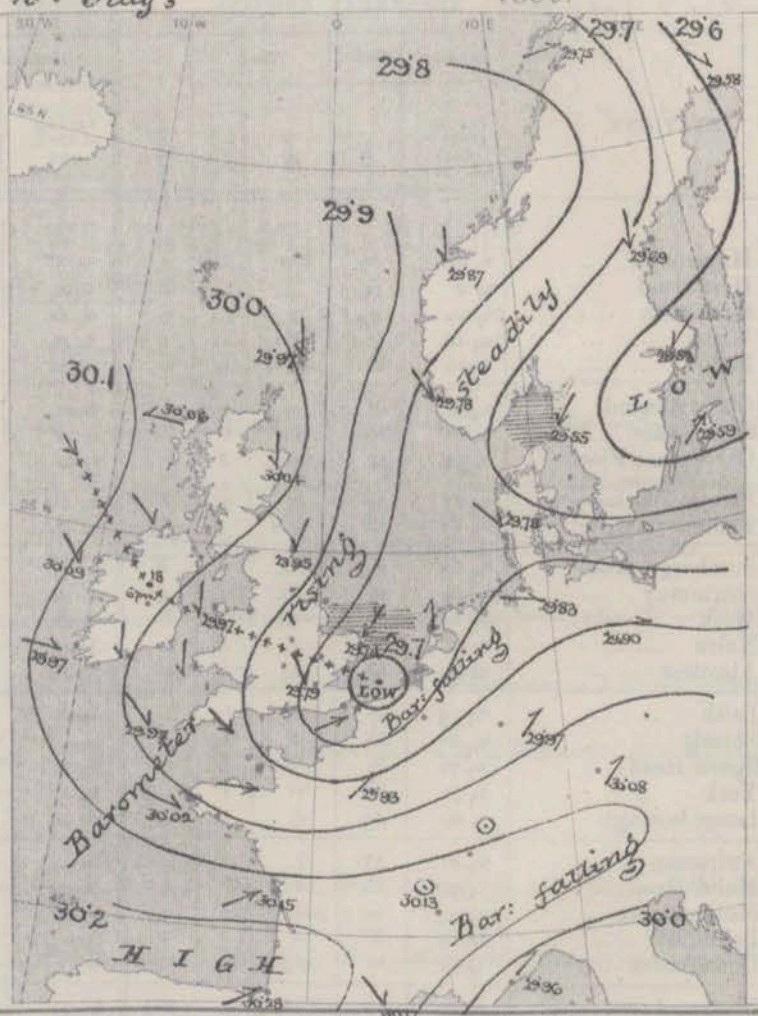
WIND - Arrows shew the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—
= forces above 10; = forces 8 to 10;
= forces 5 to 7; = forces 1 to 4.
= dead calm.

SEA DISTURBANCE—Where considerable, is shewn thus:
= Rough. = High.

MEAN HEIGHT OF THE BAROMETER

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

STATIONS.	MEAN READINGS.
	ins.
Sumburgh Head	29 · 794
Stornoway	29 · 797
Wick	29 · 810
Nairn	29 · 821
Aberdeen	29 · 831
Leith	29 · 850
Shields	29 · 876
York	29 · 910
Loughborough	29 · 936
Ardrossan	29 · 862
Donaghadee	29 · 881
Holyhead	29 · 918
Liverpool	29 · 913
Parsonstown	29 · 921
Valencia	29 · 939
Roche's Point	29 · 938
Pembroke	29 · 942
Scilly	29 · 984
Jersey	30 · 009
Hurst Castle	29 · 974
Dover	29 · 970
LONDON	29 · 967
Oxford	29 · 953
Cambridge	29 · 947
Yarmouth	29 · 943



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.

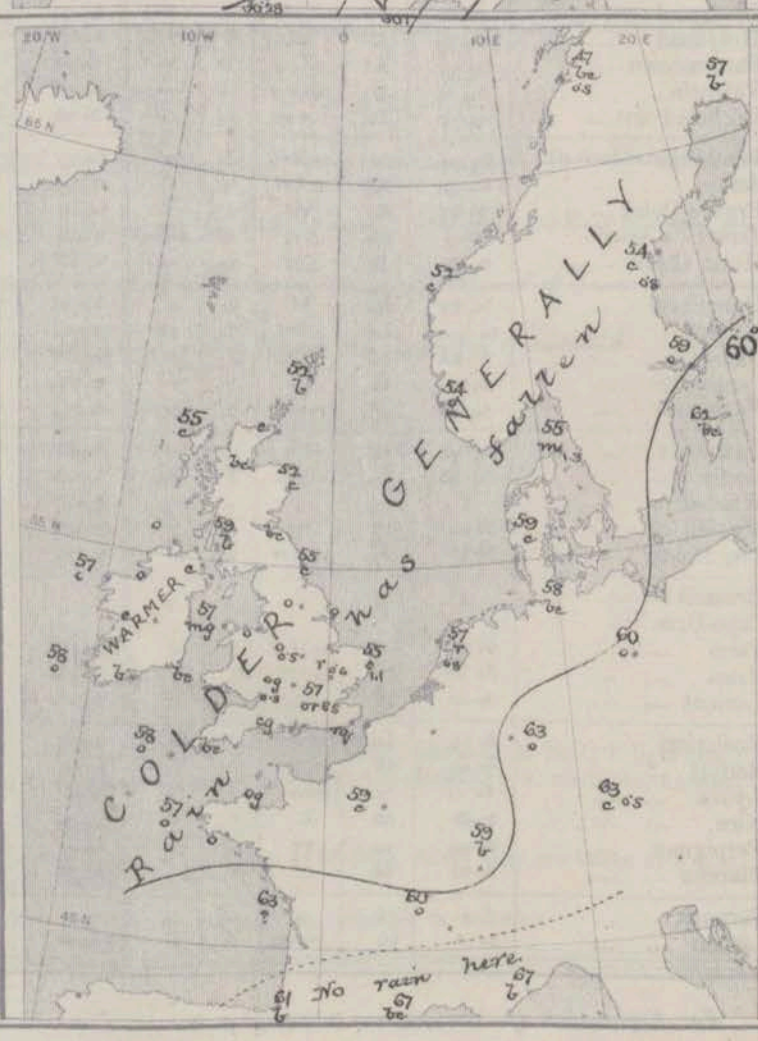
RAINFALL—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0·5 in. or more are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of July.)

STATIONS.	TEMPERATURE. Daily Max.	Daily Min.	at 8 a.m. Dry.	Wet.	RAINFALL (Inches.)
Sumburgh Head	57 · 8	48 · 3	53 · 6	52 · 0	2 · 09
Stornoway	60 · 2	49 · 5	56 · 0	54 · 0	3 · 02
Wick	62 · 2	49 · 2	56 · 1	53 · 8	2 · 25
Nairn	64 · 7	51 · 4	57 · 2	53 · 6	2 · 57
Aberdeen	64 · 4	51 · 1	58 · 0	54 · 4	2 · 74
Leith	67 · 1	51 · 7	58 · 6	55 · 3	2 · 84
Shields	64 · 4	52 · 9	58 · 6	55 · 4	2 · 63
York	68 · 5	52 · 1	59 · 4	56 · 2	2 · 57
Loughborough	72 · 1	53 · 0	62 · 0	58 · 2	2 · 34
Ardrossan	63 · 9	53 · 2	57 · 5	54 · 8	2 · 91
Donaghadee	63 · 1	51 · 6	57 · 4	55 · 6	2 · 67
Holyhead	63 · 9	54 · 7	58 · 2	55 · 9	2 · 32
Liverpool	66 · 1	54 · 4	59 · 6	55 · 9	2 · 99
Parsonstown	66 · 4	51 · 9	58 · 3	54 · 8	3 · 61
Valencia	64 · 1	53 · 6	58 · 7	56 · 3	3 · 91
Roche's Point	66 · 7	53 · 3	58 · 7	55 · 8	3 · 16
Pembroke	62 · 9	55 · 0	58 · 1	55 · 9	2 · 31
Scilly	64 · 5	56 · 3	60 · 1	58 · 0	2 · 29
Jersey	68 · 8	56 · 3	62 · 2	59 · 2	2 · 21
Hurst Castle	67 · 9	55 · 7	61 · 3	58 · 8	2 · 15
Dover	67 · 2	56 · 9	62 · 6	58 · 8	1 · 82
LONDON	73 · 0	54 · 1	62 · 3	58 · 1	2 · 17
Oxford	69 · 9	53 · 7	60 · 2	56 · 8	2 · 51
Cambridge	72 · 3	52 · 4	61 · 4	57 · 9	2 · 30
Yarmouth	66 · 8	55 · 2	61 · 2	58 · 1	2 · 68

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



GENERAL SITUATION AT 8 A.M.

PRESSURE	Highest, 30.0 in. and more over Scotland and Ireland, and 30.0 in. to nearly 30.3 in. over the greater part of France and the Spanish Peninsula. Lowest, 29.6 in. and less over the south of Sweden; 29.7 in. and less in the secondary disturbance off our southeastern coast. Gradients moderate generally – for N.ly winds in our islands, and for W.ly to SW.ly over France and Germany. Barometer rising decidedly over the United Kingdom, falling in Holland and over the Baltic.
TEMPERATURE	Highest, 67° at Nice and Perpignan, 63° at Rochefort, Munich and Wiesbaden, 62° at Roche's Point; elsewhere it is below 60°. Lowest, 47° at Bodö, 52° at Christiansund, Lerwick Head and Aberdeen, 54° at Skudesnes, Nairn and Spurn Head. The daily maxima recorded over England yesterday were as low as 60° to 68°; those over the Continent were higher.
WIND	N.ly, and moderate, over the greater part of the Kingdom (Mt. gale at Yarmouth) W.ly, fresh in the west of France, SW.ly in the northeast of France, S.ly at the Helder.
WEATHER	Clear in the south of France, cloudy in most other places, very rainy over the southeast of England and at the Helder. Rainfall measured this morning was 1.1 in. at Yarmouth, 1.3 in at the Scaw and about 0.5 in. at our Midland and Home stations.
SEA	Rough at Yarmouth and at the Scaw, moderate or slight at most other stations

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

As the depression in the southeast passes off an improvement in the weather is probable over England, but with very low temperature at night.

FORECASTS

For the 24 hours ending at NOON on 20th JULY 1890.

DISTRICTS.	FORECASTS.	DISTRICTS.	FORECASTS.
0 SCOTLAND NORTH 1 SCOTLAND EAST 2 ENGLAND N.E.	N.ly and NE.ly breezes; fair generally. Cold tonight.	6 SCOTLAND WEST 7 ENGLAND N.W. 8 ENGLAND S.W. 9 IRELAND NORTH 10 IRELAND SOUTH	NW.ly and N.ly winds, moderate or light; fair generally.
3 ENGLAND EAST	NE.ly winds, moderating with improving weather.		
4 MIDLAND COUNTIES 5 ENGLAND SOUTH	N.ly winds, fresh to light; weather improving. Cold tonight.	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: D.	THER: W.	WIND D.	WIND F	WEA	SEA		BAR:	THER: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Skudesnaes ...	29.68	52	52	SW	2	o	2	Holyhead	29.82	55	53	SSW	3	rmg	2
Sumburgh Head	29.82	56	52	NE	3	b	3	Valencia	29.86	59	59	W	3	rm	4
Stornoway	29.79	57	56	NE	3	c	2	Scilly	29.92	58	58	WSW	3	r	2
Aberdeen	29.80	55	53	S	1	o	2	Jersey	30.07	62	58	WSW	5	o	3
Shields	29.79	56	54	ESE	2	o	3	Dungeness	29.87	65	61	W	4	c	3
Ardrossan	29.80	57	53	Z	o	o	o	London	29.89	67	59	WSW	3	c	*
Malin Head ...	29.77	57	55	ENE	2	o	o	Yarmouth	29.84	57	56	WNW	2	o	2
Mullaghmore ...	29.74	60	56	ESE	2	o	1	Rochefort	30.24	68	62	WNW	5	b	?
Belmullet	29.76	59	58	NW	1	om	*								

GENERAL REMARKS ON THE WEATHER OVER EUROPE

DURING THE PAST 24 HOURS.

Weather fair over the central and southern parts of England and fine at most of the Continental stations. Rainy over Ireland, Scotland, the North Sea, and some parts of Scandinavia. Rainy weather extending later to nearly all parts of our Islands and France,— further large amounts reported over the south and southeast of England.

Temperature highest 85° at Spezzia, 82° at Barcelona, and 80° at Rome, Palermo, and Constantinople, above 70° in many parts of Central, Southern, and Eastern Europe. Lowest 45° at Bodö, 51° at Stornoway, 52° at Aberdeen, and 53° at Parsontown; below 60° in nearly all parts of our Islands and Scandinavia. Daily maxima below 60° at some of our western and northern stations and below 70° over our Islands generally, but thermometer exceeding 80° in some parts of France.

Wind light or moderate from the NWrd over the greater part of England and France, and from the Nrd in Spain. Srd or SErd in the northern parts of the United Kingdom as well as over Denmark, the south of Scandinavia, Eastern Germany, and Austria. SWrd in Finland and the north of Scandinavia, variable in Algeria, Italy, and the south of Russia. Subsequently backing to the SWrd over the south of England, but veering to the NWrd in Ireland.

Barometer highest, 30·2 ins. and upwards, in an anticyclone lying over the north of Spain; 30·0 ins. and upwards, over Central Russia. Lowest, 29·7 ins. and less, in three depressions; one lying to the NWrd of Norway, another over the North Sea, with its centre near the Dogger Bank, and the third off the west of Scotland. North Sea disturbance subsequently travelling northeastward to the south of Sweden; low pressure system off our northwest coast, moving southeastwards over Ireland.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

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

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

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

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

DAILY WEATHER REPORT.

for Sunday 20th JULY, 1890.

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

	STATIONS.	YESTERDAY EVENING. Barom.: Reading at 32° F. and Sea Level.	Temp. Dry.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	8 A.M. TO DAY. Barometer. Reading at 32° F. and Sea Level.	Barometer. Difference from 8 a.m. yesterday.	Shade Temp. Dry.	Shade Temp. Wet.	Shade Temp. Difference from 8 a.m. yesterday.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	Sea. (0 to 9.)	PAST 24 HOURS. Shade Temp. Max.	Shade Temp. Min.	Amount of Rainfall.
SCANDINAVIA.	Haparanda ...	29.98	50	NNW	2	b	29.92	+ .34	55	49	— 2	S	2	b	*	54	45	—
	Hernösand ...	29.95	58	Z	0	b	29.98	+ .29	58	50	+ 4	N	2	b	*	?	46	—
	Stockholm ...	29.83	55	NNW	2	b	29.95	+ .37	59	50	+ 2	NNE	4	b	*	64	48	—
	Wisby	29.78	57	ENE	4	0	29.84	+ .25	59	54	— 3	N	4	0	*	63	55	—
	Bodö	29.97	49	WSW	2	0	29.91	+ .16	53	49	+ 6	SSW	2	0	1	53	45	—
	Christiansund	29.98	53	NW	2	c	30.01	+ .14	52	49	0	WSW	1	b	2	55	46	—
	Skudesnaes ...	29.91	53	NNW	7	c	30.01	+ .23	55	51	+ 1	NNW	6	b	3	58	50	—
	Christiania Fjord (Færder)	29.83	60	ENE	3	c	29.97	+ .36	58	55	+ 2	NNE	3	0	1	61	53	0.16
	Skagen (The Scaw)	29.96	57	NNE	1	r	29.90	+ .35	58	57	+ 3	E	1	0	2	?	54	0.16
	Fanö	29.84	55	NW	2	0	29.84	+ .00	59	57	0	Z	0	c	*	61	54	—
BRITISH ISLANDS.	Sumburgh Head	30.08	53	NNW	3	b	30.09	+ .12	54	52	+ 2	W	2	0	2	57	47	—
	Stornoway ...	30.18	57	N	3	b	30.16	+ .10	57	56	+ 2	W	3	0	3	58	49	0.01
	Wick	30.15	54	N	2	bc	30.15	+ .09	60	56	+ 7	N	2	0	1	60	42	—
	Nairn	No Observations taken					30.20	+ .15	56	52	+ 2	WSW	2	bc	1	60	42	—
	Aberdeen ...	30.14	54	NW	3	c	30.22	+ .18	53	50	+ 3	WNW	3	c	2	57	42	—
	Leith	30.13	59	SE	1	b	30.23	+ .20	58	52	— 1	W	1	bc	*	62	45	—
	Shields	30.11	59	N	3	c	30.22	+ .27	53	50	— 2	NNW	3	c	3	60	45	—
	Spurn Head ...	30.05	57	N	6	b	30.19	+ .31	55	50	+ 1	N	5	0	4	59	50	—
	York	30.10	59	NNE	3	b	30.23	+ .30	57	52	+ 2	N	1	b	*	63	42	0.03
	Loughborough	30.10	61	N	3	b	30.26	+ .37	55	51	+ 1	NNW	2	omw	*	65	49	—
	Ardrossan ...	30.12	64	WNW	3	b	30.25	+ .25	57	54	— 2	WNW	3	bc	2	64	51	—
	Malin Head ...	30.17	58	NNW	3	b	30.27	+ .23	54	55	+ 3	W	3	0	1	61	54	—
	Mullaghmore ...	30.21	62	WNW	4	bc	30.34	+ .29	58	54	0	W	3	0	2	64	53	—
	Belmullet ...	30.25	59	NNW	1	0	30.37	+ .28	58	56	+ 1	W	2	0	*	62	54	—
	Donaghadee ...	30.16	60	N	2	bc	30.29	+ .28	57	54	0	N	2	bc	0	66	54	—
	Liverpool (Bidston)	30.10	62	NW	2	c	30.25	+ .31	56	53	— 1	NNW	3	0	3	65	55	0.01
	Holyhead ...	30.14	57	N	1	b	30.30	+ .33	58	53	+ 1	NNW	3	c	3	60	54	—
	Parsonstown ...	30.16	67	Z	0	b	30.37	+ .36	57	54	— 2	NW	2	bc	*	69	48	—
	Valencia	30.24	60	N	3	bc	30.42	+ .34	60	56	+ 2	N	2	bc	2	62	54	—
	Roche's Point ...	30.18	63	N	1	bc	30.39	+ .36	58	54	— 4	NNW	3	b	3	66	54	—
	Pembroke (St. Ann's Hd.)	30.15	60	N	4	b	30.32	+ .35	59	56	+ 2	NNW	3	b	1	62	52	—
	Scilly	30.16	59	NNW	4	bc	30.33	+ .36	59	58	+ 1	N	2	b	2	60	55	—
	Prawle Point ...	30.10	61	Z	0	c	30.29	+ .35	66	60	+ 6	NNW	2	b	1	67	52	—
	Jersey (St. Aubin's)	30.07	62	NNW	3	bc	30.29	+ .35	65	59	+ 6	Z	0	bm	0	65	55	—
	Hurst Castle ...	30.07	65	NW	2	b	30.28	+ .43	58	55	— 1	NNE	2	b	2	65	48	—
	Dungeness ...	29.99	60	N	4	c	30.19	+ .47	55	50	— 4	NNW	4	bc	2	63	46	0.02
	London	30.07	58	N	3	ep	30.24	+ .45	55	50	— 2	NNW	2	bc	*	62	46	0.01
	Oxford	30.14	56	NNE	3	b	30.27	+ .42	55	50	— 1	NNW	2	0	*	63	46	—
	Cambridge ...	30.06	59	N	2	b	30.23	+ .41	59	51	+ 2	N	2	b	*	63	45	0.03
	Yarmouth ...	29.97	56	N	3	bc	30.14	+ .40	55	52	0	NNW	2	c	3	58	50	0.59
GERMANY & HOLLAND.	Cuxhaven ...	29.93	55	NNE	3	r	29.82	— .01	54	53	— 4	NNE	4	r	*	60	54	0.88
	Berlin	29.85	67	SSW	2	c	29.82	— .08	67	61	+ 7	SSW	3	c	*	72	60	—
	Wiesbaden ...	*	*	*	*	*	29.98	+ .01	57	53	— 6	NW	4	0	*	66	55	0.08
	Munich	30.02	62	SW	4	0	30.04	— .04	54	54	— 9	NW	3	r	*	72	54	0.04
	The Helder ...	29.89	55	NNE	4	0	30.01	+ .22	56	54	— 1	N	4	0	4	57	54	0.39
FRANCE AND BELGIUM.	Brussels (9 a.m.)	*	*	*	*	*	30.09		55	52		NW	2	0	*	64	51	0.47
	Cape Gris Nez	29.99	58	N	6	c	30.25		54	51		N	6	0	6	61	52	0.16
	Paris	29.99	63	NNW	4	bc	30.19	+ .26	54	51	— 5	NNW	4	bc	*	71	50	0.08
	Brest	30.08	60	N	3	bc	30.26	+ .24	55	55	— 2	N	1	m	1	64	48	—
	Lorient	30.07	63	WNW	4	bc	30.27	+ .25	55	54	— 3	NNE	2	c	3	63	54	—
	Rochefort ...	30.14	64	W	4	0	30.25	+ .10	60	57	— 3	NE	5	c	?	66	54	0.08
	Belfort	? 29.91	61	NW	1	bc	? 30.05	.00	59	50	0	NW	1	c	*	69	46	0.28
	Lyons	30.04	65	N	1	0	30.11	— .02	55	54	— 5	NNE	3	0	*	69	54	0.39
	Nice	29.84	77	S	1	b	29.84	— .12	64	62	— 3	Z	0	c	1	81	57	—
	Perpignan ...	30.04	78	NW	2	b	30.04	— .13	72	64	+ 5	WSW	2	bc	*	83	64	—
	Biarritz	30.14	64	NW	4	f	30.15	— .13	62	59	+ 1	E	3	of	2	73	61	0.12
PENINSULA.	Corunna	*	*	*	*	*	30.26	— .03	61	60	— 5	NE	5	r	6	70	57	0.08
	Lisbon	30.11	67	NNW	6	b	30.12	— .01	63	54	— 7	N	6	c	4	82	61	—

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

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

WEATHER CHARTS

for 8 a.m. on Sunday, 20th July, 1890.

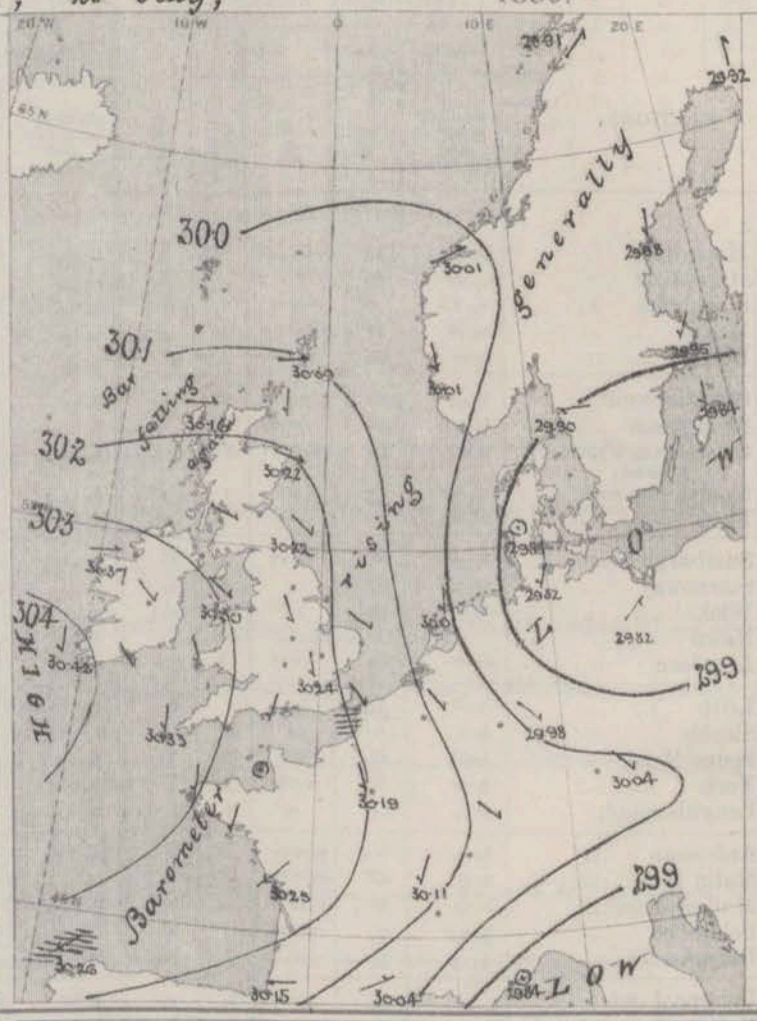
BAROMETER, WIND AND SEA.

EXPLANATION OF MAP.

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

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

SEA DISTURBANCE—Where considerable, is shewn thus:
= Rough. = High.



MEAN HEIGHT OF THE BAROMETER

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

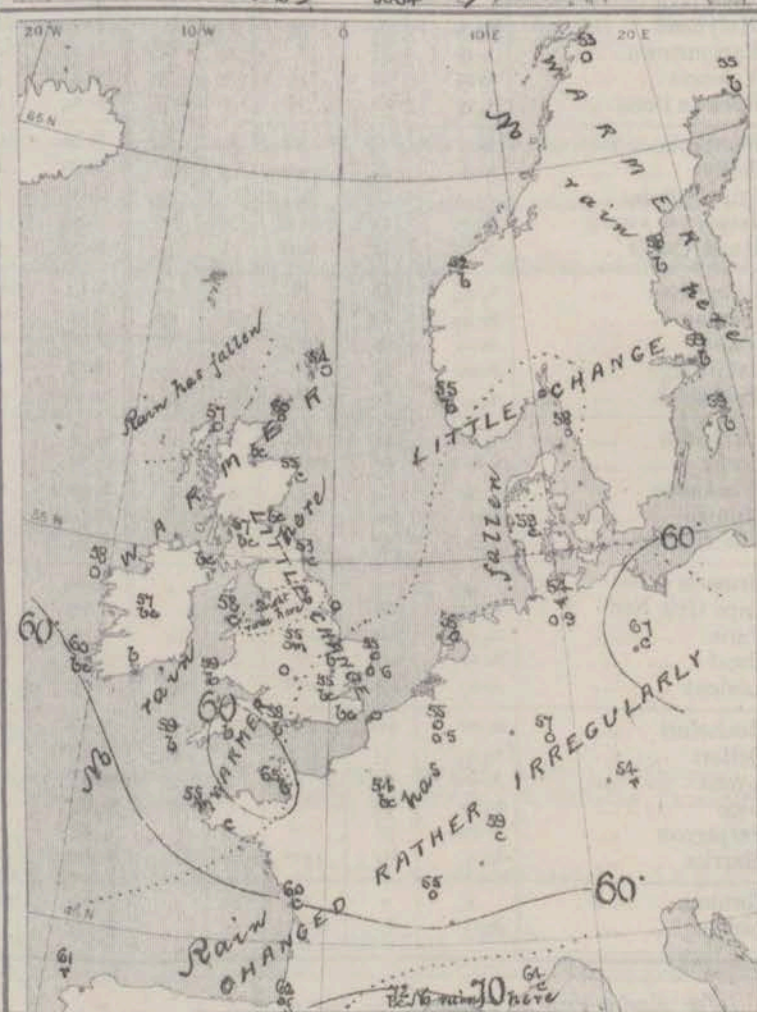
STATIONS.	MEAN READINGS. ins.
Sumburgh Head	29·794
Stornoway	29·797
Wick	29·810
Nairn	29·821
Aberdeen	29·831
Leith	29·850
Shields	29·876
York	29·910
Loughborough	29·936
Ardrossan	29·862
Donaghadee	29·881
Holyhead	29·918
Liverpool	29·913
Parsonstown	29·921
Valencia	29·939
Roche's Point	29·938
Pembroke	29·942
Scilly	29·984
Jersey	30·009
Hurst Castle	29·974
Dover	29·970
LONDON	29·967
Oxford	29·953
Cambridge	29·947
Yarmouth	29·943

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 July.)

STATIONS.	TEMPERATURE. Daily Max.	Daily Min.	at 8 a.m. Dry.	Wet.	RAINFALL. (Inches.)
Sumburgh Head	57·8	48·3	53·6	52·0	2·09
Stornoway	60·2	49·5	56·0	54·0	3·02
Wick	62·2	49·2	56·1	53·8	2·25
Nairn	64·7	51·4	57·2	53·6	2·57
Aberdeen	64·4	51·1	58·0	54·4	2·74
Leith	67·1	51·7	58·6	55·3	2·84
Shields	64·4	52·9	58·6	55·4	2·63
York	68·5	52·1	59·4	56·2	2·57
Loughborough	72·1	53·0	62·0	58·2	2·34
Ardrossan	63·9	53·2	57·5	54·8	2·91
Donaghadee	63·1	51·6	57·4	55·6	2·67
Holyhead	63·0	54·7	58·2	55·9	2·32
Liverpool	66·1	54·4	59·6	55·9	2·99
Parsonstown	66·4	51·9	58·3	54·8	3·01
Valencia	64·1	53·6	58·7	56·3	3·91
Roche's Point	66·7	53·3	58·7	55·8	3·16
Pembroke	62·9	55·0	58·1	55·9	2·31
Scilly	64·5	56·3	60·1	58·0	2·29
Jersey	68·8	56·3	62·2	59·2	2·21
Hurst Castle	67·9	55·7	61·3	58·8	2·15
Dover	67·2	56·9	62·6	58·8	1·82
LONDON	73·0	54·1	62·3	58·1	2·17
Oxford	69·9	53·7	60·2	56·8	2·51
Cambridge	72·3	52·4	61·4	57·9	2·30
Yarmouth	66·8	55·2	61·2	58·1	2·68

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

GENERAL SITUATION AT 8 A.M.

PRESSURE	Highest, 30·1 ins: to 30·4 ins: and more, over the British Isles, Western Europe, and adjacent parts of Atlantic Lowest, 29·8 ins: and less, in a depression over North Germany, and 29·3 ins: over the Gulf of Genoa. Gradients moderate to slight and decreasing. Barometer rising in most places, but inclined to fall again in north and northwest of our Islands.
TEMPERATURE	Highest, 67° at Berlin, 64° in the south of France, 63° at Keitum, 62° at Biarritz. Lowest, 52° at Christiansund, 53° at Bodö and Shields, 54° at Lumburgh Head, Cuxhaven, and Paris. Daily maxima yesterday ranged from 60° to 67° over the greater part of our Islands, but exceeded 80° at Keitum and in the extreme south of France.
WIND	Moderate NE. over Spain. Moderate N. over France, light to moderate N. over England and the North Sea, W. and backing over Scotland and the north of Ireland
WEATHER	Fair generally over France, England, and Ireland — clear in many places; rainy over North Germany. Rainfall has again been heavy over our eastern counties and at some Continental stations.
SEA	Rough at Cape Gris Nez and Corunna, moderate at Keitum and Spurn Head, slight or smooth elsewhere

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

FORECASTS

For the 24 hours ending at NOON on 24th JULY 1890.

DISTRICTS.	FORECASTS.	DISTRICTS.	FORECASTS.
0 SCOTLAND NORTH	NONE ISSUED.	6 SCOTLAND WEST	NONE ISSUED.
1 SCOTLAND EAST		7 ENGLAND N.W.	
2 ENGLAND N.E.		8 ENGLAND S.W.	
3 ENGLAND EAST		9 IRELAND NORTH	
4 MIDLAND COUNTIES		10 IRELAND SOUTH	
5 ENGLAND SOUTH		WARNINGS	NONE ISSUED.

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

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

YESTERDAY'S 2 P.M. REPORTS.

	BAR	THER: D.	THER: W.	WIND D.	WIND F	WEA	SEA
Skudesnaes ...	29.82	58	53	NW	6	c	2
Sumburgh Head	30.03	55	51	NNW	3	c	3
Stornoway	30.15	59	56	NE	3	bc	3
Aberdeen	30.10	56	49	NNW	3	c	3
Shields	30.07	59	54	NNE	3	c	4
Ardrossan	30.10	62	50	SW	2	b	1
Malin Head ...	30.14	61	57	NW	2	b	0
Mullaghmore ...	30.17	63	54	NW	2	o	2
Belmullet	30.19	61	58	N	3	c	*

	BAR:	THER: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Holyhead	30.10	59	55	NNE	3	b	2
Valencia	30.20	62	55	NNW	3	bc	3
Scilly	30.09	60	57	NNW	4	bc	3
Jersey	30.02	64	60	NNW	4	c	3
Dungeness	29.90	60	55	N	6	c	4
London	29.95	60	55	NNE	3	o	*
Yarmouth	29.91	57	54	NNW	4	bc	4
Rochefort	30.16	64	63	W	5	o	3

GENERAL REMARKS ON THE WEATHER OVER EUROPE

DURING THE PAST 24 HOURS.

Weather fine and bright over Southeastern and Southern Europe generally, and beginning to clear up in many parts of Ireland and Scotland as well as in Lapland; cloudy, changeable and very unsettled elsewhere, with much rain in the Baltic Provinces and over the southeastern counties of England. Considerable falls of rain later over the Netherlands, the extreme east of England, and some parts of France, and smaller quantities over Northern Europe.

Temperature in morning as high as 88° at Malta, Constantinople, and Pesaro, and exceeding 70° at most stations over southern and southeastern Europe, as well as at Moscow. Very low over the northwestern countries; lowest of all 47° at Kobo, 51° at Christiansund, Sumburgh Hd. and Aberdeen, and 52° at Skudesnaes, Nairn, and Spurn Hd. Rising during day to between 60° and 67° over the United Kingdom, and to rather above 80° over the southern parts of France. Exceeding 90° at a few of the Italian stations, and touching 104° at Biskra and Laghouat.

Wind NW³ to NE² over the greater part of the British Isles and North Sea, and blowing a gale both at Faeroe and Lerwick; N⁴, moderate, over Spain, W³ and SW³ over France and Germany, SW³ over the Baltic, variable elsewhere. Gale subsiding in the east later, and light N³ breezes becoming general over the United Kingdom.

Barometer highest, 30.3 ins. to 30.0 ins. over Spain, the southern half of France; 30.0 ins. and more over Ireland, Scotland, and also over Central Russia; lowest, about 29.5 ins. in a depression over the south of Sweden, about 29.7 ins. in another off the mouth of the Thames, and rather below 29.8 ins. in a third near Lemberg. Barometer rising over the British Islands all day; depression off our east coast moving eastwards towards Germany; that over the south of Sweden filling up. Pressure over Southeastern Europe giving way steadily.

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 July, 1890.

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

	STATIONS.	YESTERDAY EVENING. Barom.: Reading at 32° F. and Sea Level.	Temp. Dry.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	8 A.M. TO DAY. Barometer. Reading at 32° F. and Sea Level.	Barometer. Difference from 8 a.m. yesterday.	Shade Temp. Dry.	Shade Temp. Wet.	Shade Temp. Difference from 8 a.m. yesterday.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	Sea. (0 to 8.)	PAST 24 HOURS. Shade Temp. Max.	Shade Temp. Min.	Amount of Rainfall.
SCANDINAVIA.	Haparanda ...	29.94	54	Za	0	b	29.85	-.07	58	54	+3	SW	4	b	*	63	39	-
	Hernösand ...	29.98	57	S	2	b	29.91	-.07	60	54	+2	SSW	2	b	*	70	46	-
	Stockholm ...	30.00	58	Za	0	b	29.99	+.04	60	51	+1	Za	0	b	*	?	48	-
	Wisby	29.90	58	ENE	4	c	29.92	+.08	62	55	+3	N	4	bc	*	66	48	-
	Bodö	29.89	59	SW	2	o	29.78	-.13	53	51	0	Z	0	c	1	?	46	-
	Christiansund	30.01	55	N	6	bc	29.78	-.23	56	51	+4	ESE	3	b	3	?	?	-
	Skudesnaes ...																	
	Christiania Fjord (Færder)	29.98	63	W	3	b	29.95	-.02	62	54	+4	SSW	3	b	1	66	?	-
	Skagen (The Scaw)	29.97	58	Za	0	bc	29.97	+.07	60	55	+2	Za	0	b	0	72	55	-
	Fanö	30.00	57	NW	2	c	30.04	+.20	59	56	0	NNW	2	bc	*	66	52	-
BRITISH ISLANDS.	Sumburgh Head	30.06	55	W	2	m	29.84	-.25	54	54	0	W	2	r	3	58	51	0.11
	Stornoway ...	30.03	56	SW	5	r	30.02	-.14	56	56	-1	SW	3	o	3	63	53	0.62
	Wick	30.08	58	N	3	c	29.98	-.17	57	56	-3	NW	3	o	1	64	52	-
	Nairn	30.10	63	W	3	c	30.00	-.20	63	60	+7	W	1	bc	1	68	55	0.22
	Aberdeen ...	30.13	57	SE	4	c	30.01	-.21	62	59	+7	S	1	c m	2	62	54	0.01
	Leith	30.16	59	W	2	c	30.05	-.18	66	62	+8	W	2	c	*	69	53	0.20
	Shields	30.20	55	E	3	c	30.07	-.15	62	59	+9	WNW	3	c	2	62	51	-
	Spurn Head ...	30.21	56	NNE	3	b	30.13	-.06	60	56	+5	WSW	3	cm	3	60	53	-
	York	30.21	64	E	1	bc	30.13	-.10	59	57	+2	S	1	o	*	67	53	-
	Loughborough	30.23	61	WNW	3	bc	30.19	-.07	58	56	+3	W	2	o	*	67	52	0.02
	Ardrossan ...	30.20	59	WNW	1	r	30.12	-.13	58	57	+1	SW	1	o	1	63	54	0.16
	Malin Head ...	30.21	58	WSW	4	u	30.16	-.11	57	57	-2	W	4	od	2	61	56	0.15
	Mullaghmore ...	30.29	58	WSW	5	r	30.26	-.08	57	56	-1	WSW	5	om	4	61	56	0.10
	Belmullet ...	30.32	59	W	2	o	30.28	-.09	57	57	-1	WSW	3	or	*	60	56	0.07
	Donaghadee ...	30.25	57	S	2	o	30.20	-.09	62	60	+5	WSW	3	c	1	63	55	0.04
	Liverpool (Bidston)	30.27	57	W	3	o	30.18	-.07	58	58	+2	WNW	4	o	3	61	55	0.81
	Holyhead ...	30.30	60	WNW	1	c	30.22	-.08	57	57	-1	NW	3	og	3	64	55	0.03
	Parsonstown ...	30.33	59	Za	0	o	30.29	-.08	59	58	+2	Za	0	o	*	68	56	0.03
	Valencia	30.42	60	WSW	2	om	30.38	-.04	59	58	-1	NW	1	om	1	63	55	0.03
	Roche's Point ...	30.37	61	NW	3	c	30.33	-.06	60	56	+2	N	3	c	3	67	57	-
	Pembroke (St. Ann's Hd.)	30.33	56	WNW	2	c	30.26	-.06	59	58	0	WNW	2	cg	1	62	55	0.02
	Scilly	30.38	60	NW	3	c	30.30	-.03	58	58	-1	WNW	4	j	3	63	53	-
	Prawle Point ...	30.29	60	NNW	2	c	30.27	-.02	58	58	-8	NW	2	cg	1	70	58	0.02
	Jersey (St. Aubin's)	30.29	65	NW	2	bc	30.28	-.01	59	57	-6	NW	3	cm	3	67	55	-
	Hurst Castle ...	30.35	63	WSW	3	bc	30.25	-.03	56	55	-2	WNW	1	or	1	65	54	0.01
	Dungeness ...	30.21	61	NNE	2	b	30.18	-.01	57	54	+2	N	1	b	0	63	50	-
	London	30.23	66	NW	2	b	30.21	-.03	58	54	+3	NW	1	o	*	66	50	-
	Oxford	30.25	57	NW	1	b	30.23	-.04	55	54	0	W	1	r	*	68	50	0.06
	Cambridge ...	30.25	60	N	1	bc	30.20	-.03	58	56	+1	SW	1	o	*	66	47	-
	Yarmouth ...	30.20	57	NW	3	bc	30.18	+.04	55	53	0	W	2	bm	2	58	45	-
GERMANY & HOLLAND.	Cuxhaven ...	29.91	59	N	4	r	30.02	+.20	60	59	+5	N	3	c	*	62	?	0.12
	Berlin	29.89	65	W	3	bc	29.96	+.14	63	59	-4	W	3	o	*	72	57	0.24
	Wiesbaden ...	*	*	*	*	*	30.14	+.16	55	53	-2	NW	4	o	*	63	54	-
	Munich	30.14	55	NW	2	c	30.16	+.12	56	53	+2	W	4	c	*	57	50	0.04
	The Helder ...	30.10	57	NNW	3	o	30.14	+.13	57	53	-3	NNW	2	bc	3	?	55	-
FRANCE AND BELGIUM.	Brussels (9 a.m.)	*	*	*	*	*	30.21	+.12	54	51	-1	W	1	o	*	59	51	0.04
	Cape Gris Nez			NE	3		30.20	+.05	60	57	+6	N	1	b	0	63	52	-
	Paris	30.26	59	NNW	3	b	30.26	+.07	53	52	-1	SW	1	bc	*	61	46	-
	Brest	30.32	63	N	3	o	30.25	-.01	58	56	+3	N	2	o	?	66	48	-
	Lorient	30.29	64	N	4	bc	30.29	+.02	55	54	0	NNW	2	c	2	66	55	-
	Rochefort ...	30.29	69	N	5	bc	30.34	+.09	59	55	-1	NE	3	b	2	77	48	-
	Belfort	? 30.06	61	NW	1	b	? 30.06	+.01	59	50	0	NW	1	b	*	68	46	-
	Lyons	30.13	59	N	2	c	30.14	+.03	55	51	0	NNW	2	bc	*	63	54	-
	Nice	29.76	70	ESE	6	c	29.87	+.03	67	64	+3	NW	1	c	1	79	63	-
	Perpignan ...	30.05	70	W	3	o	30.15	+.11	62	53	-16	NW	4	o	*	80	59	-
	Biarritz	30.18	68	NNW	6	b	30.27	+.12	63	55	+1	NE	3	bc	2	73	55	-
PENINSULA.	Corunna	*	*	*	*	*												
	Lisbon	29.97	69	NNW	6	b	30.04	-.08	67	54	+4	NNE	6	b	5	72	?	-

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 Mondays 21st July, 1890.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP.

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

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

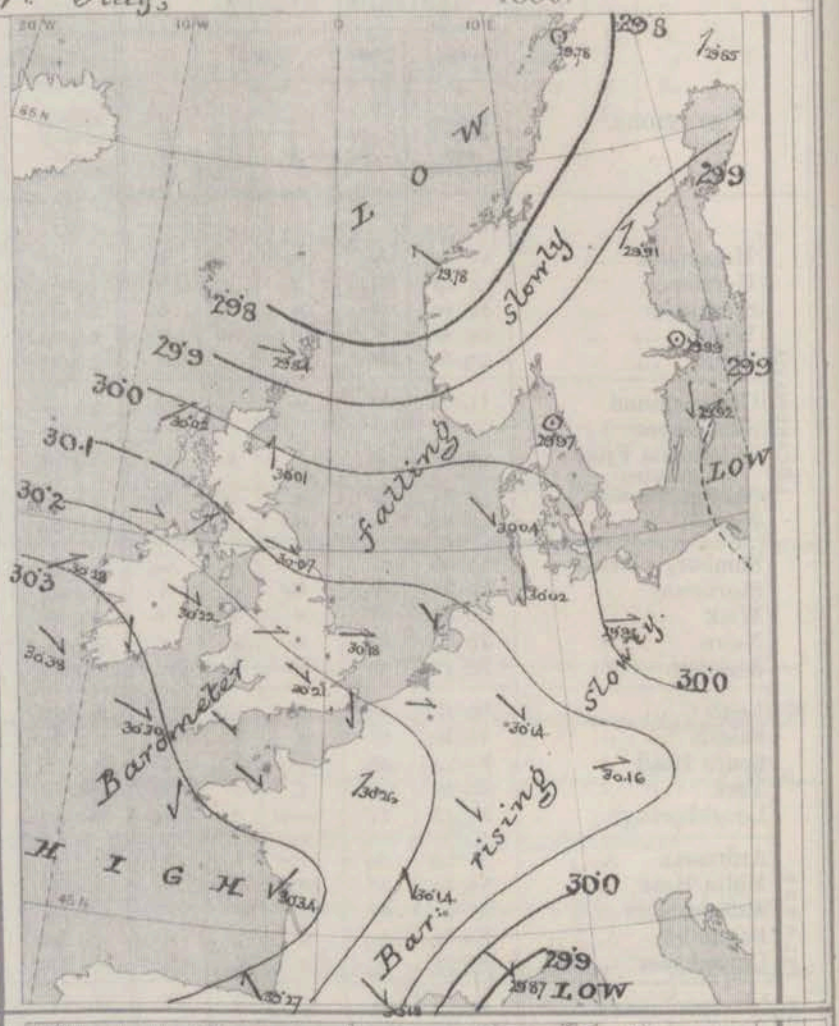
= forces above 10; = forces 8 to 10;
= forces 5 to 7; = forces 1 to 4.
⊙ = dead calm.

SEA DISTURBANCE—Where considerable, is shewn thus:
= Rough. = High.

MEAN HEIGHT OF THE BAROMETER

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

STATIONS.	MEAN READINGS.
	ins.
Sumburgh Head	29·794
Stornoway	29·797
Wick	29·810
Nairn	29·821
Aberdeen	29·831
Leith	29·850
Shields	29·876
York	29·910
Loughborough	29·936
Ardrossan	29·862
Donaghadee	29·881
Holyhead	29·918
Liverpool	29·913
Parsonstown	29·921
Valencia	29·939
Roche's Point	29·938
Pembroke	29·942
Scilly	29·984
Jersey	30·009
Hurst Castle	29·974
Dover	29·970
LONDON	29·967
Oxford	29·953
Cambridge	29·947
Yarmouth	29·943



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.

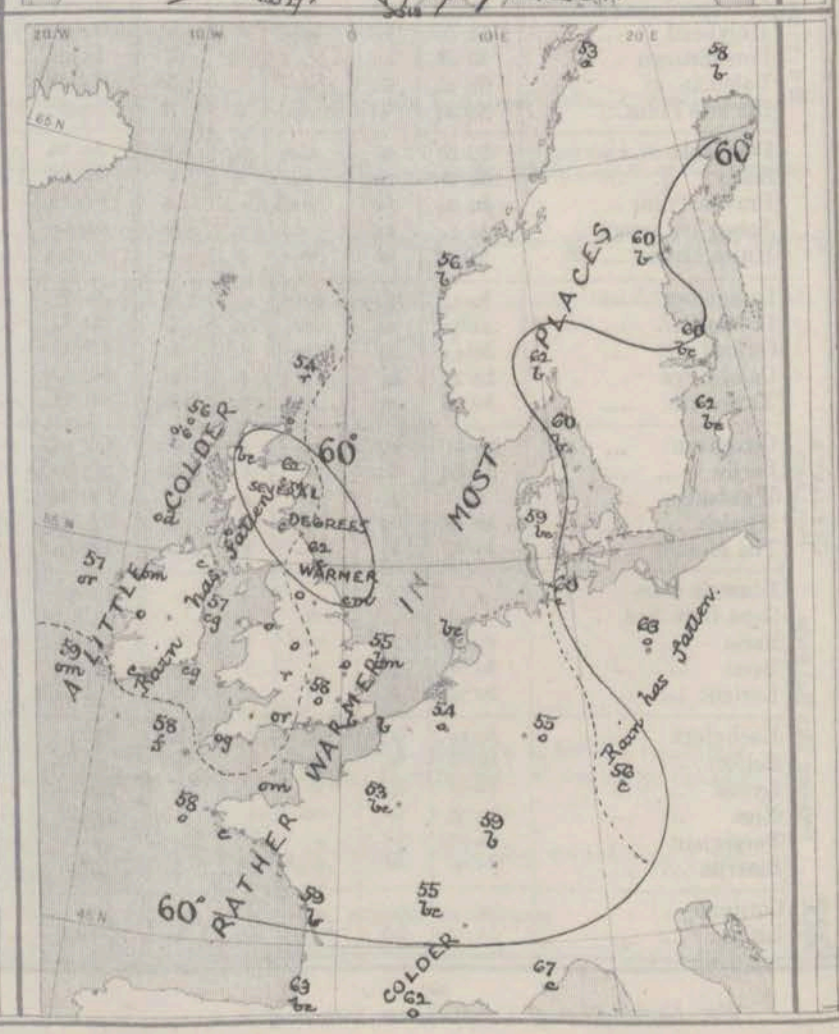
RAINFALL—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0·5 in. or more are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of July.)

STATIONS.	TEMPERATURE. Daily Max.	Daily Min.	at 8 a.m. Dry.	at 8 a.m. Wet.	RAINFALL. (Inches.)
Sumburgh Head	57·8	48·3	53·6	52·0	2·09
Stornoway	60·2	49·5	56·0	54·0	3·02
Wick	62·2	49·2	56·1	53·8	2·25
Nairn	64·7	51·4	57·2	53·6	2·57
Aberdeen	64·4	51·1	58·0	54·4	2·74
Leith	67·1	51·7	58·6	55·3	2·84
Shields	64·4	52·9	58·6	55·4	2·63
York	68·5	52·1	59·4	56·2	2·57
Loughborough	72·1	53·0	62·0	58·2	2·34
Ardrossan	63·9	53·2	57·5	54·8	2·91
Donaghadee	63·1	51·6	57·4	55·6	2·67
Holyhead	63·9	54·7	58·2	55·9	2·32
Liverpool	66·1	54·4	59·6	55·9	2·99
Parsonstown	66·4	51·9	58·3	54·8	3·01
Valencia	64·1	53·6	58·7	56·3	3·91
Roche's Point	66·7	53·3	58·7	55·8	3·16
Pembroke	62·9	55·0	58·1	55·9	2·31
Scilly	64·5	56·3	60·1	58·0	2·29
Jersey	68·8	56·3	62·2	59·2	2·21
Hurst Castle	67·9	55·7	61·3	58·8	2·15
Dover	67·2	56·9	62·6	58·8	1·82
LONDON	73·0	54·1	62·3	58·1	2·17
Oxford	69·9	53·7	60·2	56·8	2·51
Cambridge	72·3	52·4	61·4	57·9	2·30
Yarmouth	66·8	55·2	61·2	58·1	2·68

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



GENERAL SITUATION AT 8 A.M.

PRESSURE — Highest, 30·3 ins and upwards, in an anticyclone extending from the Atlantic over the Bay of Biscay and the south of Ireland. Lowest, 29·8 ins: and less, in a large depression lying off the west of Norway; 29·9 ins: and less, over the Gulf of Genoa. Gradients slight. Barometer falling in most parts of our Islands and Scandinavia, but inclined to rise again at Stornoway.

TEMPERATURE — Highest, 67° at Nice and Lisbon, 66° at Leith, 63° at Nairn, Berlin and Biarritz, and 62° at Wick, Tarder, Aberdeen, Shields, and Kirkwall. Lowest, 53° at Bodo and Paris, 54° at Sumburgh Head and Brussels, and 55° at Oxford, Yarmouth, Lorient, Wiesbaden, and Lyons. The highest maxima registered over our Islands yesterday were 70° at Prawle Point, 69° at Leith, and 68° at Nairn and Oxford.

WIND — Light or moderate from the W'ward or SW'ward over all the more northern and eastern parts of the United Kingdom. NW'ly in the south and southwest of our Islands, as well as over the Netherlands, Western Germany, and the greater part of France. E'ly in the southeast of France and also at Christiansund.

WEATHER — Cloudy or overcast in most parts of the United Kingdom, with rain at Sumburgh Head, Malin Hd, Belmullet, Oxford, and Hurst Castle. Fine at nearly all the Continental stations. Rain fell yesterday in the west and extreme north of our Islands, but the amounts were in most cases slight.

SEA — Slight or smooth generally, but rather rough at Lisbon.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The general appearance is still unsettled, for although the barometer has risen a little at Stornoway in the rear of the large depression in the north the wind shows no inclination to veer either there or in the north of Ireland. It is therefore not unlikely that another depression will shortly approach our western coasts.

FORECASTS

For the 24 hours ending at NOON on 22nd JULY 1890.

DISTRICTS.	FORECASTS.	DISTRICTS.	FORECASTS.
0 SCOTLAND NORTH 1 SCOTLAND EAST	W'ly and SW'ly winds, moderate; changeable, some rain.	6 SCOTLAND WEST	Same as Nos 0 and 1.
2 ENGLAND N.E.		7 ENGLAND N.W. 8 ENGLAND S.W.	NW'ly to W'ly or SW'ly winds, moderate; cloudy, probably some rain.
3 ENGLAND EAST	Same as No 5	9 IRELAND NORTH	SW'ly and W'ly winds, freshening; dull, some rain.
4 MIDLAND COUNTIES		10 IRELAND SOUTH	Same as Nos 7 and 8.
5 ENGLAND SOUTH	W'ly winds, light or moderate; fair at first; doubtful later, probably 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: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Skudesnaes ...	30·05	58	53	NW	8	6	3
Sumburgh Head							
Stornoway	30·11	59	56	W	4	0	4
Aberdeen							
Shields							
Ardrossan							
Malin Head ...	30·25	57	57	NSW	3	6	2
Mullaghmore ...							
Belmullet	30·35	58	57	NSW	2	0	*

	BAR:	THER: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Holyhead	30·32	64	57	NNW	2	6	1
Valencia							
Scilly							
Jersey	30·31	66	59	NNW	3	6	3
Dungeness	30·10	62	54	NNE	3	6c	1
London							*
Yarmouth							
Rochefort	30·29	74	62	NE	5	6	2

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

Weather fine and bright over Southeastern, Southern, and Western Europe, as well as over the greater part of the British Isles; very dull and unsettled over the Baltic and Germany, with much rain in several places. Becoming overcast and unsettled again in the extreme northern and northwestern parts of the United Kingdom. Rain falling over the northern and northwestern parts of our Islands later (heavily at Liverpool) and also in Germany, but weather remaining fair in the southeast and south of England and over France.

Temperature continuing very low for time of year all over Northwestern Europe; lowest morning values 51° at Kuopio, 52° at Christiansund, 53° at Archangel, Bodö, and Shields, 54° at Christ. Münster, 55° at Haparanda, Skudesnaes, Aberdeen, Oxford, and in London. Highest 84° at Sfax, 81° at Constantinople, 80° at Odessa, 70° to 79° on the Mediterranean and Adriatic coasts, as well as over Southern and Central Russia generally, and 64° to 67° over the western parts of North Germany. Not reaching 70° at any of our own stations later, but touching 71° at Brest, 77° at Rochefort, and 80° at Perpignan.

Wind N^ly (NW to NE) over Western Europe generally; light or moderate in force in most places, but fresh at a few French and Spanish stations. Backing to W. and SW. on our north and northwest coasts later and freshening.

Barometer, highest 30·4 ins to 30·1 ins: in a large anticyclonic system spreading over Western Europe from the Atlantic; lowest 29·7 ins and less, over Northern Russia and above 29·8 ins: in three small depressions, — one over the Gulf of Riga, another over North Germany, and the third over Northern Italy. New depression approaching Scotland from the W^rd later, and barometer beginning to fall at all our northern and western stations.

SUMMARY OF CHANGES IN THE WEATHER OVER THE BRITISH ISLANDS AND THEIR NEIGHBOURHOOD
FROM THE 13th to 19th JULY 1890.

The weather experienced during the earlier part of this week showed considerable improvement over England, when compared with that of the week which preceded it. In Scotland and Ireland, however, it was showery, but the change subsequently reached those parts of the Kingdom also. On Wednesday, however, a new set of disturbances began to appear, and spreading eastwards brought with them very heavy falls of rain to all the southern and southeastern parts of the Kingdom and northeast of France, accompanied by severe thunderstorm in many places. The rainfall in the neighbourhood of London was exceptionally heavy, the falls varying from 1·5 ins: to 3·3 ins: during Thursday night and Friday morning. Scarcely had this system passed off before a new one came over from the northwestward, causing heavy rains — especially over our eastern counties. On Saturday night this disturbance was passing off, the barometer was rising, and the general appearance was improving.

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 JULY 1890.

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

	STATIONS.	YESTERDAY EVENING. Barom.: Reading at 32° F. and Sea Level.	Temp. Dry.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	8 A.M. TO DAY. Barometer. Reading at 32° F. and Sea Level.	Barometer. Difference from 8 a.m. yesterday.	Shade Temp. Dry.	Shade Temp. Wet.	Shade Temp. Difference from 8 a.m. yesterday.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	Sea. (0 to 5.)	PAST 24 HOURS. Shade Temp. Max.	Shade Temp. Min.	Amount of Rainfall.
SCANDINAVIA.	Haparanda ...	29.69	56	SW	2	b	29.82	− .33	60	54	+ 2	SSE	4	c	*	64	50	—
	Hernösand ...	29.73	58	S	4	bc	29.82	− .19	60	56	0	SSW	2	o	*	72	48	—
	Stockholm ...	29.83	58	S	2	b	29.54	− .40	58	55	− 2	SSW	4	o	*	70	45	—
	Wisby	29.85	58	S	4	b	29.69	− .23	60	55	− 2	WSW	6	c	*	68	55	—
	Bodö	29.50	53	Z	0	o	29.38	− .40	52	49	− 1	SW	1	o	1	57	48	—
	Christiansund	29.63	53	SW	6	c	29.37	− .41	53	50	− 3	SE	2	r	3	57	52	0.05
	Skudesnaes ... †	29.82	55	W	2	o	29.62		55	52		WNW	6	o	4	55	52	0.24
	Christiania Fjord	29.75	61	WSW	6	c	29.48	− .47	60	55	− 2	WSW	5	b	5	63	57	—
	(Færder) Skagen (The Scaw)	29.87	56	W	4	o	29.57	− .40	56	54	− 4	W	2	r	2	64	54	0.12
	Fanö	30.01	56	SW	4	c	29.67	− .37	59	59	0	SW	4	r	*	64	55	0.20
BRITISH ISLANDS.	Sumburgh Head	29.79	53	W	2	o	29.62	− .22	54	51	0	W	4	o	4	55	50	0.01
	Stornoway ...	29.87	57	SW	3	o	29.85	− .17	54	52	− 2	W	4	o	4	63	50	—
	Wick	29.85	59	NW	2	d	29.48	− .20	56	53	− 1	WNW	5	c	2	63	46	0.12
	Nairn	29.88	61	W	2	o	29.85	− .15	57	52	− 6	W	3	o	2	70	52	0.05
	Aberdeen ...	29.88	59	ESE	1	o	29.85	− .16	59	50	− 3	NW	4	cq	3	70	52	—
	Leith	29.99	63	W	3	o	29.93	− .12	60	53	− 6	W	3	c	*	70	51	—
	Shields	30.00	67	W	3	c	29.96	− .11	58	53	− 4	WNW	4	bc	2	73	54	—
	Spurn Head ...	30.03	66	SW	2	c	29.77	− .16	61	56	+ 1	WNW	5	b	4	70	60	—
	York	30.08	67	WSW	3	c	30.01	− .12	62	55	+ 3	W	3	b	*	73	57	—
	Loughborough	30.13	69	WSW	3	c	30.06	− .13	64	58	+ 6	WNW	6	bcq	*	73	57	0.01
	Ardrossan ...	30.03	59	W	3	c	30.00	− .12	58	54	0	W	4	bc	3	63	54	—
	Malin Head ...	30.06	58	SW	5	o	30.05	− .11	57	55	0	W	5	b	3	60	55	0.05
	Mullaghmore ...	30.17	58	WSW	5	odm	30.15	− .11	60	58	+ 3	W	5	b	4	60	55	0.05
	Belmullet ...	30.20	59	W	3	o	30.20	− .08	58	58	+ 1	WNW	3	om	*	60	56	0.07
	Donaghadee ...	30.10	65	NW	3	o	30.09	− .11	61	56	− 1	NW	4	b	2	67	59	—
	Liverpool (Bidston)	30.12	63	W	4	o	30.10	− .08	59	55	+ 1	WNW	6	bc	4	65	57	0.05
	Holyhead ...	30.14	60	SW	4	o	30.14	− .08	60	57	+ 3	WNW	3	c	2	68	56	—
	Parsonstown ...	30.21	62	SW	2	o	30.21	− .08	59	58	0	WSW	2	o	*	68	56	—
	Valencia	30.42	60	W	2	om	30.33	− .05	60	59	+ 1	W	3	om	4	62	57	0.02
	Roche's Point ...	30.27	68	NW	3	c	30.26	− .07	62	58	+ 2	NW	4	o	4	70	58	—
	Pembroke (St. Ann's Hd.)	30.23	60	W	2	bc	30.21	− .05	58	56	− 1	W	3	b	3	61	57	—
	Scilly	30.30	60	NW	3	c	30.28	− .02	58	58	0	NNW	3	c	2	62	55	—
	Prawle Point ...	30.23	63	WNW	3	c	30.21	− .06	62	60	+ 4	WNW	3	bc	2	70	58	—
	Jersey (St. Aubin's)	30.25	61	W	3	ogm	30.25	− .03	59	58	0	W	4	ogm	3	61	57	0.01
	Hurst Castle ...	30.21	60	WSW	3	o	30.15	− .10	63	62	+ 7	W	4	bc	2	63	55	0.03
	Dungeness ...	30.14	64	SW	4	c	30.07	− .11	64	62	+ 7	W	5	cw	3	65	57	—
	London	30.16	65	WNW	2	o	30.08	− .13	66	61	+ 8	W	1	c	*	68	60	—
	Oxford	30.16	66	WSW	1	o	30.11	− .12	63	59	+ 8	WNW	3	c	*	68	54	—
	Cambridge ...	30.13	65	SW	1	o	30.05	− .15	65	59	+ 7	W	2	c	*	70	56	—
	Yarmouth ...	30.10	67	WSW	2	bc	29.99	− .19	64	61	+ 9	WNW	3	c	2	69	53	0.02
GERMANY & HOLLAND.	Cuxhaven ...	30.08	59	WNW	2	b	29.93	− .09	58	56	− 2	SW	5	o	*	63	56	—
	Berlin	30.03	66	WNW	2	bc	30.01	+ .05	62	56	− 1	WNW	4	bc	*	70	55	0.04
	Wiesbaden ...	*	*	*	*	*	30.17	+ .03	59	55	+ 4	WNW	4	bc	*	61	52	0.04
	Munich	30.21	56	NW	2	o	30.24	+ .08	57	54	+ 1	SW	5	o	*	63	50	—
	The Helder ...	30.12	59	SW	2	b	29.91	− .23	61	60	+ 4	W	3	r	3	63	57	—
FRANCE AND BELGIUM.	Brussels (9 a.m.)	*	*	*	*	*	30.09	− .12	55	54	+ 1	SW	3	r	*	66	52	—
	Cape Gris Nez	30.19	62	WNW	2	bc	30.10	− .10	59	59	− 1	W	5	m	5	70	55	—
	Paris	30.21	67	NW	2	o	30.24	− .02	56	56	+ 3	SSW	1	c	*	?	51	—
	Brest	30.28	60	N	2	o	30.31	+ .06	59	58	+ 1	NW	1	m	2	68	54	—
	Lorient	30.27	60	W	3	o	30.30	+ .01	57	56	+ 2	NW	2	o	2	64	55	—
	Rochefort ...	30.32	65	NW	4	bc	30.36	+ .02	64	61	+ 5	WNW	3	bc	?	72	55	—
	Belfort	?29.97	62	W	1	c	?30.02	− .04	62	51	+ 3	W	1	b	*	66	50	0.12
	Lyons	30.19	60	NNE	3	bc	30.28	+ .14	57	50	+ 2	NNW	2	b	*	66	49	—
	Nice	29.95	65	SE	4	c	30.05	+ .18	67	61	0	WSW	3	b	4	75	52	—
	Perpignan ...	30.13	70	NW	4	b	30.23	+ .08	66	55	+ 4	NW	4	b	*	73	61	—
	Biarritz	30.28	66	NNE	4	b	30.35	+ .08	63	59	0	Z	0	c	1	72	61	—
PENINSULA.	Corunna	*	*	*	*	*												
	Lisbon	30.02	75	NNW	5	b	30.11	+ .07	72	56	+ 5	NNE	6	b	4	84	?	—

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 July,* 1890.

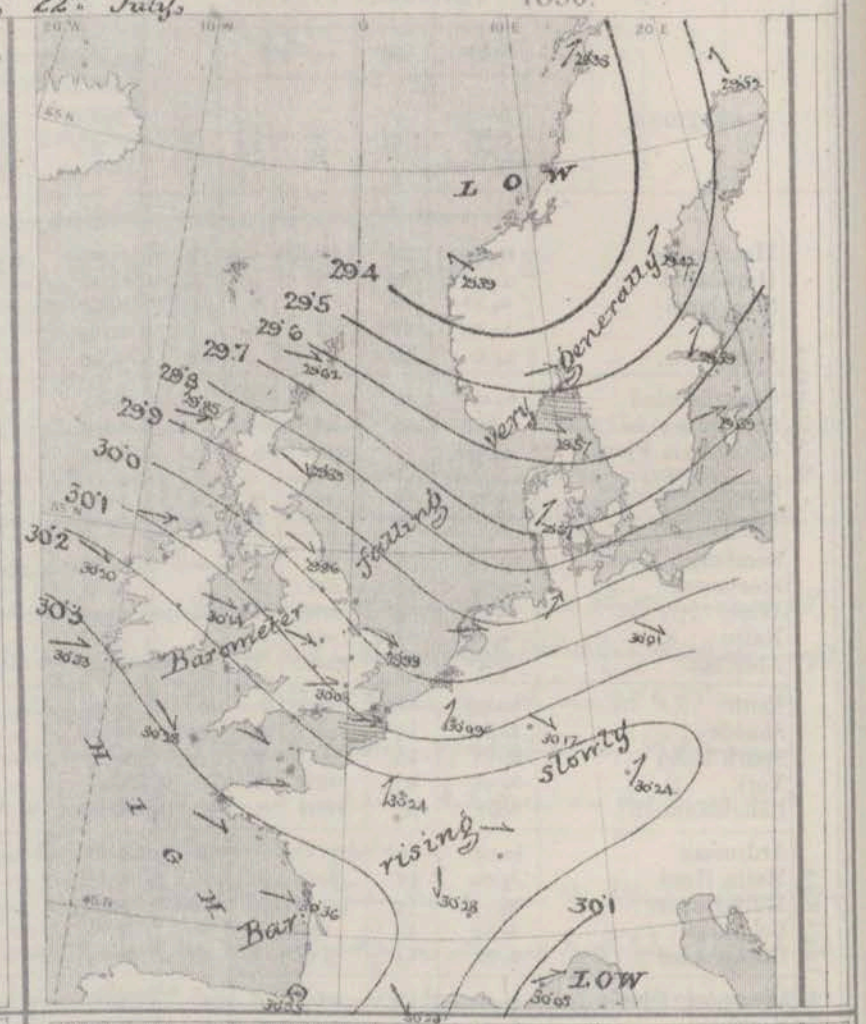
BAROMETER, WIND AND SEA.

EXPLANATION OF MAP.

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

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

SEA DISTURBANCE—Where considerable, is shewn thus:
= Rough. = High.



MEAN HEIGHT OF THE BAROMETER

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

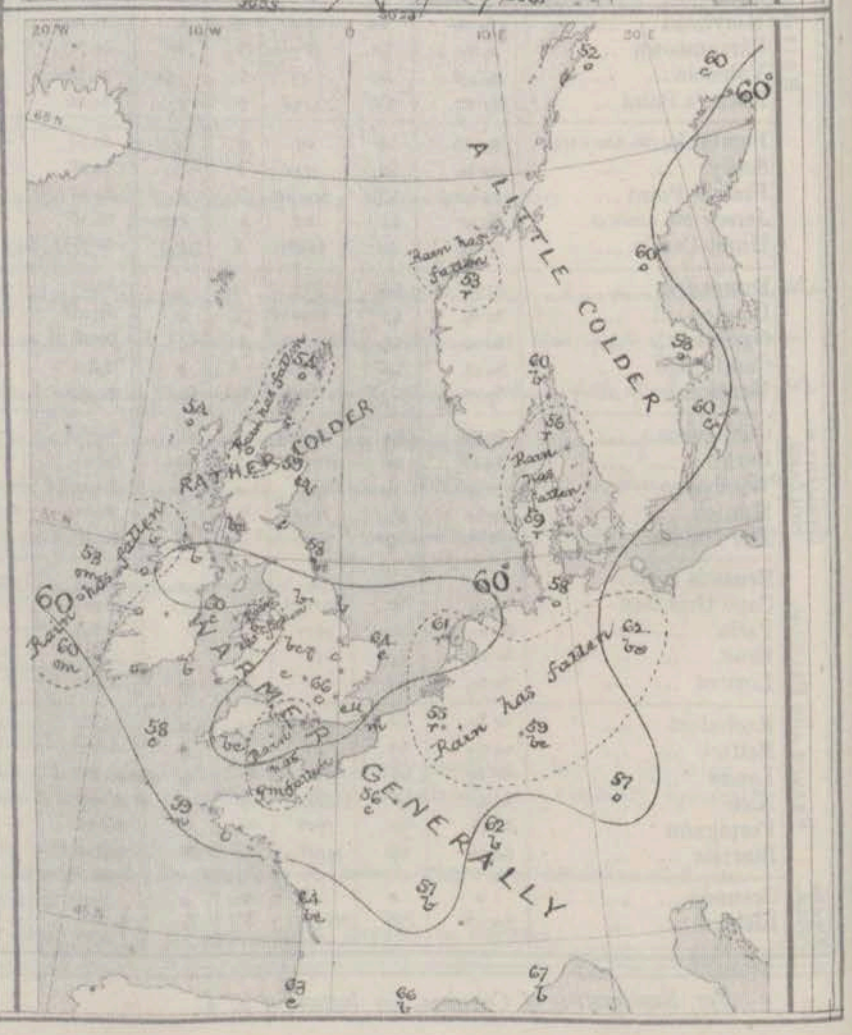
STATIONS.	MEAN READINGS. ins.
Sumburgh Head	29·794
Stornoway	29·797
Wick	29·810
Nairn	29·821
Aberdeen	29·831
Leith	29·850
Shields	29·876
York	29·910
Loughborough	29·936
Ardrossan	29·862
Donaghadee	29·881
Holyhead	29·918
Liverpool	29·913
Parsonstown	29·921
Valencia	29·939
Roche's Point	29·938
Pembroke	29·942
Scilly	29·984
Jersey	30·009
Hurst Castle	29·974
Dover	29·970
LONDON	29·967
Oxford	29·955
Cambridge	29·947
Yarmouth	29·943

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 July.)

STATIONS.	TEMPERATURE. Daily Max.	Daily Min.	at 8 a.m. Dry.	at 8 a.m. Wet.	RAINFALL. (Inches.)
Sumburgh Head	57·8	48·3	53·6	52·0	2·09
Stornoway	60·2	49·5	56·0	54·0	3·02
Wick	62·2	49·2	56·1	53·8	2·25
Nairn	64·7	51·4	57·2	53·6	2·57
Aberdeen	64·4	51·1	58·0	54·4	2·74
Leith	67·1	51·7	58·6	55·3	2·84
Shields	64·4	52·9	58·6	55·4	2·63
York	68·5	52·1	59·4	56·2	2·57
Loughborough	72·1	53·0	62·0	58·2	2·31
Ardrossan	63·9	53·2	57·5	54·8	2·91
Donaghadee	63·1	51·6	57·4	55·6	2·67
Holyhead	63·9	54·7	58·2	55·9	2·32
Liverpool	66·1	54·4	59·6	55·9	2·99
Parsonstown	66·4	51·9	58·3	54·8	3·01
Valencia	64·1	53·6	58·7	56·3	3·91
Roche's Point	66·7	53·3	58·7	55·8	3·16
Pembroke	62·9	55·0	58·1	55·9	2·31
Scilly	64·5	56·3	60·1	58·0	2·29
Jersey	68·8	56·3	62·2	59·2	2·21
Hurst Castle	67·9	55·7	61·3	58·8	2·15
Dover	67·2	56·9	62·6	58·8	1·82
LONDON	73·0	54·1	62·3	58·1	2·17
Oxford	69·9	53·7	60·2	56·8	2·51
Cambridge	72·3	52·4	61·4	57·9	2·30
Yarmouth	66·8	55·2	61·2	58·1	2·68

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

GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest 30·3 in. and upwards, in an anticyclone extending from the Atlantic over the Bay of Biscay, the west of France and the extreme southwest of Ireland.
Lowest 28·4 in. and less in a large depression lying over and to the westward of Norway.
Gradients moderate over North western Europe, – slight in the south west.
Barometer rising in France and steady in the extreme west of our islands, but falling elsewhere, – briskly in Scandinavia and Denmark.

TEMPERATURE

Highest, 72° at Lisbon, 67° at Nice, 66° in London and at Perpignan, 65° at Cambridge and 64° at Loughborough, Dungeness and Yarmouth.
Lowest, 52° at Bodö, 53° at Christiansund, 54° at Lowestoft Ness and Stornoway and 55° at Brussels.
During yesterday the thermometer rose to between 65° and 70° in many parts of the United Kingdom and to 73° at Shields, York and Loughborough.

WIND

Moderate to strong from the W.ly or NW.ly over our islands and from the SW.ly in Denmark, the Netherlands and the south of Scandinavia.
Light from the S.ly in the north of Scandinavia; variable in the south of France.

WEATHER

Fine over the greater part of the United Kingdom and France, but dull in Ireland and the extreme north of Scotland.
Raining in Denmark and the Netherlands, as well as at Christiansund; dull in Sweden.
Slight rain was experienced yesterday at a few of our stations.

SEA

moderate to smooth generally, but rather rough at Cape Gris Nez.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

There are at present no indications of any important change in the weather, but shallow secondary disturbances may possibly travel southeastward across the country in the rear of the large Scandinavian depression.

FORECASTS

For the 24 hours ending at NOON on 23rd JULY 1890.

DISTRICTS.	FORECASTS.
0 SCOTLAND NORTH	W.ly and NW.ly winds, fresh; gusty, some showers.
1 SCOTLAND EAST	
2 ENGLAND N.E.	
3 ENGLAND EAST	W.ly to NW.ly winds, moderate; fair generally, but some local showers.
4 MIDLAND COUNTIES	
5 ENGLAND SOUTH	
6 SCOTLAND WEST	Same as No. 0 to 2.
7 ENGLAND N.W.	
8 ENGLAND S.W.	W.ly and NW.ly winds, moderate; fair to showery.
9 IRELAND NORTH	Same as No. 0 to 2.
10 IRELAND SOUTH	Same as No. 8.
WARNINGS	NONE ISSUED.

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

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

YESTERDAY'S 2 P.M. REPORTS.

	BAR:	THER: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Skudesnaes ...	30·01	54	54	SSE	6	r	3
Sumburgh Head	29·85	54	52	W	3	o	8
Stornoway	29·95	62	61	W	4	o	4
Aberdeen	29·96	68	62	SE	2	c	2
Shields	30·04	72	65	WNW	4	c	2
Ardrossan	30·09	60	58	SW	2	o	2
Malin Head ...	30·11	59	59	WSW	5	o	2
Mullaghmore ...	30·20	60	59	WSW	5	od	4
Belmullet	30·22	60	58	W	3	om	*

	BAR:	THER: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Holyhead	30·20	66	63	W	3	og	2
Valencia	30·36	62	61	W	3	om	3
Scilly	30·30	59	57	NNW	4	c	2
Jersey	30·27	61	57	W	2	o	2
Dungeness	30·19	65	60	SW	1	b	0
London	30·20	67	62	WNW	2	o	*
Yarmouth	30·14	62	59	WSW	2	b	2
Rochefort	30·36	70	60	NW	3	b	?

GENERAL REMARKS ON THE WEATHER OVER EUROPE

DURING THE PAST 24 HOURS.

Weather fine and bright over the Gulf of Bothnia, Finland and the south of Russia and in many parts of Central Southern and Southwestern Europe; cloudy or overcast in the British Islands and northwest of France, with rain in several localities. Dull and rainy over East Germany also.

Temperature as high as 86° at Brindisi, 84° at Malta and 83° at Constantinople, and ranging between 70° and 80° on the southern and eastern shores of the Mediterranean generally and in the south of Russia. Very low for the time of year over North Eastern Europe, the lowest of all being 48° at St Mann, 53° at Bodö, Archangel and Paris 54° at Sumburgh Head and Brussels. Slightly exceeding 70° in several parts of our islands and France during the day, but falling short of that value over the greater part of Germany.

Wind light to moderate from between W. and NW. over the greater part of the United Kingdom, NW.ly to N.ly over France Western Germany and Spain; S.ly to SE.ly over the northern parts of Scandinavia; very variable elsewhere. Backing to SW. in our islands later, not much change elsewhere.

Barometer highest 30·3 in. to 30·0 in. over the greater part of Western Europe and the adjacent parts of the Atlantic; 30·0 in. and more over Finland and Northern Russia. Lowest 29·8 in. and less over Norway and the adjacent parts of the Atlantic and 29·9 in. and less over the whole of South Eastern Europe, as well as in a shallow depression over the northern parts of the Mediterranean. Falling somewhat over the British Islands and Norway during the day, no great change elsewhere.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

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

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

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

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

DAILY WEATHER REPORT.

for Wednesday, 23rd July, 1890.

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

	STATIONS.	YESTERDAY EVENING. Barom: Reading at 32° F. and Sea Level.	Temp. Dry.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	8 A.M. TO DAY. Barometer. Reading at 32° F. and Sea Level.	Barometer. Difference from 8 a.m. yesterday.	Shade Temp. Dry.	Shade Temp. Wet.	Shade Temp. Difference from 8 a.m. yesterday.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	Sun. (0 to 9.)	PAST 24 HOURS. Shade Temp. Max.	Shade Temp. Min.	Amount of Rainfall.
SCANDINAVIA.	Haparanda ...	29.42	57	Z	0	c	29.32	-.20	60	57	0	S	2	o	*	70	54	0.24
	Hernösand ...	29.27	52	Z	0	b	29.29	-.13	56	50	-4	NW	2	b	*	63	52	0.04
	Stockholm ...	29.33	57	Z	0	r	29.34	-.25	58	54	0	NNW	2	c	*	63	52	0.04
	Wisby	29.33	57	NNW	6	c	29.34	-.35	57	53	-3	W	4	bc	*	61	55	0.35
	Bodö	29.30	51	NE	2	r	29.26	-.12	49	48	-3	WSW	2	r	1	54	46	0.75
	Christiansund	29.36	52	W	6	o	29.41	+.04	50	47	-3	WSW	4	r	4	54	46	0.67
	Skudesnaes ...	29.59	53	WNW	6	c	29.63	+.01	51	49	-4	WNW	5	r	3	57	50	0.12
	Christiania Fjord	29.35	62	WNW	3	b	29.45	-.03	58	50	-2	WNW	4	b	3	64	54	-
	(Færder)																	
	Skagen (The Skaw)	29.43	56	W	6	b	29.50	-.07	58	51	+2	NW	4	b	4	63	52	-
	Fanö	29.72	55	W	6	c	29.71	+.04	55	52	-4	WNW	6	c	*	63	52	0.12
BRITISH ISLANDS.	Sumburgh Head	29.65	54	NW	4	b	29.68	+.06	49	47	-5	NW	3	o	4	57	46	0.09
	Stornoway ...	29.90	55	W	5	o	29.77	-.08	55	55	+1	W	4	r	4	57	50	0.01
	Wick	29.80	53	NW	8	o	29.75	-.03	53	53	-3	WNW	2	o	2	60	42	0.04
	Nairn	29.87	58	WNW	4	c	29.81	-.04	55	53	-2	Z	0	o	1	62	58	?
	Aberdeen ...	29.85	58	WNW	4	cq	29.84	-.01	54	49	-5	S	2	o	2	64	53	-
	Leith	29.93	64	W	3	b	29.91	-.02	60	57	0	W	4	c	*	67	51	-
	Shields	29.91	65	WNW	4	bc	29.96	.00	57	53	-1	NW	4	c	2	67	51	-
	Spurn Head ...	29.92	64	W	6	b	30.03	+.06	60	55	-1	W	4	bc	3	66	53	-
	York	29.99	65	W	3	bc	30.04	+.03	60	57	-2	W	2	o	*	70	48	-
	Loughborough	30.06	66	W	4	c	30.13	+.07	60	57	-4	WNW	4	ow	*	70	54	-
	Ardrossan ...	29.99	58	W	6	c	29.98	-.02	59	58	+1	W	5	o	4	64	54	-
	Malin Head ...	30.07	58	W	5	om	30.03	-.02	58	57	+1	W	6	om	4	60	56	0.01
	Mullaghmore ...	30.18	58	W	5	am	30.20	+.05	58	58	-2	WSW	6	om	5	62	56	0.03
	Belmullet ...	30.23	59	WNW	4	o	30.25	+.05	59	58	+1	W	5	o	*	60	56	0.03
	Donaghadee ...	30.08	66	N	5	c	30.09	.00	62	60	+1	W	5	c	3	72	58	-
	Liverpool (Bidston)	30.06	64	W	5	b	30.12	+.02	59	57	0	W	6	o	4	63	57	-
	Holyhead ...	30.12	62	WNW	2	b	30.18	+.04	63	60	+3	WNW	4	b	4	68	56	-
	Parsonstown ...	30.20	61	SW	2	o	30.28	+.07	61	60	+2	SW	2	o	*	65	58	0.01
	Valencia	30.37	60	W	2	o	30.41	+.08	58	58	-2	NW	1	f	1	62	57	0.03
	Roche's Point ...	30.27	64	NNW	5	bc	30.33	+.07	62	59	0	WNW	3	c	3	70	58	-
	Pembroke (St. Ann's Hd.)	30.23	61	W	3	bc	30.28	+.07	58	57	0	W	3	c	3	62	57	-
	Scilly	30.29	60	WNW	4	o	30.34	+.06	59	58	+1	NNW	4	o	2	61	57	-
	Prawle Point ...	30.21	63	NW	3	o	30.29	+.08	62	56	0	WNW	3	o	1	70	56	-
	Jersey (St. Aubin's)	30.22	63	WNW	2	b	30.30	+.05	61	59	+2	WNW	3	am	3	64	58	-
	Hurst Castle ...	30.13	66	WNW	4	bc	30.24	+.09	65	62	+2	W	4	b	2	71	58	-
	Dungeness ...	30.01	57	WNW	4	bc	30.13	+.06	66	59	+2	NNW	4	b	3	73	52	-
	London	30.05	70	WSW	3	bc	30.17	+.09	61	58	-5	W	1	o	*	74	54	-
	Oxford	30.10	63	WNW	3	b	30.19	+.08	61	59	-2	W	1	o	*	72	56	-
	Cambridge ...	30.03	68	NW	2	b	30.13	+.08	62	57	-3	NW	1	o	*	73	58	-
	Yarmouth ...	29.98	62	ESE	3	b	30.07	+.08	59	54	-5	NW	3	bc	2	69	51	-
GERMANY & HOLLAND.	Cuxhaven ...	29.91	58	WNW	6	r	29.53	-.10	57	56	-1	WNW	6	bc	*	61	56	0.20
	Berlin	29.75	59	WNW	4	r	?	?	56	53	-6	WNW	5	o	*	70	50	0.39
	Wiesbaden ...	*	*	*	*	*	30.06	-.11	61	57	+2	W	4	b	*	70	55	-
	Munich	30.08	60	W	4	c	30.12	-.12	54	53	-3	SW	5	o	*	64	48	0.32
	The Helder ...	29.94	59	W	2	c	29.99	+.08	58	55	-3	WNW	2	o	3	63	57	-
FRANCE AND BELGIUM.	Brussels (9 a.m.)	*	*	*	*	*	† 30.10	+.01	60	55	+5	WNW	2	bc	*	64	57	0.08
	Cape Gris Nez	30.07	62	W	1	c	30.13	+.03	60	57	+1	WNW	4	b	4	70	57	-
	Paris	30.15	66	NW	3	o	30.23	-.01	62	59	+6	WNW	2	b	*	72	49	-
	Brest	30.28	59	N	4	m	30.33	+.02	58	57	-1	N	3	f	2	66	54	-
	Lorient	30.27	64	W	3	b	30.31	+.01	59	59	+2	NNW	2	b	2	64	57	-
	Rochefort ...	30.35	65	NW	4	o	30.35	-.01	64	62	0	NW	4	o	3	73	55	-
	Belfort	?	62	W	1	o	?	?	59	52	-3	W	2	c	*	63	49	0.12
	Lyons	29.96	70	NW	2	b	30.24	-.04	62	59	+5	N	2	c	*	73	?	-
	Nice	30.04	71	WSW	4	b	29.97	-.08	68	60	+1	Z	0	b	0	77	61	-
	Perpignan ...	30.19	75	NW	3	b	30.23	.00	68	60	+2	NW	3	b	*	79	59	-
	Biarritz	30.34	68	NW	3	bc	30.35	.00	64	61	+1	Z	0	o	2	73	61	0.04
PENINSULA.	Corunna	*	*	*	*	*												
	Lisbon	30.06	78	N	5	b	30.08	-.03	73	55	+1	NNE	5	b	?	86	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 WEDNESDAY 23rd JULY, 1890.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP

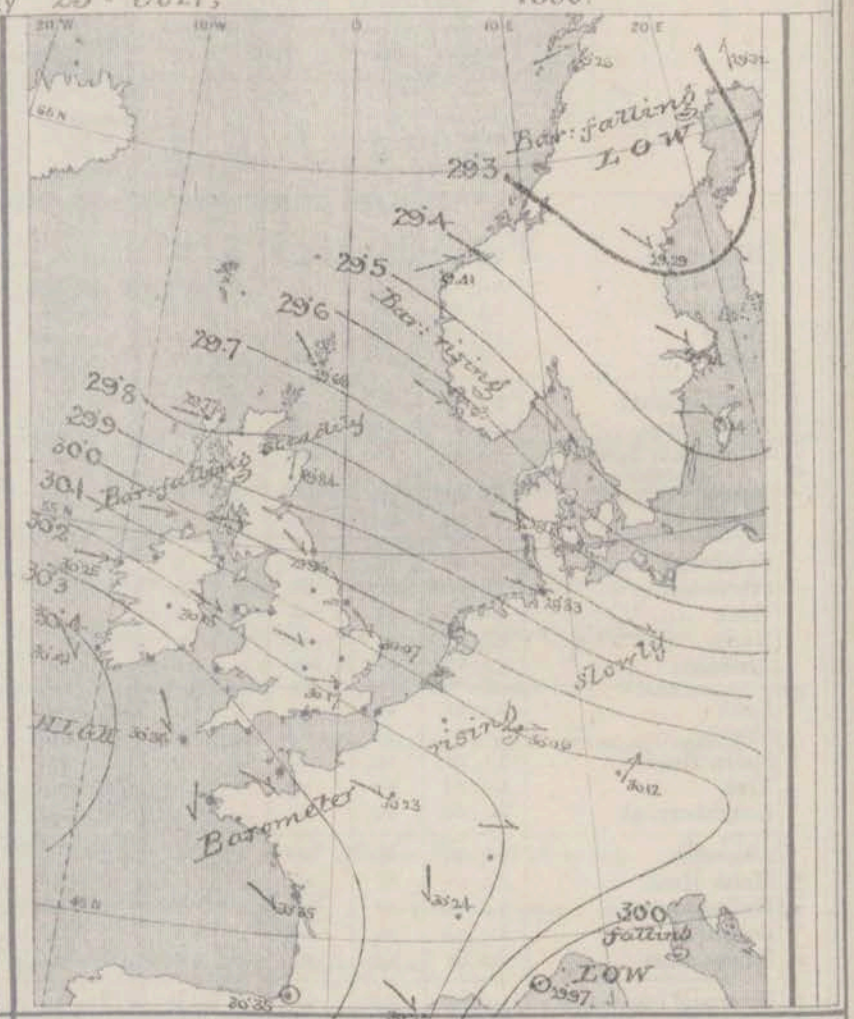
BAROMETER—Isobars are drawn for each tenth of an inch. Changes since previous morning are stated in words.

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

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

SEA DISTURBANCE—Where considerable, is shewn thus :

= Rough. = High.



MEAN HEIGHT OF THE BAROMETER

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

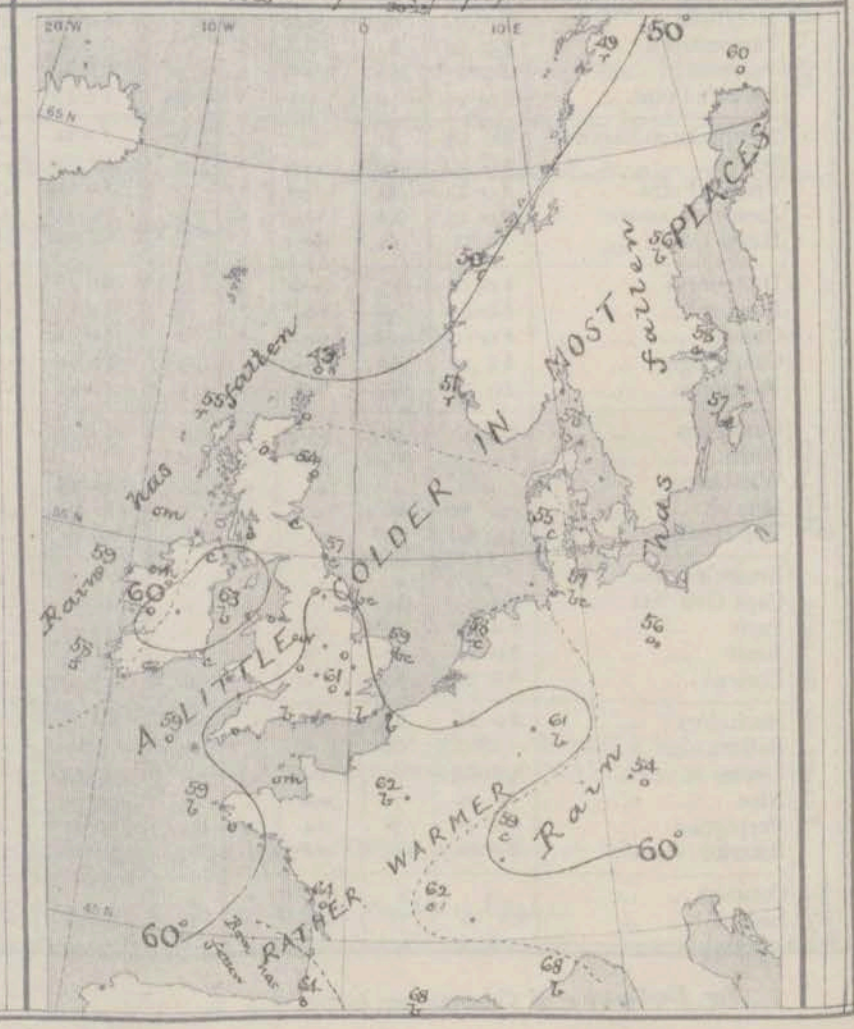
STATIONS.	MEAN READINGS.
	ins.
Sumburgh Head	29 · 794
Stornoway	29 · 797
Wick	29 · 810
Nairn	29 · 821
Aberdeen	29 · 831
Leith	29 · 850
Shields	29 · 876
York	29 · 910
Loughborough	29 · 936
Ardrossan	29 · 862
Donaghadee	29 · 881
Holyhead	29 · 918
Liverpool	29 · 913
Parsonstown	29 · 921
Valencia	29 · 939
Roche's Point	29 · 938
Pembroke	29 · 942
Scilly	29 · 989
Jersey	30 · 009
Hurst Castle	29 · 974
Dover	29 · 970
LONDON	29 · 967
Oxford	29 · 953
Cambridge	29 · 947
Yarmouth	29 · 943

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 July.)

STATIONS.	TEMPERATURE. Daily Max.	Daily Min.	at 8 a.m. Dry.	at 8 a.m. Wet.	RAINFALL (Inches.)
Sumburgh Head	57 · 8	48 · 3	53 · 6	52 · 0	2 · 09
Stornoway	60 · 2	49 · 5	55 · 0	54 · 0	3 · 62
Wick	62 · 2	49 · 2	56 · 1	53 · 8	2 · 25
Nairn	64 · 7	51 · 4	57 · 2	53 · 6	2 · 57
Aberdeen	64 · 4	51 · 1	58 · 0	54 · 4	2 · 74
Leith	67 · 1	51 · 7	58 · 6	55 · 3	2 · 84
Shields	64 · 4	52 · 9	58 · 6	55 · 4	2 · 63
York	68 · 5	52 · 1	59 · 4	56 · 2	2 · 57
Loughborough	72 · 1	53 · 0	62 · 0	58 · 2	2 · 34
Ardrossan	63 · 9	53 · 2	57 · 3	54 · 8	2 · 91
Donaghadee	63 · 1	51 · 6	57 · 4	55 · 6	2 · 67
Holyhead	63 · 9	54 · 7	58 · 2	55 · 9	2 · 32
Liverpool	66 · 1	54 · 4	59 · 6	55 · 9	2 · 99
Parsonstown	66 · 4	51 · 9	58 · 3	54 · 8	3 · 01
Valencia	*64 · 1	53 · 6	58 · 7	56 · 3	3 · 91
Roche's Point	66 · 7	53 · 3	58 · 7	55 · 8	3 · 16
Pembroke	62 · 9	55 · 0	58 · 1	55 · 9	2 · 31
Scilly	64 · 5	56 · 3	60 · 1	58 · 0	2 · 29
Jersey	68 · 8	56 · 3	62 · 2	59 · 2	2 · 21
Hurst Castle	67 · 9	55 · 7	61 · 3	58 · 8	2 · 15
Dover	67 · 2	56 · 9	62 · 6	58 · 8	1 · 82
LONDON	73 · 0	54 · 1	62 · 3	58 · 1	2 · 17
Oxford	69 · 9	53 · 7	60 · 2	56 · 8	2 · 51
Cambridge	72 · 3	52 · 4	61 · 4	57 · 9	2 · 30
Yarmouth	66 · 8	55 · 2	61 · 2	58 · 1	2 · 68

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

GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30·4 ins: and upwards, in an anticyclone lying to the southwestward of Ireland.
Lowest, 29·3 ins: and less, in a depression lying over the north of Scandinavia.
Gradients moderate or slight generally. Barometer falling in Scotland and also over the northern parts of Scandinavia, but rising elsewhere.

TEMPERATURE

Highest, 73° at Lisbon, 68° at Nice and Perpignan, 66° at Bangeness, 65° at Hurst Castle, 64° at Rochfort and Biarritz, and 63° at Holyhead.
Lowest, 49° at Bodö and Sumburgh Hd, 50° at Christiansund, 51° at Aberdeen, 53° at Nick, 54° at Aberdeen and Munich.
The highest maxima registered over our Islands yesterday were 74° in London, 73° at Bangeness and Cambridge, and 72° at Croughadda and Oxford.

WIND

W. or NW. over nearly the whole of Western Europe; moderate in force generally, but strong in the north of Ireland and the south of Denmark.
A fresh gale from NW. was experienced at Wick yesterday.

WEATHER

Rainy in the Hebrides and west of Norway, and dull in many other parts of the United Kingdom as well as in Germany and the west of France.
Fine on the east and southern coasts of England, as well as in Sweden, Denmark, and the east and south of France.
Slight rain fell yesterday in Ireland and the north of Scotland.

SEA

Moderate to smooth generally, but rather rough at Milleghmore.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

No important change in the weather is indicated, but a new depression is apparently advancing towards our Islands from the northwestward, and some increase of wind from the westward and northwestward is therefore probable on our north and northwest coasts.

FORECASTS

For the 24 hours ending at NOON on 24th JULY 1890.

DISTRICTS.	FORECASTS.
0 SCOTLAND NORTH 1 SCOTLAND EAST	W. winds, moderate, to NW., strong; dull, some rain.
2 ENGLAND N.E.	W. winds, freshening; fair generally.
3 ENGLAND EAST 4 MIDLAND COUNTIES 5 ENGLAND SOUTH	W. and NW. winds, moderate or fresh; fair, warm.
6 SCOTLAND WEST	Same as Nos 0 and 1.
7 ENGLAND N.W.	W. winds, strong; fair generally, but slight rain locally.
8 ENGLAND S.W.	Same as Nos 3 to 5
9 IRELAND NORTH	W. to NW. winds, strong; dull, some rain.
10 IRELAND SOUTH	Same as Nos 3 to 5.
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: D.	THER: W.	WIND D.	WIND F	WEA	SEA
Skudesnaes ...	29·60	57	53	WNW	6	o	4
Sumburgh Head	29·62	54	52	WNW	5	bc	4
Stornoway	29·78	57	54	W	5	o	5
Aberdeen	29·84	61	51	NW	5	c q	4
Shields	29·91	66	56	WNW	4	o	2
Ardrossan	30·00	61	55	W	5	c	4
Malin Head ...	30·07	60	56	W	5	bc	3
Mullaghmore ...	30·19	62	59	W	6	c	4
Belmullet	30·23	60	58	W	3	o	*

	BAR:	THER: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Holyhead	30·15	67	61	W	3	b	2
Valencia	30·38	61	60	NW	3	om	3
Scilly	30·30	60	60	NW	3	o	2
Jersey	30·25	63	60	W	4	o	3
Dungeness	30·03	65	61	NSW	4	c	3
London	30·07	74	64	WNW	3	bc	*
Yarmouth	29·99	64	58	NNE	3	b	2
Rochefort	30·37	70	66	WNW	3	c	?

GENERAL REMARKS ON THE WEATHER OVER EUROPE

DURING THE PAST 24 HOURS.

Weather fine and bright over Southeastern, Southern, and Western Europe, fair over the United Kingdom generally, cloudy over many parts of Germany and Austria, overcast over Northern Europe, with rain in many places. Rain during day in last named districts and in Germany, and slight falls over some parts of Scotland and Ireland.

Temperature fallen over Eastern, risen a little over Western Europe. Morning readings exceeding 80° at Constantinople, and exceeding 70° at most of the Mediterranean, Adriatic, and Black Sea stations. Below 60° at nearly all the Scandinavian, Scotch, and Irish stations, and as low as 52° at Bodö, 53° at Christiansund, 54° at Sumburgh Head and Stornoway, 53° at Brussels and Limoges, and 56° at Paris and Münster. Daily maxima exceeding 70° over many parts of England and France and touching 80° at Lisbon.

Wind W. and NW. over our Islands, moderate to fresh in force, SW. in the Netherlands and Denmark, S. over Finland and Sweden, W. and NW. over Germany and Austria, N. to NE. over the Iberian Peninsula, very variable elsewhere. Backing to W. at our northern stations later, and blowing freshly. Little change elsewhere.

Barometer highest 30·3 ins. (and more) to 30·0 ins. in a high pressure system stretching from the Atlantic over Western Europe to Germany and Austria, and covering Ireland and the greater part of England; 29·9 ins. and more over Central and Eastern Russia. Lowest 29·4 ins. and less, over Norway, and rather below 29·9 ins. over the Black Sea. Falling over Sweden later, but little change over our Island and 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).

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DAILY WEATHER REPORT.

for Thursday, 24th July, 1890.

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

	STATIONS.	YESTERDAY EVENING. Barom: Reading at 32° F. and Sea Level.	Temp. Dry.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	8 A.M. TO DAY. Barometer. Reading at 32° F. and Sea Level.	Barometer. Difference from 8 a.m. yesterday.	Shade Temp. Dry.	Shade Temp. Wet.	Shade Temp. Difference from 8 a.m. yesterday.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	Sea. (0 to 8.)	PAST 24 HOURS. Shade Temp. Max.	Shade Temp. Min.	Amount of Rainfall.
SCANDINAVIA.	Haparanda ...	29.27	56	E	2	r	29.21	-.11	58	57	-2	Z	0	r	*	61	52	0.51
	Hernösand ...	29.31	56	Z	0	b	29.31	+.02	56	50	0	NNE	2	b	*	72	43	-
	Stockholm ...	29.38	55	SW	2	b	29.33	-.01	58	53	0	W	2	bc	*	72	50	-
	Wisby	29.43	57	NW	6	bc	29.38	+.04	55	51	-2	W	4	b	*	63	54	-
	Bodö	29.28	51	NW	2	0	29.28	+.02	55	49	+6	ENE	3	b	1	55	45	-
	Christiansund	29.38	50	NW	5	r	29.37	-.04	49	47	-1	SW	5	r	4	50	46	0.71
	Skudesnaes ...	29.60	52	NW	5	0	29.54	-.09	52	46	+1	NW	4	c	3	52	46	0.20
	Christiania Fjord (Færder)	29.40	60	NNW	2	c	29.39	-.06	56	47	-2	NNW	3	b	3	63	54	-
	Skagen (The Scaw)	29.44	56	NW	5	0	29.42	-.08	56	53	-2	NW	2	bc	2	63	50	-
	Fanö	29.66	55	NNW	4	c	29.55	-.16	55	54	0	NNW	2	r	*	54	54	0.08
BRITISH ISLANDS.	Sumburgh Head	29.65	52	NNW	2	bc	29.61	-.07	50	47	+1	NNW	4	c	4	54	44	0.06
	Stornoway ...	29.77	55	NW	5	0	29.81	+.04	53	52	-2	NW	4	0	3	59	48	0.04
	Wick	29.69	53	NW	3	r	29.75	.00	52	48	-1	NW	5	bc	2	57	43	0.42
	Nairn	29.75	58	W	3	c	29.81	.00	51	49	-4	W	2	c	2	62	49	0.09
	Aberdeen ...	29.73	63	NNW	4	cq	29.79	-.05	54	49	0	WNW	4	cq p	3	68	49	0.09
	Leith	29.83	62	W	4	bc	29.84	-.07	58	52	-2	W	2	c	*	67	49	-
	Shields	29.86	66	W	5	bc	29.84	-.12	53	51	-2	WNW	4	c	2	68	50	0.02
	Spurn Head ...	29.89	66	W	7	c	29.87	-.16	58	54	-2	WNW	6	b	5	66	52	0.11
	York	29.96	66	W	4	c	29.89	-.15	57	52	-3	NW	3	bc	*	71	50	0.36
	Loughborough	30.05	70	W	4	0	29.95	-.18	63	57	+3	W	4	bq	*	76	58	-
	Ardrossan ...	29.91	57	W	4	c	29.91	-.07	56	53	-3	W	4	c	3	59	52	0.03
	Malin Head ...	29.98	57	W	5	0	29.96	-.07	55	51	-3	NW	5	0	3	59	54	0.36
	Mullaghmore ...	30.09	58	WSW	7	0 pm	30.05	-.13	56	52	-2	NW	5	0	4	61	54	0.05
	Belmullet ...	30.12	59	W	5	0	30.11	-.14	56	52	-3	NNW	2	0	*	61	54	0.11
	Donaghadee ...	29.95	65	NNW	5	c	29.99	-.10	59	57	-3	WNW	4	c	3	70	58	0.26
	Liverpool (Bidston)	30.03	64	W	6	0	29.96	-.16	56	54	-3	WNW	4	0	4	69	55	0.02
	Holyhead ...	30.09	65	W	4	cq	29.99	-.19	57	56	-6	W	4	q pm	4	72	56	0.02
	Parsonstown ...	30.17	64	SW	2	0	30.05	-.23	59	58	-2	Z	0	r	*	70	57	0.04
	Valencia	30.30	61	W	4	0m	30.17	-.24	58	57	0	NW	3	0 pm	4	63	57	0.02
	Roche's Point ...	30.24	68	NW	3	bc	30.10	-.23	61	57	-1	NW	4	bc	4	71	57	-
	Pembroke (St. Ann's Hd.)	30.19	59	WNW	4	c	30.05	-.23	59	58	+1	W	4	c	4	62	57	-
	Scilly	30.28	59	WNW	5	f	30.18	-.16	58	58	-1	W	4	f	3	62	55	0.02
	Prawle Point ...	30.23	65	W	3	bc	30.11	-.18	59	58	-3	WSW	4	cq	2	67	56	-
	Jersey (St. Aubin's)	30.22	63	NW	3	b	30.15	-.15	59	58	-2	W	4	0 pm	3	66	55	0.01
	Hurst Castle ...	30.17	60	W	4	b	30.04	-.20	61	60	-4	WNW	5	c	2	71	59	-
	Dungeness ...	30.07	64	WNW	5	bc	29.95	-.18	64	60	-2	W	6	bc	4	69	58	-
	London	30.09	72	WNW	3	c	29.97	-.20	65	60	+4	WNW	3	bc	*	76	58	-
	Oxford	30.09	67	W	2	c	29.98	-.21	64	58	+3	W	4	c	*	75	58	-
	Cambridge ...	30.05	70	W	2	c	29.93	-.20	65	58	+3	NW	2	bc	*	74	58	-
	Yarmouth ...	29.98	70	WNW	4	bc	29.87	-.20	59	56	0	NW	3	c	2	71	54	0.03
GERMANY & HOLLAND.	Cuxhaven ...	29.86	58	WNW	5	r	29.67	-.16	59	59	+2	W	3	r	*	62	57	0.12
	Berlin	29.86	60	NW	3	0	29.71	?	60	58	+4	WNW	4	0	*	64	55	0.24
	Wiesbaden ...	*	*	*	*	*	29.97	-.09	64	60	+3	SW	4	bc	*	70	61	-
	Munich	30.16	59	SW	3	b	30.11	-.01	62	56	+8	SW	5	b	*	66	?	-
	The Helder ...	29.89	62	W	4	r	29.76	-.23	56	55	-2	NW	3	c	3	63	55	0.08
FRANCE AND BELGIUM.	Brussels (9 a.m.)	*	*	*	*	*	29.93	-.17	61	59	+1	SW	3	0	*	70	56	-
	Cape Gris Nez	30.08	62	WSW	5	b	29.96	-.17	60	59	0	W	5	c	5	66	59	-
	Paris	30.20	67	WNW	2	0	30.12	-.11	59	57	-3	W	3	0	*	?	55	-
	Brest	30.31	60	W	3	0	30.21	-.12	57	57	-1	W	2	0	2	65	54	-
	Lorient	30.28	66	NNE	1	c	30.21	-.10	56	55	-3	NW	3	0	2	72	54	-
	Rochefort ...	30.32	67	NW	3	0	30.26	-.09	65	62	+1	NNE	3	0	*	72	59	-
	Belfort	?	64	W	1	bc	?	?	62	51	+3	NW	1	b	*	67	50	-
	Lyons	30.19	66	SE	3	b	30.13	-.11	63	59	+1	NW	3	b	*	72	56	-
	Nice	29.95	72	W	4	b	29.99	+.02	66	63	-2	WSW	3	b	0	78	59	-
	Perpignan ...	30.11	75	NW	2	b	30.10	-.13	72	63	+4	NW	3	b	*	81	62	-
	Biarritz	30.26	68	N	3	0	30.16	-.19	66	64	+2	SSE	2	0	1	72	63	-
PENINSULA.	Corunna	*	*	*	*	*												
	Lisbon	29.97	80	NNW	4	bc	29.98	-.10	70	63	-3	NE	1	b	4	88	64	-

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

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

WEATHER CHARTS

for 8 a.m. on Thursday, 24th July, 1890.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP.

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

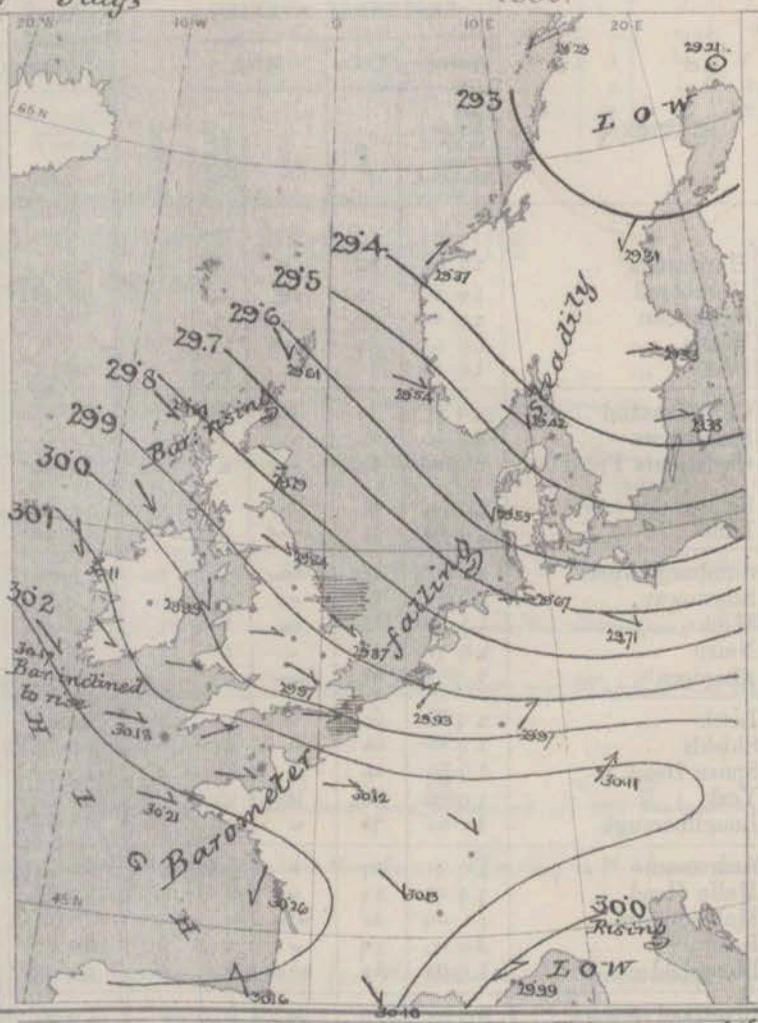
WIND - Arrows shew the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—
= forces above 10; = forces 8 to 10;
= forces 5 to 7; = forces 1 to 4.
= dead calm.

SEA DISTURBANCE—Where considerable, is shewn thus:
= Rough. = High.

MEAN HEIGHT OF THE BAROMETER

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

STATIONS.	MEAN READINGS.
	ins.
Sumburgh Head	29·794
Stornoway	29·797
Wick	29·810
Nairn	29·821
Aberdeen	29·831
Leith	29·830
Shields	29·876
York	29·910
Loughborough	29·936
Ardrossan	29·862
Donaghadee	29·881
Holyhead	29·918
Liverpool	29·913
Parsonstown	29·921
Valencia	29·939
Roche's Point	29·938
Pembroke	29·942
Scilly	29·984
Jersey	30·009
Hurst Castle	29·974
Dover	29·970
LONDON	29·967
Oxford	29·953
Cambridge	29·947
Yarmouth	29·943



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.

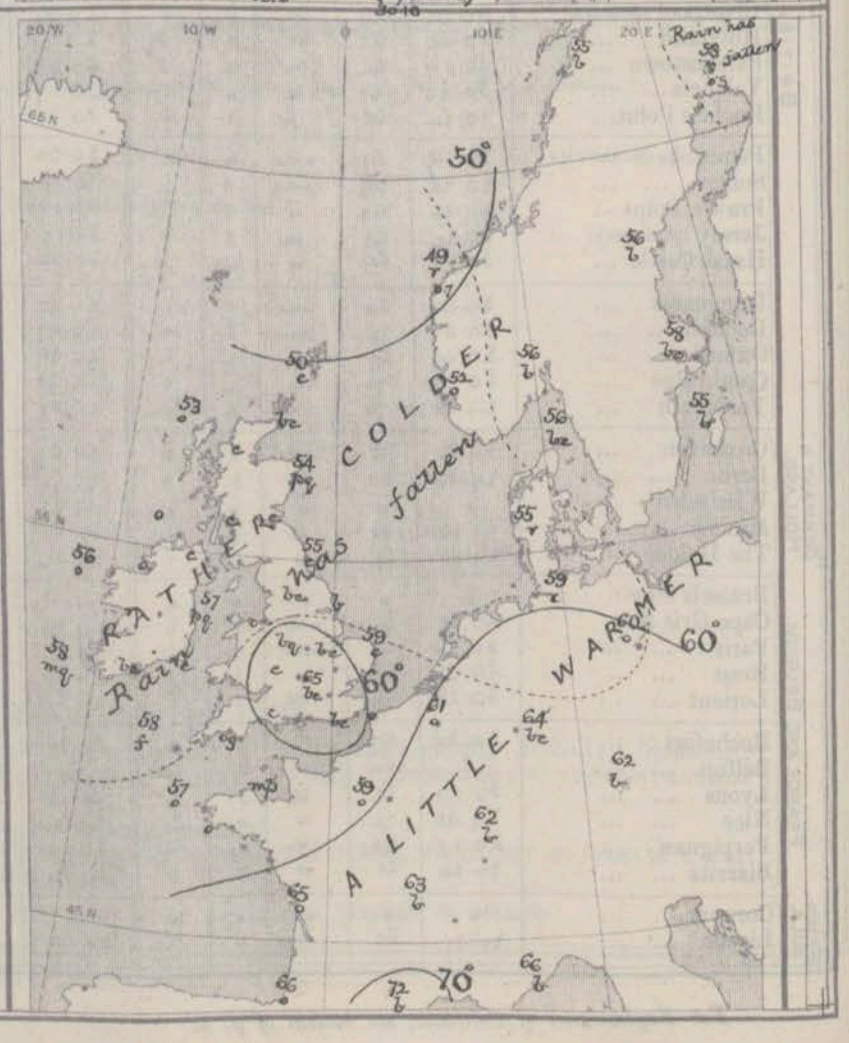
RAINFALL—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0·5 in. or more are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of July.)

STATIONS.	TEMPERATURE. Daily Max.	Daily Min.	at 8 a.m. Dry.	Wet.	RAINFALL. (Inches.)
Sumburgh Head	57·8	48·3	53·6	52·0	2·09
Stornoway	60·2	49·5	56·0	54·0	3·02
Wick	62·2	49·2	56·1	53·8	2·25
Nairn	64·7	51·4	57·2	53·6	2·57
Aberdeen	64·4	51·1	58·0	54·4	2·74
Leith	67·1	51·7	58·6	55·3	2·84
Shields	64·4	52·9	58·6	55·4	2·63
York	68·5	52·1	59·4	56·2	2·57
Loughborough	72·1	53·0	62·0	58·2	2·34
Ardrossan	63·9	53·2	57·5	54·8	2·91
Donaghadee	63·1	51·6	57·4	55·6	2·67
Holyhead	63·9	54·7	58·2	55·9	2·32
Liverpool	66·1	54·4	59·6	55·9	2·99
Parsonstown	66·4	51·9	58·3	54·8	3·01
Valencia	64·1	53·6	58·7	56·3	3·91
Roche's Point	66·7	53·3	58·7	55·8	3·16
Pembroke	62·9	55·0	58·1	55·9	2·31
Scilly	64·5	56·3	60·1	58·0	2·29
Jersey	68·8	56·3	62·2	59·2	2·21
Hurst Castle	67·9	55·7	61·3	58·8	2·15
Dover	67·2	56·9	62·6	58·8	1·82
LONDON	73·0	54·1	62·3	58·1	2·17
Oxford	69·9	53·7	60·2	56·8	2·51
Cambridge	72·3	52·4	61·4	57·9	2·30
Yarmouth	66·8	55·2	61·2	58·1	2·68

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



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30·2 ins: and upwards, in an anticyclone extending from the Atlantic over the Bay of Biscay and the west of France.

Lowest, 29·3 ins: and less, in a depression lying over the north of Scandinavia.

Gradients moderate or slight. Barometer rising a little in the north and extreme west of our Islands, but falling elsewhere.

TEMPERATURE

Highest, 72° at Perpignan, 70° at Lisbon, 66° at Nice and Biarritz, and 65° in London and at Cambridge and Rochford.

Lowest, 49° at Christiansund, 50° at Sumburgh Hd., 51° at Nairn, 52° at Stornoway and Wick, 53° at Stornoway and 54° at Aberdeen.

The highest maxima registered over our Islands yesterday were 76° in London and at Loughborough, 75° at Oxford and 74° at Cambridge.

WIND

Moderate to fresh from the W.ward or NW.ward over our Islands, the North Sea, Denmark, and the south of Scandinavia.

Light from the same quarters at most of the French stations.

Moderate from SW. over Belgium and South Germany; light and variable over the northern parts of Scandinavia.

WEATHER

Cloudy and showery in many parts of the United Kingdom; dull in the west and north of France; rainy over the south of Denmark Vexé in Sweden, South Germany, and the east and south of France.

Slight rain fell yesterday at many of our western and northern stations

SEA

Moderate to smooth generally, but rather rough at Spurn Head and Cape Gris Nez.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

Some small and very shallow depressions are apparently passing eastwards across our Islands, and showery weather is therefore not improbable over England. There are at present no indications of any decided change in the general distribution of pressure

FORECASTS

For the 24 hours ending at NOON on 25th JULY 1890.

DISTRICTS.	FORECASTS.
0 SCOTLAND NORTH 1 SCOTLAND EAST	NW.ward winds, light or moderate; fair generally, but some showers.
2 ENGLAND N.E. 3 ENGLAND EAST 4 MIDLAND COUNTIES	Same as No 5.
5 ENGLAND SOUTH	W.ward and NW.ward winds, fresh; unsettled, some showers, thunder locally.
6 SCOTLAND WEST 7 ENGLAND N.W.	NW.ward winds, moderate or fresh; changeable, some showers.
8 ENGLAND S.W.	Same as No 5.
9 IRELAND NORTH 10 IRELAND SOUTH	Same as Nos 6 and 7.
WARNINGS	NONE ISSUED.

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

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

YESTERDAY'S 2 P.M. REPORTS.

	BAR:	THER: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Skudesnaes ...	29·62	52	50	WNW	7	r	4
Sumburgh Head	29·65	52	49	WNW	2	o	4
Stornoway	29·77	57	56	W	5	o	5
Aberdeen	29·72	67	60	WNW	4	c q	1
Shields	29·87	68	62	WNW	5	c	2
Ardrossan	29·95	59	57	W	4	o	4
Malin Head ...	30·01	59	58	W	6	o	4
Mullaghmore ...	30·16	60	58	NW	7	o m	6
Belmullet	30·20	61	59	W	5	o	*
Holyhead	30·15	71	64	NW	4	b	4
Valencia	30·34	62	60	W	5	c m	5
Scilly	30·35	60	59	WNW	4	b	2
Jersey	30·30	65	60	WNW	3	o	3
Dungeness	30·13	68	63	NNW	5	bc	3
London	30·14	74	67	W	3	bc	*
Yarmouth	30·03	69	63	NW	4	c	2
Rochefort	30·36	71	65	NW	3	o	*

GENERAL REMARKS ON THE WEATHER OVER EUROPE

DURING THE PAST 24 HOURS.

Weather in morning fine and bright at most of the Mediterranean stations and over France, cloudy and unsettled in most other regions, with rain generally in Norway, and locally in several other parts of Northern, Northwestern, and Central Europe. Showers later over the northern and western parts of the British Islands and to the eastward of the North Sea, fell at Christiansund exceeding 0·7 in.

Temperature still low over the northwestern countries, and decreasing rapidly over Southeastern Europe. Morning readings exceeding 70° in the extreme south and southeast only; below 60° in many parts of France, Germany, and Austria, as well as over our Islands, the North Sea, and Scandinavia. Lowest of all 49° at Kobe and Sumburgh Hd., 50° at Christiansund, 53° at Wick, 54° at Aberdeen, Neufahrwasser and Memel. Rising to between 70° and 76° in several parts of England and Ireland later and to a somewhat higher value in the southern parts of France.

Wind mainly NW. over Northwestern Europe and Austria—moderate in most places, but strong locally at a few stations; N. over the south of France, NE. in Spain, W. moderate over Germany, S. over Finland. Very variable over Russia and the Mediterranean. Becoming more W. and freshening, in our Islands later.

Barometer highest 30·4 ins. and more to 30·0 ins. over Ireland England, France, Spain, the Bay of Biscay and adjacent parts of the Atlantic; 29·7 ins. and more, over Central, Northern, and Eastern Russia. Lowest 29·3 ins. and less, over the northern parts of Scandinavia, the Gulf of Bothnia and Gulf of Riga; 30·0 ins. and less, over the Gulf of Genoa and Northern Italy. Falling in our Islands later.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

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

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

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

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

DAILY WEATHER REPORT.

for Friday, 25th July 1890.

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

	STATIONS.	YESTERDAY EVENING. Barom: Reading at 32° F. and Sea Level.	Temp. Dry.	Wind. Direc.	Force. (0 to 12.)	Weather.	8 A.M. TO DAY. Barometer. Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Shade Temp. Dry.	Wet.	Difference from 8 a.m. yesterday.	Wind. Direc.	Force. (0 to 12.)	Weather.	Sea. (0 to 5.)	PAST 24 HOURS. Shade Temp. Max.	Min.	Amount of Rainfall.
SCANDINAVIA.	Haparanda ...	29.22	52	SSW	2	o	29.31	+.10	58	54	0	WNW	2	bc	*	61	50	0.08
	Hernösand ...	29.30	53	SSW	2	bc	29.40	+.09	55	49	-1	NNW	4	b	*	66	43	0.24
	Stockholm ...	29.30	58	WNW	2	c	29.36	+.03	54	52	-4	NNW	2	o	*	70	50	-
	Wisby	29.33	57	WNW	4	c	29.38	.00	57	52	+2	W	4	c	*	61	54	-
	Bodö	29.32	53	W	2	c	29.60	+.02	48	46	-7	SW	6	r	2	?	45	0.24
	Christiansund	29.47	57	WNW	4	c	29.54	+.17	50	47	+1	W	4	r	4	?	48	0.39
	Skudesnaes ...	29.54	52	NW	1	c	29.70	+.16	50	48	-2	NNW	2	r	3	55	48	0.47
	Christiania Fjord (Færder)	29.37	59	NW	3	o	29.54	+.15	56	48	0	NNE	5	b	2	61	53	-
	Skagen (The Skaw)	29.39	55	NW	4	bc	29.54	+.12	58	53	+2	NW	2	b	2	61	52	-
	Fanö	29.67	53	NW	6	c	29.76	+.21	55	53	0	NW	6	c	*	59	50	0.24
BRITISH ISLANDS.	Sumburgh Head	29.70	48	NW	4	o	29.80	+.19	51	47	+1	NNW	4	c	4	53	43	0.06
	Stornoway ...	29.86	56	NW	4	bc	29.93	+.12	53	53	0	W	3	o	3	57	40	0.02
	Wick	29.80	54	NW	3	b	29.92	+.17	55	50	+3	NW	3	b	1	57	43	-
	Nairn	29.84	57	W	3	bc	29.94	+.13	55	50	+4	W	2	b	1	59	42	-
	Aberdeen ...	29.84	55	W	2	c	29.96	+.17	53	49	-1	NW	2	b	2	60	45	0.13
	Leith	29.87	61	W	4	c	29.97	+.13	59	54	+1	W	1	c	*	66	49	-
	Shields	29.86	63	WNW	3	c	29.99	+.15	56	53	+1	WNW	3	c	2	66	49	-
	Spurn Head ...	29.88	62	WNW	4	c	30.00	+.13	57	54	-1	WNW	3	bc	3	63	53	-
	York	29.91	62	W	3	c	30.01	+.12	58	53	+1	WNW	3	bc	*	67	47	-
	Loughborough	29.99	62	W	5	bc	30.07	+.12	57	54	-6	W	2	cw	*	69	47	-
	Ardrossan ...	29.95	57	W	4	c	30.00	+.09	58	53	+2	WNW	3	c	1	61	53	-
	Malin Head ...	30.01	56	NW	5	cp	30.02	+.06	56	53	+1	W	2	o	2	57	53	0.01
	Mullaghmore ...	30.08	57	WNW	6	cp	30.04	-.01	57	51	+1	SSW	1	c	2	60	49	-
	Belmullet ...	30.13	59	WNW	2	o	30.01	-.10	58	53	+2	ESE	1	o	*	59	51	-
	Donaghadee ...	30.02	58	NNW	3	o	30.06	+.07	58	55	-1	WNW	3	c	1	63	56	-
	Liverpool (Bidston)	30.01	58	WNW	4	c	30.04	+.11	58	54	+2	WNW	4	bc	4	62	55	-
	Holyhead ...	30.05	59	NW	3	c	30.08	+.09	62	57	+5	NW	1	b	1	66	52	-
	Parsonstown ...	30.10	62	Z	0	bc	30.06	+.01	55	53	-4	Z	0	c	*	65	48	-
	Valencia	30.18	59	W	2	cm	30.08	-.12	60	59	+2	WSW	3	rm	4	62	54	0.14
	Roche's Point ...	30.12	62	NW	4	bc	30.09	-.03	57	57	-4	S	3	r	3	66	55	0.10
	Pembroke (St. Ann's Hd.)	30.08	61	N	1	bc	30.13	+.08	58	56	-1	SE	1	bc	0	64	52	-
	Scilly	30.14	60	NW	4	c	30.14	-.04	58	57	0	WNW	1	bc	2	61	55	-
	Prawle Point ...	30.08	61	W	3	c	30.14	+.03	59	57	0	S	1	bc	0	66	57	-
	Jersey (St. Aubin's)	30.11	60	W	3	o	30.15	.00	63	58	+4	NW	3	bcm	3	63	55	-
	Hurst Castle ...	30.00	65	WSW	5	b	30.13	+.09	60	56	-1	WNW	1	bc	1	72	52	-
	Dungeness ...	29.93	60	WSW	4	bc	30.03	+.08	58	52	-6	N	3	b	2	69	50	-
	London	29.95	68	NW	2	c	30.08	+.11	60	54	-5	NW	1	bc	*	75	51	-
	Oxford	30.01	60	NNW	3	b	30.10	+.12	59	53	-5	NW	2	b	*	72	50	-
	Cambridge ...	29.94	62	N	2	b	30.06	+.13	60	55	-5	NW	1	b	*	72	49	-
	Yarmouth ...	29.92	62	NNE	2	b	30.02	+.15	57	54	-2	WNW	3	bc	2	68	49	-
GERMANY & HOLLAND.	Cuxhaven ...	29.75	57	WNW	5	b	29.82	+.15	58	56	-1	NW	5	b	*	60	56	0.40
	Berlin	29.72	60	WNW	5	bc	29.86	+.15	56	51	-4	WNW	4	c	*	64	50	0.16
	Wiesbaden ...	*	*	*	*	*	30.00	+.03	58	56	-6	Z	0	c	*	70	54	0.49
	Munich	30.04	61	SW	5	o	30.06	-.05	61	59	-1	SW	4	c	*	73	55	0.04
	The Helder ...	29.90	58	NW	2	b	29.93	+.17	59	54	+3	NNW	2	bc	3	59	55	-
FRANCE AND BELGIUM.	Brussels (9 a.m.)	*	*	*	*	*	30.01	+.08	57	55	-4	W	2	o	*	69	55	0.16
	Cape Gris Nez	29.94	61	W	3	o	30.08	+.12	56	53	-4	NW	4	bc	4	66	54	-
	Paris	30.07	65	WNW	3	o	30.08	-.04	61	59	+2	W	1	o	*	71	56	-
	Brest	30.17	61	NNW	2	m	30.17	-.04	59	57	+2	N	1	o	2	66	50	-
	Lorient	30.17	62	WNW	2	o	30.16	-.05	58	57	+2	NW	2	b	2	66	55	-
	Rochefort ...	30.20	64	NW	4	b	30.20	-.06	63	62	-2	NW	3	c	*	73	57	-
	Belfort	?	67	W	1	o	?	?	67	50	+5	W	1	o	*	70	50	0.20
	Lyons	30.06	68	NNE	2	b	30.11	-.02	63	57	0	NE	1	b	*	75	56	-
	Nice	29.93	70	SSW	4	b	29.93	-.06	67	62	+1	Z	0	b	0	82	61	-
	Perpignan ...	30.01	78	W	3	o	30.04	-.06	72	63	0	NW	3	b	*	88	66	-
	Biarritz	30.13	69	NNE	4	o	30.18	+.02	65	61	-1	NNE	3	o	2	75	64	-
PENINSULA.	Corunna	*	*	*	*	*	† 30.17	.00	69	64	+2	N	6	bc	6	70	57	-
	Lisbon	29.97	78	NNW	5	b	30.01	+.03	72	63	+2	NNE	2	b	5	86	68	-

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, 25th July,* 1890.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP.

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

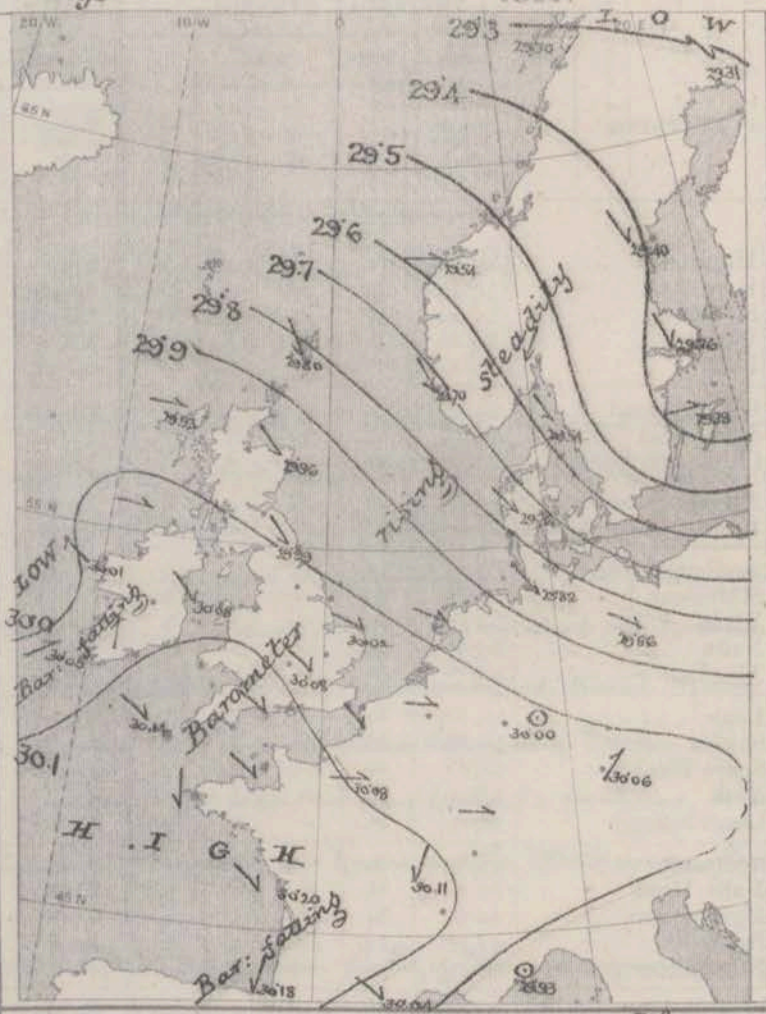
WIND - Arrows shew the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—
= forces above 10; = forces 8 to 10;
= forces 5 to 7; = forces 1 to 4.
⊙ = dead calm.

SEA DISTURBANCE—Where considerable, is shewn thus:
= Rough. = High.

MEAN HEIGHT OF THE BAROMETER

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

STATIONS.	MEAN READINGS.
	ins.
Sumburgh Head	29 · 794
Stornoway	29 · 797
Wick	29 · 810
Nairn	29 · 821
Aberdeen	29 · 831
Leith	29 · 850
Shields	29 · 876
York	29 · 910
Loughborough	29 · 936
Ardrossan	29 · 862
Donaghadee	29 · 881
Holyhead	29 · 918
Liverpool	29 · 913
Parsonstown	29 · 921
Valencia	29 · 939
Roche's Point	29 · 938
Pembroke	29 · 942
Scilly	29 · 984
Jersey	30 · 009
Hurst Castle	29 · 974
Dover	29 · 970
LONDON	29 · 967
Oxford	29 · 953
Cambridge	29 · 947
Yarmouth	29 · 943



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.

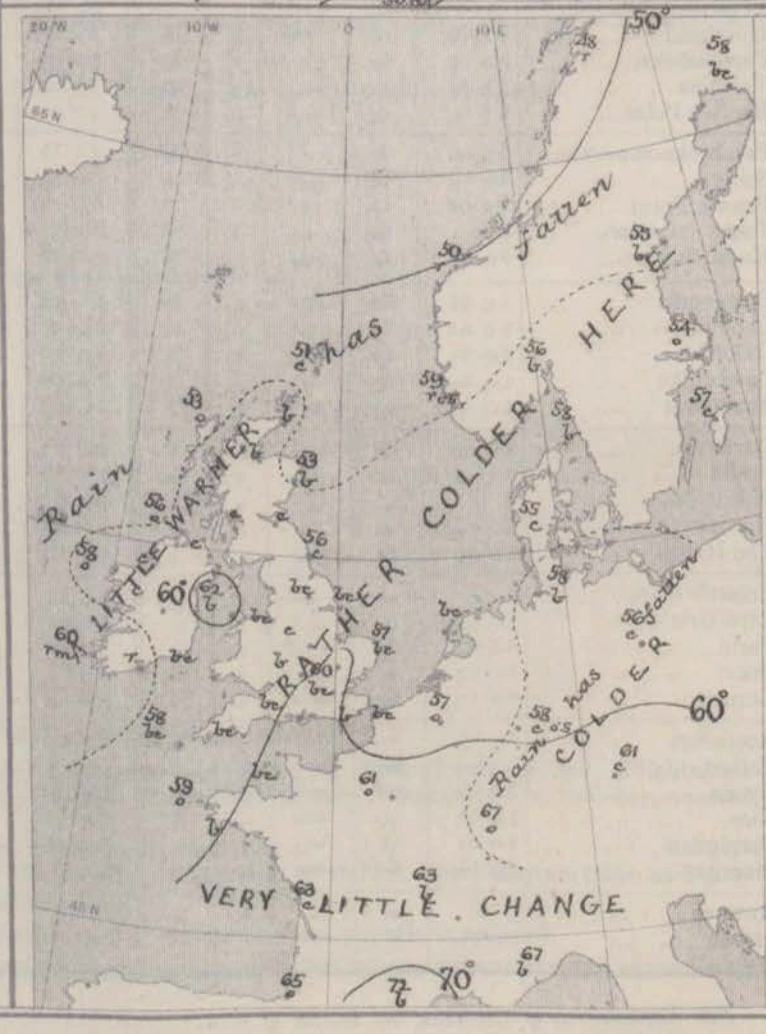
RAINFALL—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0·5 in. or more are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of July.)

STATIONS.	TEMPERATURE. Daily Max.	Daily Min.	at 8 a.m. Dry.	Wet.	RAINFALL. (Inches.)
Sumburgh Head	57 · 8	48 · 3	53 · 6	52 · 6	2 · 09
Stornoway	60 · 2	49 · 5	56 · 0	54 · 0	3 · 02
Wick	62 · 2	49 · 2	56 · 1	53 · 8	2 · 25
Nairn	64 · 7	51 · 4	57 · 2	53 · 6	2 · 57
Aberdeen	64 · 4	51 · 1	58 · 9	54 · 4	2 · 74
Leith	67 · 1	51 · 7	58 · 6	55 · 3	2 · 84
Shields	64 · 4	52 · 9	58 · 6	55 · 4	2 · 63
York	68 · 5	52 · 1	59 · 4	56 · 2	2 · 57
Loughborough	72 · 1	53 · 0	62 · 0	58 · 2	2 · 34
Ardrossan	63 · 9	53 · 2	57 · 5	54 · 8	2 · 91
Donaghadee	63 · 1	51 · 6	57 · 4	55 · 6	2 · 67
Holyhead	63 · 9	54 · 7	58 · 2	55 · 9	2 · 32
Liverpool	66 · 1	54 · 4	59 · 6	55 · 9	2 · 99
Parsonstown	66 · 4	51 · 9	58 · 3	54 · 8	3 · 01
Valencia	64 · 1	53 · 6	58 · 7	56 · 3	3 · 91
Roche's Point	66 · 7	53 · 3	58 · 7	55 · 8	3 · 16
Pembroke	62 · 9	55 · 0	58 · 1	55 · 9	2 · 31
Scilly	64 · 5	56 · 3	60 · 1	58 · 0	2 · 29
Jersey	68 · 8	56 · 3	62 · 2	59 · 2	2 · 21
Hurst Castle	67 · 9	55 · 7	61 · 3	58 · 8	2 · 15
Dover	67 · 2	56 · 9	62 · 6	58 · 8	1 · 82
LONDON	73 · 0	54 · 1	63 · 3	58 · 1	2 · 17
Oxford	69 · 9	53 · 7	60 · 2	56 · 8	2 · 51
Cambridge	72 · 3	52 · 4	61 · 4	57 · 9	2 · 30
Yarmouth	66 · 8	55 · 2	61 · 2	58 · 1	2 · 68

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 Rochefort; 30·1 ins. and upwards over the Channel, the Bay of Biscay, the south of England and the greater part of France.
Lowest, 29·3 ins. and less, in a depression lying over Lapland; 30·0 ins. and less, in another system lying off the west of Ireland.
Gradients slight. Barometer falling a little on the west coasts of our Islands and France, but rising elsewhere.

TEMPERATURE

Highest, 72° at Perpignan and Lisbon, 67° at Nice and Belfort, 65° at Biarritz, and 63° at Jersey, Rochefort and Lyons.
Lowest, 45° at Haparanda, 50° at Christiansund, and Rudenaes, 51° at Lerwick Head, and 53° at Stornoway and Aberdeen.
The highest maxima registered over our Islands yesterday were 75° in London and 72° at Oxford and Cambridge.

WIND

Light or moderate from the W. or NW. over the greater part of Western Europe, but S. in Ireland and the southwest of England.
At some of the Danish stations the NW. wind blew strongly.

WEATHER

Hazy in the south of Ireland and also in the west of Norway.
Fine in most other localities, but dull at some of the French stations.
Slight showers fell yesterday in many parts of the United Kingdom and heavy rain at some of the German and Norwegian stations.

SEA

Moderate to smooth generally, but rather rough at Lisbon.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The depression off the west of Ireland will probably move eastwards and occasion unsettled weather in many parts of the United Kingdom.

FORECASTS

For the 24 hours ending at NOON on 26th JULY, 1890.

DISTRICTS.	FORECASTS.	DISTRICTS.	FORECASTS.
0 SCOTLAND NORTH 1 SCOTLAND EAST	Light winds, backing to the S. or SE., fine to showery.	6 SCOTLAND WEST	Same as No. 0 and 1.
2 ENGLAND N.E.	SW. to S. winds, light; fine to dull and some rain.	7 ENGLAND N.W. 8 ENGLAND S.W.	SW. to W. or NW. winds, moderate; unsettled, some rain.
3 ENGLAND EAST 4 MIDLAND COUNTIES 5 ENGLAND SOUTH	W. to SW. winds, light or moderate; fine to dull and some rain, possibly thunder.	9 IRELAND NORTH 10 IRELAND SOUTH	S. winds, shifting to the NW., dull and rainy at first, some improvement later.
		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: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Skudesnaes ...	29.83	55	51	NNW	6	c	4
Sumburgh Head	29.67	50	48	NW	5	o	6
Stornoway	29.84	54	53	NW	4	c	4
Aberdeen	29.81	59	51	NNW	3	c	3
Shields	29.85	64	55	NNW	4	c	2
Ardrossan	29.93	61	58	W	4	c	3
Malin Head ...	30.01	56	52	NW	4	o	3
Mullaghmore ...	30.08	60	55	NNW	5	o	4
Belmullet	30.11	59	54	WSW	2	r	*

	BAR:	THER: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Holyhead	30.08	64	57	NW	1	b	2
Valencia	30.18	62	57	NW	3	bc	2
Scilly	30.14	60	59	NNW	4	m	3
Jersey	30.14	61	59	NNW	3	o	3
Dungeness	29.94	64	61	WSW	4	bc	3
London	29.95	74	65	NNW	3	c	*
Yarmouth	29.92	64	58	N	4	b	3
Rochefort	30.23	71	65	NW	4	bc	*

GENERAL REMARKS ON THE WEATHER OVER EUROPE

DURING THE PAST 24 HOURS.

Weather in morning fine over Western Europe as a whole, but dull in several regions, and showery in some localities. Dull and rainy in many parts of Northern and Central Europe, fine and bright in the extreme southeast, southeast, and south. Rainfall considerable over Northern and Central Europe later, but fair weather prevalent over the greater part of the United Kingdom, with slight showers in a few localities.

Temperature rises somewhat over the Baltic, Central Europe, and Southern Russia, not changed much over Western or Northwestern Europe. Morning readings varying between 70° and 84° at the Mediterranean stations to less than 60° over the most Northwestern countries; lowest values of all 45° at Christiansund, 50° at Sumburgh Head, 51° at Malin, 52° at Skudesnaes. Rising during day to between 70° and 75° over the southern and south midland counties of England, but falling short of 70° in north. Maxima 82° at Nice, 86° at Lisbon, 88° at Perpignan.

Wind NW, moderate, in Ireland and Scotland and over the North Sea, W in the south of England and north of France, W and SW over North Germany; N to NE over Spain and the southwest of France; very variable elsewhere, and light NW rising becoming strong at Skudesnaes later, no change worth noting later.

Barometer highest 30.2 ins. and more to 30.0 ins. over the Bay of Biscay, Ireland, France, the northern parts of Spain and Portugal and Algeria; lowest 29.3 ins. and less, over Lapland and the north of Sweden, 29.7 ins. and less, over the south of Russia, 30.0 ins. and less, over Sardinia, Corsica, and the Gulf of Genoa. No important change over Western Europe later.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

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

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

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

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

DAILY WEATHER REPORT.

for Saturday, 26th July, 1890.

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

	STATIONS.	YESTERDAY EVENING. Barom: Reading at 32° F. and Sea Level.	Temp. Dry.	Wind. Direc.	Force. (0 to 12.)	Weather.	8 A.M. TO DAY. Barometer. Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Shade Temp. Dry.	Wet.	Difference from 8 a.m. yesterday.	Wind. Direc.	Force. (0 to 12.)	Weather.	Sea. (0 to 6.)	PAST 24 HOURS. Shade Temp. Max.	Min.	Amount of Rainfall.
SCANDINAVIA.	Haparanda ...	29.48	58	SE	0	b	29.52	+.21	56	53	-2	N	2	bc	*	64	48	-
	Hernösand ...	29.54	57	NW	2	bc	29.60	+.20	54	46	-1	NNW	4	b	*	72	48	-
	Stockholm ...	29.56	54	W	2	b	29.74	+.33	57	50	+3	N	4	b	*	68	46	0.04
	Wisby	29.58	56	N	6	c	29.67	+.29	58	54	+1	NW	4	bc	*	59	52	-
	Bodö	29.50	48	SSW	4	c	29.54	+.24	48	46	0	S	2	o	1	50	43	0.12
	Christiansund	29.74	49	SSW	5	r	29.62	+.08	50	46	0	SSW	5	r	4	50	48	0.28
	Skudesnaes ...	29.87	52	NW	6	c	29.92	+.22	55	50	+5	SW	2	o	3	55	46	-
	Christiania Fjord (Færder)	29.65	52	NNW	2	c	29.83	+.29	57	49	+1	NNW	2	b	2	59	54	-
	Skagen (The Skaw)	29.66	56	NW	1	b	29.84	+.30	58	53	0	NW	1	b	1	64	54	-
	Fanö	29.90	52	NNW	4	c	29.99	+.23	55	54	0	NNW	4	c	*	59	52	0.02
BRITISH ISLANDS.	Sumburgh Head	29.87	52	W	2	o	29.74	-.06	55	54	+4	S	2	c	3	57	49	0.02
	Stornoway ...	29.90	59	W	3	c	29.64	-.29	53	53	0	SW	3	r	3	59	46	0.04
	Wick	29.92	55	E	0	o	29.68	-.24	56	54	+1	SW	2	bc	1	62	49	0.02
	Nairn	29.92	62	W	1	b	29.70	-.24	55	52	0	E	0	c	0	64	41	-
	Aberdeen ...	29.96	55	SSE	2	c	29.77	-.19	56	53	+3	SE	1	c	2	61	46	-
	Leith	29.97	64	W	3	b	29.76	-.21	58	55	-1	SSE	1	c	*	66	46	-
	Shields	30.00	57	SE	2	bc	29.84	-.15	57	55	+1	S	3	o	2	58	51	-
	Spurn Head ...	30.05	59	ESE	3	b	29.92	-.08	62	60	+5	WSW	4	bc	3	64	56	0.20
	York	30.04	64	W	1	b	29.91	-.10	62	59	+4	SW	3	o	*	66	54	0.07
	Loughborough	30.06	59	W	1	c	29.98	-.09	61	59	+4	SW	3	cp	*	72	57	0.05
	Ardrossan ...	29.95	58	SW	2	bc	29.73	-.27	59	58	+1	SSW	4	o	3	63	53	0.16
	Malin Head ...	29.86	58	ESE	4	b	29.70	-.32	59	58	+3	SW	3	opd	1	61	56	0.05
	Mullaghmore ...	29.90	60	SE	2	o	29.75	-.29	60	59	+3	SW	4	og	2	63	57	0.09
	Belmullet ...	29.89	60	SW	2	o	29.77	-.24	58	57	0	WNW	4	o	*	63	57	0.31
	Donaghadee ...	29.98	59	SSW	3	bc	29.77	-.29	68	62	+5	W	3	c	1	64	56	0.48
	Liverpool (Bidston)	30.02	63	NNW	1	o	29.90	-.17	61	59	+3	SW	3	o	3	67	56	0.19
	Holyhead ...	30.02	57	SSE	2	dg	29.88	-.20	58	58	-4	SW	5	gm	5	65	56	0.41
	Parsonstown ...	29.94	61	SW	2	r	29.83	-.23	61	60	+6	SW	2	o	*	62	55	0.86
	Valencia	29.99	61	SSW	5	rm	29.90	-.15	60	59	0	WSW	3	om	3	64	58	0.22
	Roche's Point...	30.04	64	WSW	3	bc	29.93	-.14	60	60	+3	WSW	4	p	4	66	57	0.20
	Pembroke (St. Ann's Hd.)	30.06	58	SSW	3	o	29.98	-.15	60	58	+2	SSW	5	c	4	60	56	0.03
	Scilly	30.13	60	SW	2	f	30.07	-.07	60	60	+2	SW	4	o	2	62	54	-
	Prawle Point ...	30.15	58	SW	4	c	30.09	-.05	59	58	0	SSW	3	o	1	61	56	0.01
	Jersey (St. Aubin's)	30.17	65	W	2	c	30.14	-.01	60	59	-3	WSW	3	fd	3	68	58	-
	Hurst Castle ...	30.14	61	WSW	4	bc	30.08	-.05	60	60	0	WSW	4	cp	2	66	59	0.01
	Dungeness ...	30.09	62	WSW	5	bc	30.07	+.04	61	58	+3	WSW	4	cp	3	66	57	0.01
	London	30.10	65	WSW	2	bc	30.05	-.03	60	59	0	SW	1	od	*	72	57	0.04
	Oxford	30.09	61	WSW	2	r	30.04	-.06	62	59	+3	SW	2	c	*	70	57	0.01
	Cambridge ...	30.07	65	N	1	b	30.02	-.04	65	62	+5	SW	1	o	*	70	65	-
	Yarmouth ...	30.09	61	ESE	2	bc	30.01	-.01	59	54	+2	SSW	2	om	2	63	54	0.03
GERMANY & HOLLAND.	Cuxhaven ...	29.93	59	NW	5	bc	30.05	+.23	60	57	+2	NW	4	b	*	61	58	-
	Berlin	29.91	57	WNW	4	b	30.06	+.20	55	51	-1	WNW	5	bc	*	68	48	-
	Wiesbaden ...	*	*	*	*	*	30.16	+.16	57	52	-1	N	2	b	*	72	50	-
	Munich	30.13	56	E	0	c	30.19	+.13	58	54	-3	E	4	c	*	68	54	0.08
	The Helder ...	30.08	56	NW	1	bc	30.06	+.13	57	55	-2	S	1	bc	1	59	48	-
FRANCE AND BELGIUM.	Brussels (9 a.m.)	*	*	*	*	*	30.14	+.13	60	54	+3	SW	1	o	*	66	46	-
	Cape Gris Nez	30.12	60	SW	4	c	30.12	+.04	61	59	+5	SW	4	c	4	68	56	-
	Paris	30.14	64	NNW	3	b	30.17	+.09	55	53	-6	N	1	o	*	?	50	-
	Brest	30.18	62	W	1	o	30.13	-.04	61	60	+2	WSW	1	o	1	68	55	-
	Lorient																	
	Rochefort ...	30.22	66	WNW	4	b	30.20	.00	63	?	0	ENE	2	b	*	72	52	-
	Belfort	?	65	E	1	bc	?	?	62	52	-5	E	2	b	*	69	52	-
	Lyons	30.08	69	WNW	3	b	30.10	-.01	60	56	-3	NNW	3	b	*	73	57	-
	Nice	29.90	69	SW	5	b	29.94	+.01	67	64	0	SE	1	c	0	79	61	-
	Perpignan ...	30.06	73	NW	3	b	30.09	+.05	70	63	- -	W	2	b	*	81	61	-
	Biarritz	30.18	65	NW	5	c	30.15	-.03	63	62	-2	SE	3	o	?	77	61	-
PENINSULA.	Corunna	*	*	*	*	*												
	Lisbon	29.96	76	NW	5	b	30.01	.00	69	62	-3	N	2	b	4	70	64	-

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

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

WEATHER CHARTS

for 8 a.m. on Saturday, 26th July 1890.

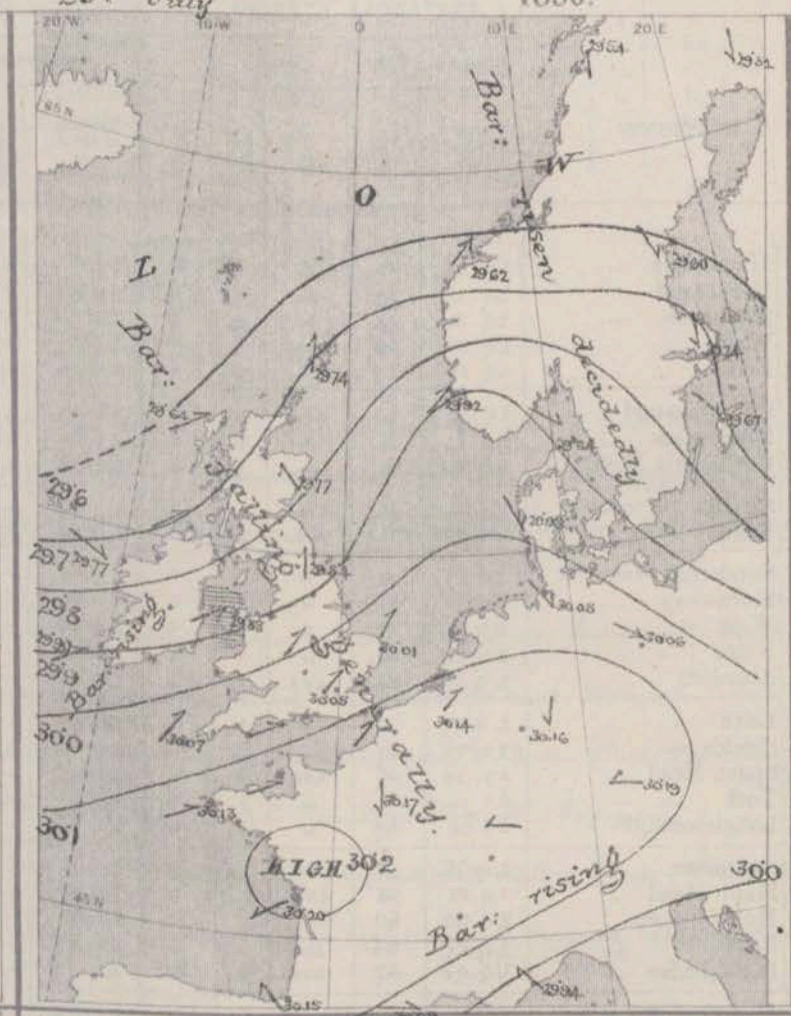
BAROMETER, WIND AND SEA.

EXPLANATION OF MAP.

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

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

SEA DISTURBANCE—Where considerable, is shewn thus:
= Rough. = High.



MEAN HEIGHT OF THE BAROMETER

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

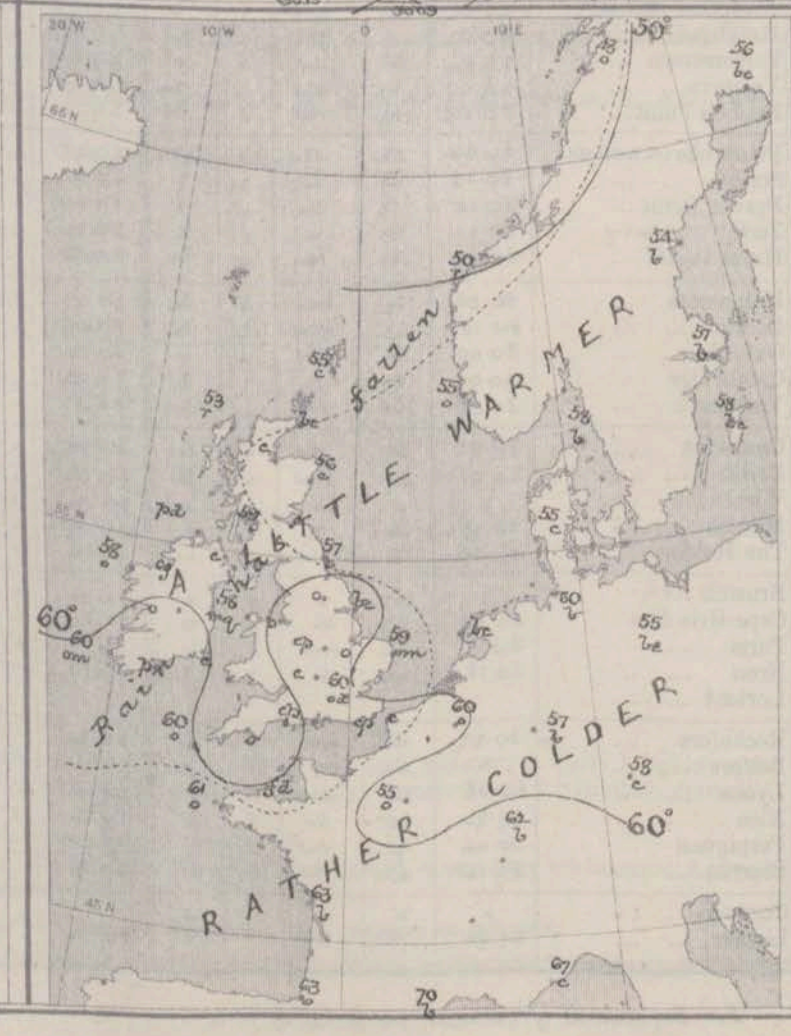
STATIONS.	MEAN READINGS. ins.
Sumburgh Head	29·794
Stornoway	29·797
Wick	29·810
Nairn	29·824
Aberdeen	29·831
Leith	29·850
Shields	29·876
York	29·910
Loughborough	29·936
Ardrossan	29·862
Donaghadee	29·881
Holyhead	29·918
Liverpool	29·913
Parsonstown	29·921
Valencia	29·939
Roche's Point	29·938
Pembroke	29·942
Scilly	29·984
Jersey	30·009
Hurst Castle	29·974
Dover	29·970
LONDON	29·967
Oxford	29·953
Cambridge	29·947
Yarmouth	29·943

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 July.)

STATIONS.	TEMPERATURE. Daily Max.	Daily Min.	at 8 a.m. Dry.	at 8 a.m. Wet.	RAINFALL (Inches.)
Sumburgh Head	57·8	48·3	53·6	52·0	2·69
Stornoway	60·2	49·5	56·0	54·0	3·02
Wick	62·2	49·2	56·1	53·8	2·25
Nairn	64·7	51·4	57·2	53·6	2·57
Aberdeen	64·4	51·1	58·0	54·4	2·74
Leith	67·1	51·7	58·6	55·3	2·84
Shields	64·4	52·9	58·6	55·4	2·63
York	68·5	52·1	59·4	56·2	2·57
Loughborough	72·1	53·0	62·0	58·2	2·34
Ardrossan	65·9	53·2	57·5	54·8	2·91
Donaghadee	63·1	51·6	57·4	55·6	2·67
Holyhead	63·9	54·7	58·2	55·9	2·32
Liverpool	66·1	54·4	59·6	55·9	2·99
Parsonstown	66·4	51·9	58·3	54·8	3·01
Valencia	64·1	53·6	58·7	56·3	3·91
Roche's Point	66·7	53·3	58·7	55·8	3·16
Pembroke	62·9	55·0	58·1	55·9	2·31
Scilly	64·5	56·3	60·1	58·0	2·29
Jersey	68·8	56·3	62·2	59·2	2·21
Hurst Castle	67·9	55·7	61·3	58·8	2·15
Dover	67·2	56·9	62·6	58·8	1·82
LONDON	73·0	54·1	62·3	58·1	2·17
Oxford	69·9	53·7	60·2	56·8	2·51
Cambridge	72·3	52·4	61·4	57·9	2·30
Yarmouth	66·8	55·2	61·2	58·1	2·68

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 Rochefort, 30·1 ins. and upwards, in an anticyclone lying over the Channel, the Bay of Biscay, France, and Western Germany.
Lowest, 29·6 ins. and less, over the northern parts of Scandinavia.
Gradients moderate over our Islands and the west of Norway, slight elsewhere.
Barometer falling in our Islands and the west of France generally, but rising again at Valencia.

TEMPERATURE

Highest, 70° at Perpignan, 69° at Lerwick, 67° at Nice, 65° at Cambridge, and 63° at Rochefort and Brussels.
Lowest, 48° at Bodö, 50° at Christiansund, 53° at Tromsoe, 54° at Hernösand, and 55° at Skudesnes, Fare Dumbugh Head and Nairn.
The highest maxima registered over our Islands yesterday were 72° at Loughborough and in London, and 70° at Oxford and Cambridge.

WIND

Light or moderate from the S.ly or SW.ly over our Islands and the west of Norway.
Moderate from the N.ly or NW.ly in Sweden.
Light from the E.ly over the southern parts of France and Germany.

WEATHER

Cloudy or overcast over the greater part of the United Kingdom and also in the north of France and west of Norway, with showers in the southern parts of Ireland and England.
Fine in Sweden, Denmark, the Netherlands, Germany, and the south of France.
Since yesterday morning rain has fallen at all but our northeastern stations.

SEA

Moderate to smooth generally, but rather rough at Holyhead.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

Conditions are still favourable for the passage of depressions along our western coasts, and the weather over the United Kingdom seems likely to remain in a somewhat unsettled and showery state.

FORECASTS

For the 24 hours ending at NOON on 27th JULY 1890.

DISTRICTS.	FORECASTS.	DISTRICTS.	FORECASTS.
0 SCOTLAND NORTH 1 SCOTLAND EAST 2 ENGLAND N.E.	S.ly and SW.ly winds, light or moderate; changeable, some rain.	6 SCOTLAND WEST 7 ENGLAND N.W. 8 ENGLAND S.W.	SW.ly winds, fresh; gusty, showery.
3 ENGLAND EAST 4 MIDLAND COUNTIES 5 ENGLAND SOUTH	SW.ly winds, moderate or fresh; changeable, some showers.	9 IRELAND NORTH 10 IRELAND SOUTH	W.ly to S.ly winds, unsettled, rain at times
		WARNINGS	NONE ISSUED.

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

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

YESTERDAY'S 2 P.M. REPORTS.

	BAR:	THER: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Skudesnaes ...	29·83	65	50	NW	7	c	4
Sumburgh Head	29·88	55	52	WNW	2	bc	3
Stornoway	29·93	58	55	W	3	c	3
Aberdeen	29·95	58	52	S	2	c	3
Shields	30·04	54	51	ESE	2	dp	3
Ardrossan	30·01	61	57	S	2	bc	2
Malin Head ...	29·99	61	56	E	3	b	2
Mullaghmore ...	29·96	62	56	ESE	4	o	3
Belmullet	29·94	63	59	SSE	1	o	*

	BAR:	THER: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Holyhead	30·09	64	57	SSW	3	b	2
Valencia	30·05	62	60	WSW	4	om	4
Scilly	30·16	62	61	SSW	1	bc	3
Jersey	30·18	67	58	WNW	2	c	2
Dungeness	30·09	63	58	WSW	4	bc	3
London	30·10	68	60	W	2	c	*
Yarmouth	30·08	61	55	N	3	c	2
Rochefort	30·20	69	64	WNW	4	c	?

GENERAL REMARKS ON THE WEATHER OVER EUROPE

DURING THE PAST 24 HOURS.

Weather in morning fine and bright over Southeastern, Southern, and Southwestern Europe, fair generally over France, Great Britain and the North Sea, dull and unsettled elsewhere. Very rainy on the Norwegian coast and in the south of Ireland, and rather showery looking in the southeast of England. Rainy weather in Ireland becoming more general later, and spreading to many parts of Gt Britain.

Temperature in morning exceeding 70° over the Mediterranean, Adriatic, and at Constantinople, lower in all other parts of Europe, and below 60° over most of the northwestern, northern, and central Countries. As low as 48° at Bodo, 50° at Christiansund and Skudesnaes, 51° at Sumburgh Head, and 53° at Stornoway and Aberdeen. Rising to a little above 70° at some of the English and French stations later, to 81° at Perpignan and to 90° at Lisbon, but not touching 60° either at Sumburgh Head, Stornoway or Shields.

Wind chiefly NW³ or W³ over Great Britain, the North Sea, Germany and Austria, and moderate in force, but SW³ to S³, light, both over the Baltic Provinces and Finland on the one hand, and in the west and south of Ireland on the other. N³ to NE³ over the Spanish Peninsula, very variable and light over the Mediterranean. Becoming S³ and freshening on our western coasts generally towards evening, and backing at some of the Central English stations also.

Barometer highest 30·2 ins: to 30·0 ins: in an anticyclonic system of irregular form, covering the Bay of Biscay, Spain, France, England and Ireland, and exceeding 29·8 ins: over the southeast of Russia. Lowest 29·3 ins: and less over Lapland and also in a small depression over the Gulf of Riga; 29·9 ins: and less, in very shallow disturbances over the northern parts of the Adriatic and Mediterranean. Falling in the west of our Islands later as a new shallow disturbance approached our western coasts.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

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

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

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

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

DAILY WEATHER REPORT.

for Sunday 27th July, 1890.

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

	STATIONS.	YESTERDAY EVENING. Barom: Reading at 32° F. and Sea Level.	Temp. Dry.	Wind. Direc.	Wind. Force (0 to 12.)	Weather.	8 A.M. TO DAY. Barometer. Reading at 32° F. and Sea Level.	Barometer. Difference from 8 a.m. yesterday.	Shade Temp. Dry.	Shade Temp. Wet.	Shade Temp. Difference from 8 a.m. yesterday.	Wind. Direc.	Wind. Force (0 to 12.)	Weather.	Sea. (0 to 9.)	PAST 24 HOURS. Shade Temp. Max.	Shade Temp. Min.	Amount of Rainfall.
Scandinavia.	Haparanda ...	29.51	56	L	0	b	29.61	+ .09	61	54	+ 5	WNW	2	b	*	64	43	—
	Hernösand ...	29.69	57	NNW	2	bc	29.75	+ .15	60	53	+ 6	L	0	b	*	72	48	—
	Stockholm ...	29.87	57	L	0	b	29.90	+ .16	60	58	+ 3	SW	2	b	*	68	48	—
	Wisby	29.83	58	WSW	4	b	29.92	+ .25	57	53	— 1	W	4	b	*	64	54	—
	Bodö	29.60	52	SW	1	0	29.56	+ .02	52	50	+ 4	E	2	r	1	55	46	0.12
	Christiansund	29.68	55	SSW	3	c	29.53	— .09	56	54	+ 6	SSE	1	0	1	?	50	0.49
	Skudesnaes ...	29.82	58	SSE	8	0	29.74	— .18	56	56	+ 1	W	2	r	3	57	54	—
	Christiania Fjord (Færder)	29.87	60	SSW	3	bc	29.79	— .04	57	56	0	S	6	r	3	61	57	—
	Skagen (The Scaw)	29.91	53	W	4	b	29.83	— .01	58	57	0	SW	3	m	2	61	?	0.08
	Fanö	29.97	57	SW	4	0	29.94	— .05	61	61	+ 6	SSW	4	c	*	61	55	0.12
British Islands.	Sumburgh Head	29.55	54	S	4	r	29.61	— .13	55	53	0	S	3	0	4	60	49	0.05
	Stornoway ...	29.63	55	W	3	0	29.56	— .08	54	53	+ 1	SW	3	b	8	60	50	0.02
	Wick	29.60	59	NW	5	0	29.60	— .08	55	55	— 1	S	3	ow	2	63	45	0.12
	Nairn	29.62	61	SW	2	c	29.63	— .07	55	54	0	L	0	0	1	71	52	—
	Aberdeen ...	29.64	67	SW	3	c	29.70	— .07	55	53	— 1	SE	1	0	8	69	54	—
	Leith	29.73	63	W	2	0	29.72	— .04	60	55	+ 2	WSW	2	*	*	71	52	0.03
	Shields	29.78	67	SSW	4	bc	29.78	— .06	63	58	+ 6	SSW	2	c	2	70	55	0.02
	Spurn Head ...	29.90	66	SW	4	c	29.87	— .05	64	61	+ 2	SW	3	c	3	69	59	0.01
	York	29.88	66	SW	3	0	29.85	— .06	62	59	0	SW	2	c	*	70	58	0.07
	Loughborough	29.96	67	SW	3	0	29.91	— .07	61	59	0	SSW	2	odp	*	71	58	—
	Ardrossan ...	29.77	58	W	3	0	29.71	— .02	59	55	— 2	SSW	4	op	3	61	55	0.02
	Malin Head ...	29.78	57	W	4	0	29.68	— .02	54	53	— 5	WSW	5	op	3	60	53	0.10
	Mullaghmore ...	29.83	58	SW	5	og	29.74	— .01	56	54	— 4	SSW	4	c	3	61	55	0.04
	Belmullet ...	29.83	59	WSW	2	0	29.73	— .04	57	55	— 1	WSW	3	0	*	59	54	0.10
	Donaghadee ...	29.81	61	WNW	2	c	29.77	.00	59	57	— 4	SSW	3	c	1	70	57	0.01
	Liverpool (Bidston)	29.89	56	SW	5	0	29.86	— .04	62	58	+ 1	WSW	2	c	3	69	57	—
	Holyhead ...	29.89	55	SW	5	rgm	29.85	— .03	60	57	+ 2	SW	4	b	4	62	54	0.04
	Parsonstown ...	29.89	61	L	0	c	29.81	— .02	58	57	— 3	SW	1	0	*	64	53	—
	Valencia	29.94	60	WSW	3	og	29.86	— .04	60	58	0	SW	3	0	4	63	56	—
	Roche's Point ...	29.93	64	WSW	3	bc	29.89	— .04	59	56	— 1	WSW	4	c	4	65	58	0.05
	Pembroke (St. Ann's Hd.)	29.95	58	SSW	5	f	29.92	— .06	58	55	— 2	WSW	4	c	4	62	56	0.04
	Scilly	30.03	63	SSW	4	m	29.96	— .11	59	59	— 1	WSW	1	0	2	65	57	0.04
	Prawle Point ...	30.07	60	SSW	4	c	29.98	— .11	58	57	— 1	SSW	5	mg	3	61	56	0.02
	Jersey (St. Aubin's)	30.13	64	W	3	bc	30.05	— .09	65	59	+ 5	SSW	3	b	3	68	55	—
	Hurst Castle ...	30.07	64	WSW	4	b	30.02	— .06	61	60	+ 1	SW	6	c	2	66	59	—
	Dungeness ...	30.05	63	SW	5	bc	30.02	— .05	63	59	+ 2	WSW	4	bc	3	66	58	—
	London	30.01	66	SSW	1	0	29.99	— .06	66	60	+ 6	W	3	c	*	72	55	0.03
	Oxford	30.01	62	SW	3	c	29.96	— .05	61	58	— 1	SSW	4	0	*	68	56	—
	Cambridge ...	29.99	67	SW	1	0	29.96	— .06	63	60	— 2	SW	3	c	*	72	52	0.02
	Yarmouth ...	29.97	68	SSW	2	bc	29.96	— .05	62	59	+ 3	SW	2	bc	2	71	55	—
Germany & Holland.	Cuxhaven ...	30.08	60	SW	3	b	30.04	— .01	60	59	0	SW	3	b	*	66	59	—
	Berlin	30.12	61	W	2	b	30.17	+ .11	59	53	+ 4	SSW	3	b	*	66	56	—
	Wiesbaden ...	*	*	*	*	*	30.13	— .03	58	54	+ 1	NE	1	b	*	68	48	—
	Munich	30.15	59	NE	4	c	30.16	— .03	58	54	0	NE	4	bc	*	68	48	—
	The Helder ...	30.02	61	SW	2	bc	30.00	— .06	62	59	+ 5	SW	2	b	3	63	57	—
France and Belgium.	Brussels (9 a.m.)	*	*	*	*	*	30.09	— .05	64	59	+ 4	SSW	1	c	*	69	54	—
	Cape Gris Nez	30.09	62	WSW	4	b	30.03	— .09	62	58	+ 1	W	4	bc	4	68	57	—
	Paris	30.12	69	E	1	0	30.11	— .06	61	58	+ 6	S	1	0	*	72	55	—
	Brest	30.12	59	SW	1	0	30.09	— .04	60	58	— 1	SW	2	0	3	66	54	—
	Lorient	30.14	66	W	1	b	30.07	— .11	59	57	— 4	W	1	f	2	68	55	—
	Rochefort ...	30.17	71	NW	3	b	30.13	— .07	64	61	+ 1	NE	2	b	?	77	54	—
	Belfort	30.06	66	SE	1	b	?	?	62	59	0	SE	1	b	*	77	51	—
	Lyons	30.05	70	N	2	b	30.10	.00	63	59	+ 3	E	1	b	*	75	56	—
	Nice	29.93	?70	SW	4	b	30.00	+ .06	66	65	— 1	L	0	c	0	79	62	—
	Perpignan ...	30.00	79	N	3	b	30.05	— .04	72	64	+ 2	W	2	b	*	84	59	—
	Biarritz	30.07	69	WNW	4	b	30.03	— .12	67	64	+ 4	S	2	b	1	75	61	—
Peninsula.	Corunna	*	*	*	*	*	30.05		69	66		NNE	1	0	1	70	57	—
	Lisbon	30.00	68	NNW	4	b	30.06	+ .05	62	58	— 7	WNW	4	b	5	86	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 Sunday, 27th July, 1890.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP.

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

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

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

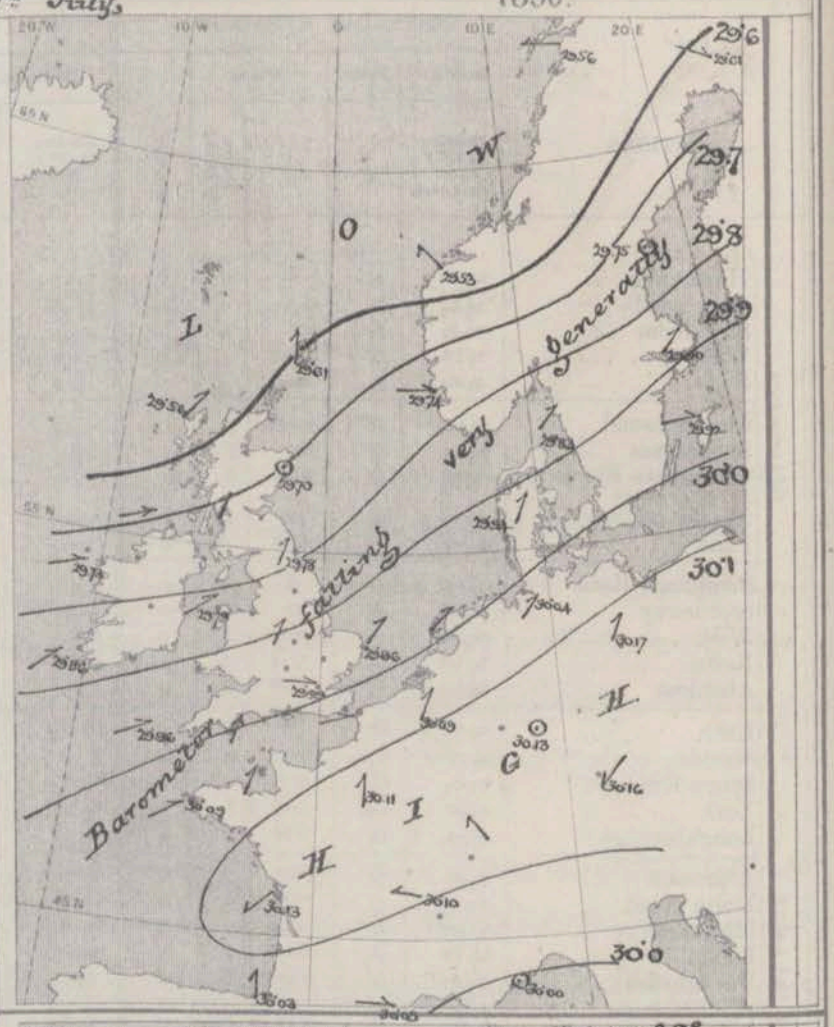
SEA DISTURBANCE—Where considerable, is shewn thus:

= Rough. = High.

MEAN HEIGHT OF THE BAROMETER

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

STATIONS.	MEAN READINGS.
	ins.
Sumburgh Head	29 · 794
Stornoway	29 · 797
Wick	29 · 810
Nairn	29 · 821
Aberdeen	29 · 831
Leith	29 · 850
Shields	29 · 876
York	29 · 910
Loughborough	29 · 936
Ardrossan	29 · 862
Donaghadee	29 · 881
Holyhead	29 · 918
Liverpool	29 · 913
Parsonstown	29 · 921
Valencia	29 · 939
Roche's Point	29 · 938
Pembroke	29 · 942
Scilly	29 · 984
Jersey	30 · 009
Hurst Castle	29 · 974
Dover	29 · 970
LONDON	29 · 967
Oxford	29 · 953
Cambridge	29 · 947
Yarmouth	29 · 943



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.

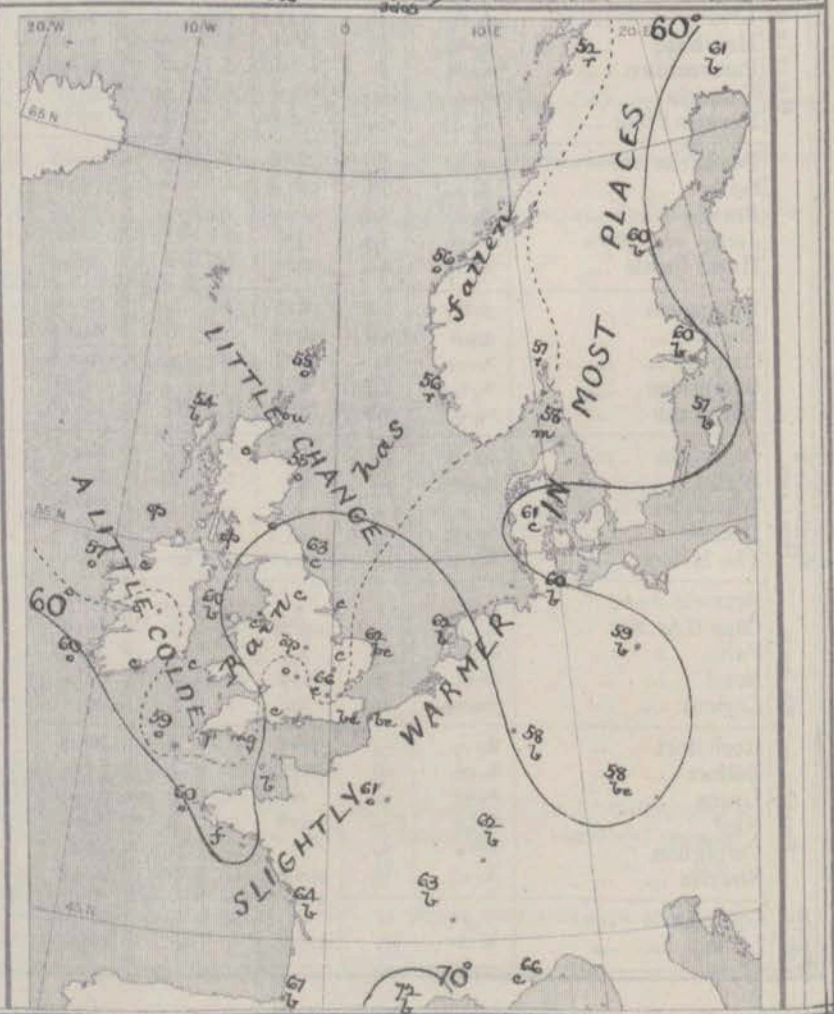
RAINFALL—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0·5 in. or more are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of July.)

STATIONS.	TEMPERATURE. Daily Max.	Daily Min.	at 8 a.m. Dry.	at 8 a.m. Wet.	RAINFALL (Inches.)
Sumburgh Head	57 · 8	48 · 3	53 · 6	52 · 0	2 · 09
Stornoway	60 · 2	49 · 5	56 · 0	54 · 0	3 · 02
Wick	62 · 2	49 · 2	56 · 1	53 · 8	2 · 25
Nairn	64 · 7	51 · 4	57 · 2	53 · 6	2 · 57
Aberdeen	64 · 4	51 · 1	58 · 0	54 · 4	2 · 74
Leith	67 · 1	51 · 7	58 · 6	55 · 3	2 · 84
Shields	64 · 4	52 · 9	58 · 6	55 · 4	2 · 63
York	68 · 5	52 · 1	59 · 4	56 · 2	2 · 57
Loughborough	72 · 1	53 · 0	62 · 0	58 · 2	2 · 34
Ardrossan	63 · 9	53 · 2	57 · 5	54 · 8	2 · 91
Donaghadee	63 · 1	51 · 6	57 · 4	55 · 6	2 · 67
Holyhead	63 · 9	54 · 7	58 · 2	55 · 9	2 · 32
Liverpool	66 · 1	54 · 4	59 · 6	55 · 9	2 · 99
Parsonstown	66 · 4	51 · 9	58 · 3	54 · 8	3 · 91
Valencia	64 · 1	53 · 6	58 · 7	56 · 3	3 · 91
Roche's Point	66 · 7	53 · 3	58 · 7	55 · 8	3 · 16
Pembroke	62 · 9	55 · 0	58 · 1	55 · 9	2 · 31
Scilly	64 · 5	56 · 3	60 · 1	58 · 0	2 · 29
Jersey	68 · 8	56 · 3	62 · 2	59 · 2	2 · 21
Hurst Castle	67 · 9	55 · 7	61 · 3	58 · 8	2 · 15
Dover	67 · 2	56 · 9	62 · 6	58 · 8	1 · 82
LONDON	73 · 0	54 · 1	62 · 3	58 · 1	2 · 17
Oxford	69 · 9	53 · 7	60 · 2	56 · 8	2 · 51
Cambridge	72 · 3	52 · 4	61 · 4	57 · 9	2 · 30
Yarmouth	66 · 8	55 · 2	61 · 2	58 · 1	2 · 68

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, in an elongated anticyclone extending from Central Europe to the west of France. Lowest, 29·6 ins. and less, in a series of depressions lying to the northward of our Islands, the northwest of Norway and over Lapland. Gradients slight. Barometer falling a little in most parts of Western Europe, but rising in Sweden and Germany.
TEMPERATURE	Highest, 71° at Perpignan, 69° at Corunna, 67° at Biarritz, 66° in London and at Nice, 65° at Jersey, and 64° at Rochefort. Lowest, 37° at Bodo, 54° at Stornoway and Malin Hd, and 55° at Lerwick, Wick, Nairn, and Aberdeen. The highest maxima registered over our Islands yesterday were 73° at Donaghadee, and 71° in London and at Cambridge.
WIND	Chiefly SW and light or moderate in force, but SE or E in the west of Norway, and also in the east of France. Light or moderate from the NW or N in Portugal and the northwest of Spain.
WEATHER	Rainy in Norway, and dull in the north and extreme west of our Islands, with passing showers at Ardrossan and Malin Head. Fine in most other localities, but foggy at Lorient. Slight rain fell yesterday in many parts of the United Kingdom, and larger amounts in Norway.
SEA	Slight or smooth generally, but moderate on our southwest coasts, and rather rough at Lisbon.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

FORECASTS

For the 24 hours ending at NOON on 28th JULY 1890.

DISTRICTS.	FORECASTS.	DISTRICTS.	FORECASTS.
0 SCOTLAND NORTH	NONE ISSUED	6 SCOTLAND WEST	NONE ISSUED
1 SCOTLAND EAST		7 ENGLAND N.W.	
2 ENGLAND N.E.		8 ENGLAND S.W.	
3 ENGLAND EAST		9 IRELAND NORTH	
4 MIDLAND COUNTIES		10 IRELAND SOUTH	
5 ENGLAND SOUTH.		WARNINGS	NONE ISSUED.

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

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

YESTERDAY'S 2 P.M. REPORTS.

	BAR:	THER: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Skudesnaes ...	29.91	57	53	SSE	4	c	4
Sumburgh Head	29.60	56	54	SSE	5	r	5
Stornoway	29.59	58	58	W	3	c	3
Aberdeen	29.67	65	60	SSE	3	c	3
Shields	29.78	68	62	SSW	3	c	2
Ardrossan	29.73	60	57	SW	3	o	3
Malin Head ...	29.77	58	56	W	4	o	2
Mullaghmore ...	30.03	60	56	W	5	o	4
Belmullet	29.84	59	55	WSW	3	o	*

	BAR:	THER: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Holyhead	29.89	60	59	SW	5	omq	5
Valencia	29.96	63	58	WNW	3	o	3
Scilly	30.03	65	63	SSW	4	bc	3
Jersey	30.15	66	62	WSW	2	c	8
Dungeness	30.07	64	61	SW	5	c	4
London	30.04	70	63	WSW	3	c	*
Yarmouth	29.98	71	63	SSW	3	c	2
Rochefort	30.19	75	67	NW	3	b	2

GENERAL REMARKS ON THE WEATHER OVER EUROPE

DURING THE PAST 24 HOURS.

Weather cloudy or overcast over the greater part of the United Kingdom, with showers at several of our southern stations; dull also over the north of Russia and the western parts of Norway and France, with rain at St Petersburg and Christiansund. Fine over the whole of central and southern Europe, as well as in Sweden and Denmark. Showers falling during day in nearly all parts of our Islands; thunderstorms with heavy rain occurring over the north of Italy.

Temperature highest 77° at Barcelona, San Fernando and Brindisi, 76° at Constantinople and Tunis, and 75° at Palermo, La Calle, and Malta; above 70° in nearly all parts of Southern and Eastern Europe. Lowest 48° at Bodö, 50° at Christiansund, 51° at Warsaw, 52° at Munster and Breslau, and 53° at Stornoway. Daily maxima below 65° at several of our western and northern stations, and very little above 70° in any part of our Islands, but thermometer exceeding 80° in most parts of Southern Europe, the highest reading of all being 98° at Madrid, and 97° at C. Bearn and Lisbon.

Wind light or moderate from the SW.ly over our Islands and the west of Norway, as well as over the Baltic Provinces. Moderate from the N.ly or NW.ly in Sweden and Denmark and from the W.ly or NW.ly in Germany and Austria. Light from the E.ly at most of the French and Spanish stations; light from between N. and W. in Italy and Algeria. Subsequently veering to the W.ly on our west and northwest coasts.

Barometer highest, 30·1 ins. to 30·2 ins. in an anticyclone extending from the Bay of Biscay and the north of Spain to Central Germany. Lowest, 29·4 ins. and less, in a depression lying over the Gulf of Finland; 29·6 ins. and less, in another lying to the northwestward of Scotland; 29·9 ins. and less, over Asia Minor, and also in a shallow depression lying over Montenegro. Depression over Gulf of Finland and to the northwestward of our Islands subsequently travelling eastwards.

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 JULY 1890.

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

	STATIONS.	YESTERDAY EVENING. Barom: Reading at 32° F. and Sea Level.	Temp. Dry.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	8 A.M. TO DAY. Barometer. Reading at 32° F. and Sea Level.	Barometer. Difference from 8 a.m. yesterday.	Shade Temp. Dry.	Shade Temp. Wet.	Shade Temp. Difference from 8 a.m. yesterday.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	Sea. (0 to 5.)	PAST 24 HOURS. Shade Temp. Max.	Shade Temp. Min.	Amount of Rainfall.
SCANDINAVIA.	Haparanda ...	29.76	57	S	2	c	29.85	+ .24	62	58	+ 1	S	2	c	*	64	41	—
	Hernösand ...	29.78	61	Z	0	c	29.82	+ .07	62	59	+ 2	SSW	2	c	*	68	30	—
	Stockholm ...	29.93	62	SSW	2	0	29.97	+ .07	68	61	+ 8	SW	2	bc	*	70	52	—
	Wisby	29.95	61	SSW	4	c	29.98	+ .06	65	61	+ 8	SSW	4	c	*	66	54	—
	Bodö	29.68	52	SW	2	c	29.75	+ .19	55	52	+ 3	E	2	r	1	57	50	0.08
	Christiansund	29.72	54	NNW	3	0	29.62	+ .09	56	53	0	SSW	2	c	4	?	52	0.04
	Skudesnæs ...	29.77	56	SSE	6	0	29.71	— .03	57	56	+ 1	SSE	6	0	4	58	54	0.04
	Christiania Fjord (Færder)	29.81	58	SSW	6	m	29.82	+ .03	58	57	+ 1	SSW	6	m	4	61	57	0.04
	Skagen (The Scaw)	29.89	61	W	2	0	29.85	+ .02	59	58	+ 1	SW	2	0	2	70	57	—
	Fanö	29.96	60	SW	4	c	29.88	— .06	65	63	+ 4	S	4	bc	*	66	59	—
BRITISH ISLANDS.	Sumburgh Head	29.57	54	S	1	0	29.48	— .18	55	53	0	S	1	c	3	56	48	0.01
	Stornoway ...	29.50	56	SW	5	0	29.38	— .18	54	53	0	SW	6	0	5	60	48	0.08
	Wick	29.57	62	W	1	c	29.48	— .12	57	54	+ 2	SW	3	bc	2	64	47	—
	Nairn	29.58	63	W	2	bc	29.51	— .12	57	52	+ 2	WSW	2	b	2	64	48	—
	Aberdeen ...	29.64	60	SSW	3	c	29.57	— .13	57	53	+ 2	SSW	3	c	3	62	52	0.03
	Leith	29.69	59	WSW	3	r	29.62	— .10	58	53	— 2	WSW	3	bc	*	66	53	0.10
	Shields	29.76	63	SSW	3	0	29.70	— .08	59	56	— 4	WNW	2	c	2	69	53	—
	Spurn Head ...	29.82	66	SW	3	c	29.76	— .11	61	57	— 3	SW	2	b	2	68	50	0.22
	York	29.89	64	SSW	3	0	29.76	— .09	60	56	— 2	SW	2	b	*	69	51	—
	Loughborough	29.86	67	SSW	3	c	29.82	— .09	62	57	+ 1	W	3	b	*	71	54	0.22
	Ardrossan ...	29.68	56	SSW	4	op	29.64	— .07	55	53	— 2	WSW	5	c	4	58	53	0.23
	Malin Head ...	29.62	59	W	4	bp	29.60	— .08	54	51	0	SW	6	bp	4	62	51	0.10
	Mullaghmore ...	29.89	61	SW	5	bc	29.68	— .06	56	52	0	WSW	6	bc	5	62	52	0.05
	Belmullet ...	29.68	54	WSW	4	b	29.70	— .03	56	53	— 1	W	4	c	*	60	52	0.21
	Donaghadee ...	29.71	63	WSW	3	c	29.71	— .06	59	53	0	SW	4	b	2	73	57	0.06
	Liverpool (Bidston)	29.83	61	SSW	2	c	29.78	— .08	58	54	— 4	WSW	4	bc	3	66	54	—
	Holyhead ...	29.83	59	SW	4	cq	29.79	— .06	56	53	— 4	WSW	4	cqw	2	62	53	—
	Parsonstown ...	29.77	60	Z	0	c	29.78	— .03	57	55	— 1	SW	2	bc	*	63	49	0.07
	Valencia	29.80	60	SW	6	0	29.87	+ .01	58	55	— 2	W	3	0	3	63	53	0.09
	Roche's Point ...	29.84	60	WSW	4	bc	29.82	— .05	58	54	— 1	W	4	bc	4	65	52	—
	Pembroke (St. Ann's Hd.)	29.86	59	SSW	2	c	29.86	— .06	57	55	— 1	WSW	3	bc	3	61	56	—
	Scilly	29.87	60	SSW	3	m	29.97	— .04	59	59	0	W	2	bc	2	66	56	0.40
	Prawle Point ...	29.93	58	SSW	5	0	29.91	— .07	58	57	0	WSW	3	bc	3	60	55	0.05
	Jersey (St. Aubin's)	29.98	67	NW	3	b	29.93	— .10	62	59	— 3	W	4	ogm	3	69	56	—
	Hurst Castle ...	29.96	61	WSW	4	c	29.87	— .15	60	? 60	— 1	WNW	3	b	2	66	58	0.03
	Dungeness ...	29.95	65	SW	2	bc	29.86	— .16	62	59	— 1	WSW	5	c	3	68	56	—
	London	29.93	67	S	3	c	29.86	— .13	63	59	— 3	SSW	2	0	*	69	58	—
	Oxford	29.89	60	SW	3	p	29.85	— .11	58	56	— 3	NW	1	bc	*	67	56	0.15
	Cambridge ...	29.90	66	SW	4	0	29.83	— .13	60	59	— 3	SW	2	0	*	68	55	0.01
	Yarmouth ...	29.91	69	SW	3	b	29.82	— .14	62	60	0	WSW	3	c	2	70	58	—
GERMANY & HOLLAND.	Cuxhaven ...	30.04	64	N	1	b	29.97	— .07	65	63	+ 5	S	2	m	*	72	?	—
	Berlin	30.11	67	ESE	2	b	30.05	— .12	62	57	+ 3	SSW	3	b	*	75	55	—
	Wiesbaden ...	*	*	*	*	*	30.01	— .12	59	57	+ 1	Z	0	b	*	73	52	—
	Munich	30.11	62	NE	1	b	30.12	— .04	61	59	+ 3	NW	1	b	*	70	48	—
	The Helder ...	29.95	63	SSW	1	bc	29.86	— .14	64	61	+ 2	SSW	1	bc	1	70	55	—
FRANCE AND BELGIUM.	Brussels (9 a.m.)	*	*	*	*	*	29.91	— .18	69	62	+ 5	SSW	2	b	*	75	57	—
	Cape Gris Nez	29.96	65	SW	1	bc	29.91	— .12	60	59	— 2	SW	3	b	2	72	59	—
	Paris	30.01	74	S	2	bc	29.96	— .15	64	60	+ 3	SSW	1	b	*	78	54	—
	Brest	29.98	61	NW	3	0	29.95	— .14	60	59	0	W	2	0	2	72	54	—
	Lorient	30.02	64	WNW	2	b	29.98	— .09	62	60	+ 5	W	2	0	2	66	57	—
	Rochefort ...	30.04	76	NW	3	b	30.08	— .05	64	62	0	NNW	4	b	2	82	57	—
	Belfort	30.06	67	E	1	bc	30.06	?	62	53	0	E	1	bc	*	75	52	—
	Lyons														*			
	Nice	30.00	68	ENE	4	bc	30.05	+ .05	67	61	+ 1	Z	0	b	0	79	59	0.32
	Perpignan ...	29.99	74	SE	2	b	30.05	.00	71	67	— 1	W	2	0	*	84	64	—
	Biarritz	29.99	69	NW	5	c	30.05	+ .02	67	64	0	W	3	0	2	86	64	—
PENINSULA.	Corunna	*	*	*	*	*												
	Lisbon	30.03	64	NNW	5	b	30.06	.00	67	60	+ 5	NNW	5	c	2	75	61	—

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

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

WEATHER CHARTS

for 8 a.m. on Mondays, 28th July, 1890.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP.

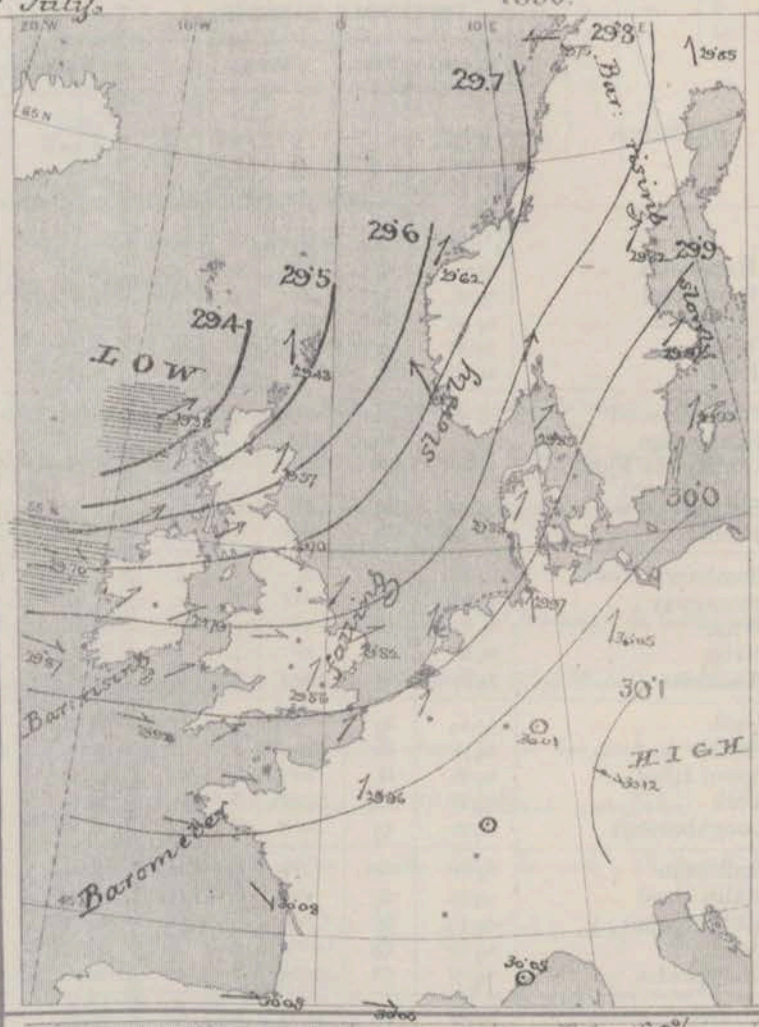
BAROMETER—Isobars are drawn for each tenth of an inch. Changes since previous morning are stated in words.

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

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

SEA DISTURBANCE—Where considerable, is shewn thus:

= Rough. = High.



MEAN HEIGHT OF THE BAROMETER

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

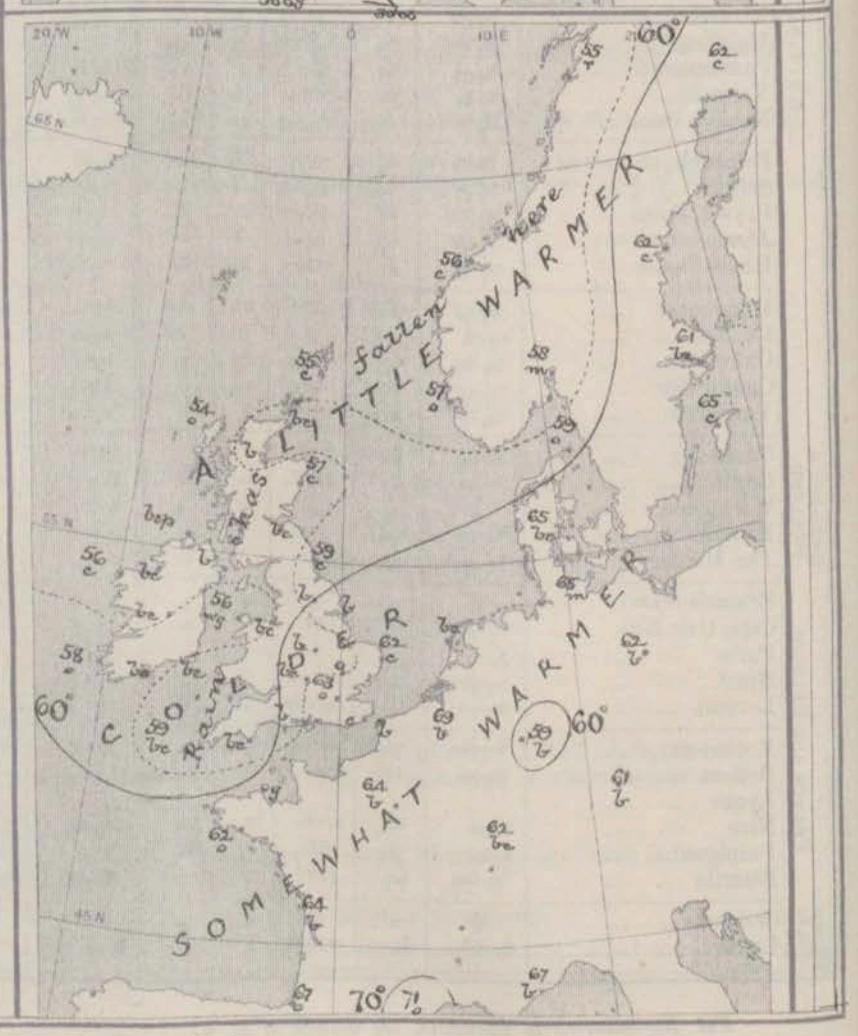
STATIONS.	MEAN READINGS. ins.
Sumburgh Head	29·794
Stornoway	29·797
Wick	29·819
Nairn	29·821
Aberdeen	29·831
Leith	29·850
Shields	29·876
York	29·910
Loughborough	29·936
Ardrossan	29·862
Donaghadee	29·881
Holyhead	29·918
Liverpool	29·913
Parsonstown	29·921
Valencia	29·939
Roche's Point	29·938
Pembroke	29·942
Scilly	29·984
Jersey	30·009
Hurst Castle	29·974
Dover	29·970
LONDON	29·967
Oxford	29·953
Cambridge	29·947
Yarmouth	29·943

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 July.)

STATIONS.	TEMPERATURE. Daily Max.	Daily Min.	at 8 a.m. Dry.	Wet.	RAINFALL. (Inches.)
Sumburgh Head	57·8	48·3	53·6	52·0	2·09
Stornoway	60·2	49·5	56·0	54·0	3·02
Wick	62·2	49·2	56·1	53·8	2·25
Nairn	64·7	51·4	57·2	53·6	2·57
Aberdeen	64·4	51·1	58·0	54·4	2·74
Leith	67·1	51·7	58·6	55·3	2·84
Shields	64·4	52·9	58·6	55·4	2·63
York	68·5	52·1	59·4	56·2	2·57
Loughborough	72·1	53·0	62·0	58·2	2·34
Ardrossan	63·9	53·2	57·5	54·8	2·91
Donaghadee	63·1	51·6	57·4	55·6	2·67
Holyhead	63·9	54·7	58·2	55·9	2·32
Liverpool	66·1	54·4	59·6	55·9	2·99
Parsonstown	66·4	51·9	58·3	54·8	3·01
Valencia	64·1	53·6	58·7	56·3	3·91
Roche's Point	66·7	53·3	58·7	55·8	3·16
Pembroke	62·9	55·0	58·1	55·9	2·31
Scilly	64·5	56·3	60·1	58·0	2·29
Jersey	68·8	56·3	62·2	59·2	2·21
Hurst Castle	67·9	55·7	61·3	58·8	2·15
Dover	67·2	56·0	62·6	58·8	1·82
LONDON	73·0	54·1	62·3	58·1	2·17
Oxford	69·9	53·7	60·2	56·8	2·51
Cambridge	72·3	52·4	61·4	57·9	2·30
Yarmouth	66·8	55·2	61·2	58·1	2·68

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, 30·12 in. at Munich; 30·0 in. and upwards over nearly the whole of Germany, France and Spain. Lowest 29·4 in. and less in the depression lying off the northwest of Scotland. Gradients slight. Barometer falling a little in most part of Great Britain and also in Norway, Denmark, Germany and the Netherlands, but rising elsewhere.

TEMPERATURE — Highest 71° at Perpignan, 69° at Brussels, 68° at Stockholm, 67° at Biarritz, Nice and Suez, and 65° at Malta, Paris and Cephalonia. Lowest 54° at Stornoway and Malin Head, 55° at Bodö, Sumburgh Head and Aberdeen and 56° at Christiansund, Belmullet and Mullaghmore. The highest maxima registered over our islands yesterday were 73° at Donaghadee, 71° at Loughborough and 70° at Falmouth.

WIND — SW. in all the more northern and eastern parts of the United Kingdom; strong in force on our extreme northwest coast. Light from the W. and over the south of our islands and the west and north of France; variable in the east and south of France. Chiefly S. in Scandinavia and Denmark; strong in the south of Norway.

WEATHER — Fine over the greater part of western Europe, but rainy at Bodö and showery at Malin Head. Showers fell yesterday in many parts of the United Kingdom, and solar halos were seen at some of the English and Irish stations.

SEA — Moderate to smooth generally, but rather rough at Stornoway and Mullaghmore.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

A new high pressure system is apparently forming over Northern Europe and as the barometer remains fairly high in Spain the indications are less favourable than of late. Showery weather is probable over Great Britain generally, with a somewhat low temperature.

FORECASTS

For the 24 hours ending at NOON on 29th JULY 1890.

DISTRICTS.	FORECASTS.
0 SCOTLAND NORTH	SW. winds, moderate or fresh; fair to showery.
1 SCOTLAND EAST	
2 ENGLAND N.E.	SW. and W. winds, moderate; changeable, showery.
3 ENGLAND EAST	
4 MIDLAND COUNTIES	
5 ENGLAND SOUTH	
6 SCOTLAND WEST	SW. and W. winds, fresh; fair to showery.
7 ENGLAND N.W.	
8 ENGLAND S.W.	W. to NW. winds, light or moderate; fair to showery.
9 IRELAND NORTH	Same as No. 6 and 7.
10 IRELAND SOUTH	Same as No. 8.
WARNINGS	NONE ISSUED.

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

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

YESTERDAY'S 2 P.M. REPORTS.

	BAR:	THER: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Skudesnaes ...	29.78	58	56	S	1	o	3
Sumburgh Head							
Stornoway	29.53	59	59	W	5	r	5
Aberdeen							
Shields							
Ardrossan							
Malin Head ...	29.67	62	57	WSW	5	o	3
Mullaghmore ...							
Belmullet	29.70	60	56	WSW	4	b	*

	BAR:	THER: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Holyhead	29.85	62	59	SW	5	c	4
Valencia							
Scilly							
Jersey	30.02	68	61	W	2	b	2
Dungeness	29.98	67	62	WSW	3	bc	2
London							*
Yarmouth							
Rochefort	30.09	82	74	WNW	3	b	?

GENERAL REMARKS ON THE WEATHER OVER EUROPE

DURING THE PAST 24 HOURS.

Weather in morning fine and bright over the greater part of Europe but cloudy and somewhat unsettled over the British Islands, dull and rainy in Norway. Showers in several parts of our Islands during the day, very little elsewhere.

Temperature about its normal value for July over North Western Europe, low elsewhere. Morning readings exceeding 70° at many of the Spanish and Mediterranean stations, and as high as 79° at Brindisi, 78° at Barcelona, and 77° at San Fernando. Below 60° over the greater part of Central Europe, in the northwest and north of our Islands and in Norway; as low as 52° at Bodö, 54° at Stornoway and Malin Head, 55° at Sumburgh Head and Aberdeen. Rising during day to somewhat above 70° in some parts of our Islands and Germany and to 86° at Biarritz but not touching 70° in London.

Wind moderate over the British Islands and North Sea, light generally elsewhere. Mainly S.W. to S. over Northwestern Europe, N. over the Baltic and Finland. S. over the Bay of Biscay, very variable elsewhere. Blowing rather freshly in the British Islands later – little or no change elsewhere.

Barometer, highest 30.0 inches to 30.2 inches, and more over southwestern, central and southeastern Europe; lowest 29.6 inches and less over the northern parts of Scotland and Norway and in Lapland; depressions in extreme northwest moving northeastwards. Falling throughout our Islands during day, but gradients remaining moderate; high pressure area apparently moving eastwards.

SUMMARY OF CHANGES IN THE WEATHER OVER THE BRITISH ISLANDS AND THEIR NEIGHBOURHOOD FROM THE 20TH. TO THE 26TH JULY 1890.

The weather of the past week has remained changeable and showery in the western and northern parts of the United Kingdom, but over ~~the greater part~~ of England it has been finer and warmer than for a long while past.

During the greater part of the week an anticyclone extended from the Atlantic over England, Ireland, and France, while a large depression moved slowly eastwards across Scandinavia. The prevailing winds over our Islands were therefore W. and N.W., and while showers were occasionally reported in Ireland and Scotland, the weather over England was mostly fine.

On the 24th, however, the anticyclone moved eastwards and for the remainder of the time the highest pressure were found to the south of the United Kingdom. The wind therefore backed to the W. & S.W. and a series of depressions began to travel in a northeasterly direction along our extreme western and northern coasts, while shallow secondary disturbances occasionally passed directly across the Kingdom. These latter systems occasioned an extension of cloudy, showery weather to most of the English districts.

Temperature was rather low at the commencement of the time but the thermometer afterwards rose steadily to about its normal height for the time of year. The highest readings were recorded on the 23rd. or 24th. when the thermometer rose to 75° or a little more at some of the English stations.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

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

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

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

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

DAILY WEATHER REPORT.

for Tuesday 29th. July. 1890.

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

	STATIONS.	YESTERDAY EVENING. Barom. Reading at 32° F. and Sea Level.	Temp. Dry.	Wind. Direc.	Force. (0 to 12.)	Weather.	8 A.M. TO DAY. Barometer. Reading at 32° F. and Sea Level.	Difference from 8 a.m. yesterday.	Shade Temp. Dry.	Wet.	Difference from 8 a.m. yesterday.	Wind. Direc.	Force. (0 to 12.)	Weather.	Sea. (0 to 6.)	PAST 24 HOURS. Shade Temp. Max.	Min.	Amount of Rainfall.
SCANDINAVIA.	Haparanda ...	29.87	58	[illegible]	0	c	[illegible]	+.01	66	61	+4	S	2	3	*	?	54	—
	Hernösand ...	29.82	62	SSW	2	b	29.78	−.04	61	58	−1	SSW	2	b	*	72	50	—
	Stockholm ...	29.95	59	SW	2	b	29.81	−.16	60	60	0	S	2	b	*	72	57	0.04
	Wisby	29.85	60	S	4	b	29.68	−.18	69	61	+4	S	4	b	*	72	52	—
	Bodö	29.50	62	?	2	c	29.58	−.17	63	57	+8	E	2	0	1	63	55	0.08
	Christiansund	29.63	57	ESE	2	r	29.58	−.04	56	54	0	ESE	3	b	2	57	52	0.12
	Skudesnæs ...	29.70	56	S	6	0	29.72	+.01	57	55	0	S	4	0	4	?	55	—
	Christiania Fjord (Fredrikstad)	29.70	59	S	3	r	29.73	−.09	59	57	+1	WSW	3	0	2	61	57	0.16
	Skagen (The Skaw)	29.78	58	E	0	r	29.75	−.10	57	56	−2	NW	1	0	1	63	55	0.08
	Fanö	29.81	60	WSW	3	0	29.84	−.04	60	58	−5	WSW	2	r	*	70	55	0.51
BRITISH ISLANDS.	Sumburgh Head	29.45	54	S	2	c	29.57	+.09	53	52	−2	W	3	bc	4	60	48	0.14
	Stornoway ...	29.49	56	W	5	c	29.67	+.25	54	52	0	SW	4	bc	4	57	49	0.12
	Wick	29.48	56	W	5	bc	29.70	+.22	58	54	+1	W	5	bc	2	61	45	0.04
	Nairn	29.58	55	W	3	c	29.72	+.21	57	55	0	W	3	bc	1	62	50	0.08
	Aberdeen ...	29.59	61	WSW	4	c	29.77	+.20	54	51	−3	SW	1	c	3	64	51	0.04
	Leith	29.67	61	W	5	bc	29.81	+.19	56	52	−2	W	3	c	*	65	52	—
	Shields	29.73	64	WSW	3	c	29.87	+.17	57	53	−2	SW	2	c	2	67	51	—
	Spurn Head ...	29.70	63	W	2	bc	29.92	+.16	66	56	−1	WSW	4	b	3	67	52	—
	York	29.81	63	W	3	bc	29.93	+.17	58	55	−2	S	2	bc	*	69	50	—
	Longborough	29.85	65	W	2	c	29.95	+.17	61	56	−1	W	3	b-w	*	70	46	—
	Ardrossan ...	29.71	58	WSW	4	b	29.84	+.20	54	53	−1	WSW	3	0	3	60	53	0.02
	Malin Head ...	29.73	56	W	6	0	29.86	+.20	56	52	+2	SW	4	0	3	60	52	0.04
	Mullaghmore ...	29.82	58	W	6	bc	29.85	+.17	56	52	0	SSW	4	0	3	60	52	0.04
	Belmullet ...	29.83	58	W	3	c	29.82	+.12	58	56	+2	SW	2	c	*	60	54	0.02
	Donaghadee ...	29.78	62	WNW	4	bc	29.90	+.19	56	54	−3	W	4	c	2	68	50	0.01
	Liverpool (Bidston)	29.84	62	W	3	bc	29.96	+.18	58	53	0	WSW	3	c	3	65	52	—
	Holyhead ...	29.85	59	SW	4	b	29.96	+.17	59	55	+3	WSW	3	b-w	3	63	52	—
	Parsonstown ...	29.87	61	2	0	b	29.93	+.15	54	53	−3	2	0	0	*	63	51	0.05
	Valencia	29.96	59	WNW	2	bc q	29.92	+.05	60	57	+2	S	6	0 q	5	63	52	0.03
	Roche's Point ...	29.94	62	W	4	bc	29.98	+.14	58	56	0	SW	3	0	3	63	52	—
	Pembroke (St. Ann's Hd.)	29.92	59	WSW	5	bc	30.02	+.16	58	56	+1	WSW	3	bc	2	61	55	—
	Scilly	30.01	60	W	3	c	30.05	+.13	62	60	+3	WSW	1	0	2	65	57	—
	Prawle Point ...	29.97	60	WSW	4	c	30.07	+.16	58	57	0	W	2	bc	1	61	53	—
	Jersey (St. Aubin's)	?	?	?	?	?	30.11	+.16	62	57	0	WNW	3	bc-w	3	66	53	—
	Hurst Castle ...	29.94	64	W	5	bc	30.07	+.20	60	57	0	W	3	bc	2	68	53	—
GERMANY & HOLLAND.	Dungeness ...	29.87	59	W	5	bc	30.02	+.16	61	57	−1	W	3	bc	2	66	48	—
	London	29.90	64	SSW	2	0	30.02	+.16	60	55	−3	SW	2	bw	*	74	48	—
	Oxford	29.93	57	WSW	3	b	30.03	+.18	57	54	−1	SW	3	b	*	69	49	—
	Cambridge ...	29.87	65	SW	2	bc	30.00	+.17	60	57	0	W	1	b	*	73	45	0.15
	Yarmouth ...	29.84	67	W	3	c-b	29.96	+.14	60	56	−2	WNW	2	b	2	68	50	0.05
	Cuxhaven ...	29.88	68	SW	2	b	29.88	−.09	65	63	0	WNW	1	m	*	76	63	0.04
	Berlin	29.91	76	SSE	1	c	29.87	−.18	67	61	+5	WNW	4	c	*	84	?	—
	Wiesbaden ...	*	*	*	*	*	29.93	−.02	67	63	+8	2	0	0	*	77	59	0.16
	Munich	30.04	67	NE	1	b	30.08	−.04	66	61	+5	SW	4	c	*	75	55	0.04
	The Helder ...	29.88	63	WSW	1	bc	29.93	+.07	61	56	−3	WNW	1	bc	2	68	55	—
FRANCE AND BELGIUM.	Brussels (9 a.m.)	*	*	*	*	*	30.02	+.11	59	55	−10	SW	2	bc	*	78	52	—
	Cape Gris Nez	29.93	61	W	5	bc	30.00	+.09	57	55	−3	W	3	b	3	72	55	—
	Paris	29.96	71	WNW	2	bc	30.09	+.13	59	56	−5	2	0	bc	*	82	53	—
	Brest	30.02	64	NW	1	0	30.08	+.13	59	57	−1	2	0	b	1	66	52	—
	Lorient	30.02	63	WNW	4	b	30.10	+.12	55	53	−7	NNW	1	b	2	66	54	—
	Rochefort ...	30.10	68	NW	4	c	30.15	+.07	63	61	−1	NNW	2	c	?	75	54	—
	Belfort	29.95	67	W	1	c	29.95	−.11	64	53	+2	W	1	c	*	88	59	—
	Lyons	29.94	77	S	3	0	30.04		68	63		N	1	c	*	87	63	—
	Nice	30.03	69	S	4	b	30.03	−.02	68	63	+1	2	0	bc	0	75	63	—
	Perpignan ...	30.00	65	NE	3	0	30.05	0.0	68	67	−3	2	0	*	*	72	64	0.12
	Biarritz	30.06	66	N	3	f	30.07	+.02	64	61	−3	2	0	0	2	75	67	—
PENINSULA.	Corunna	*	*	*	*	*												
	Lisbon	30.04	67	NNW	4	c	30.04	−.02	65	60	−2	N	3	0	?	75	64	—

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

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

WEATHER CHARTS

for 8 a.m. on Tuesday, 29th July, 1890.

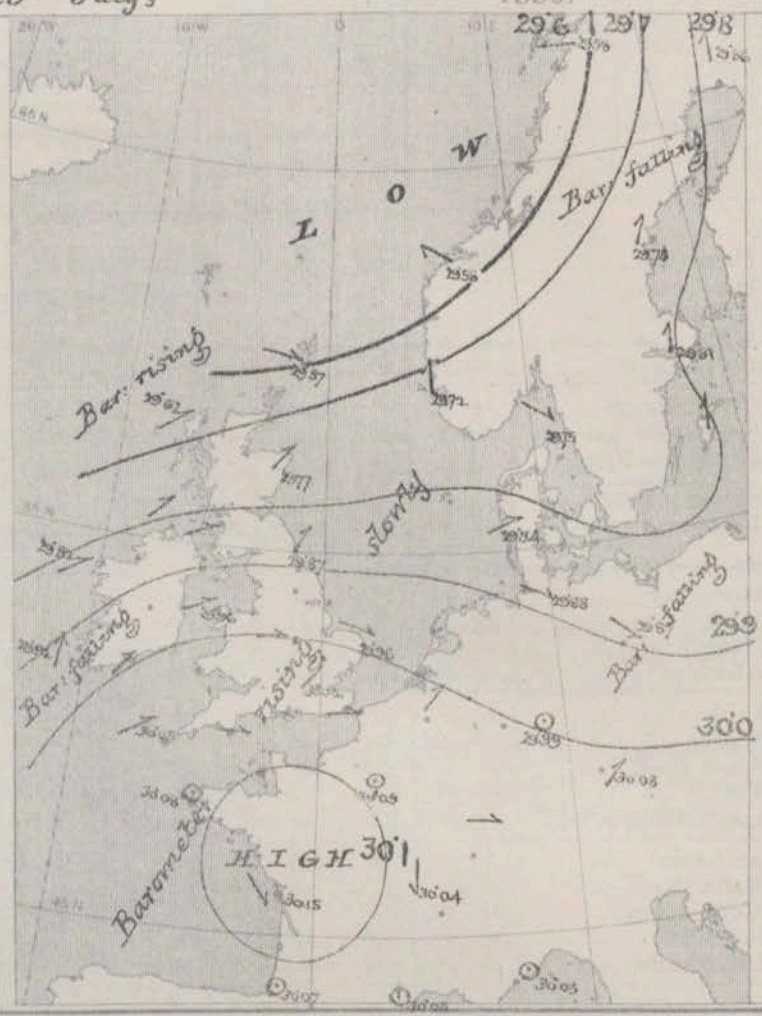
BAROMETER, WIND AND SEA.

EXPLANATION OF MAP.

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

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

SEA DISTURBANCE—Where considerable, is shewn thus:
= Rough. = High.



MEAN HEIGHT OF THE BAROMETER

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

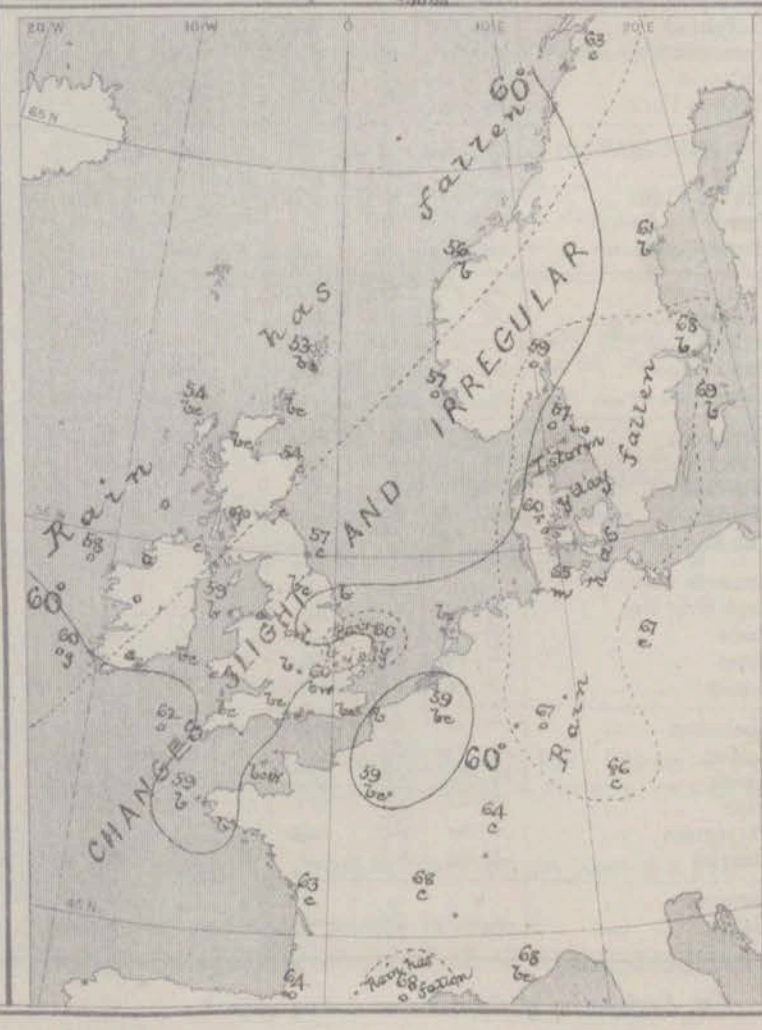
STATIONS.	MEAN READINGS. ins.
Sumburgh Head	29·794
Stornoway	29·797
Wick	29·810
Nairn	29·821
Aberdeen	29·831
Leith	29·850
Shields	29·876
York	29·910
Loughborough	29·930
Ardrossan	29·862
Donaghadee	29·881
Holyhead	29·918
Liverpool	29·913
Parsonstown	29·921
Valencia	29·939
Roche's Point	29·938
Pembroke	29·942
Scilly	29·984
Jersey	30·009
Hurst Castle	29·974
Dover	29·970
LONDON	29·967
Oxford	29·953
Cambridge	29·947
Yarmouth	29·943

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 July.)

STATIONS.	TEMPERATURE. Daily Max.	Daily Min.	At 8 a.m. Dry.	At 8 a.m. Wet.	RAINFALL. (Inches.)
Sumburgh Head	57·8	48·3	53·6	52·0	2·09
Stornoway	60·2	49·5	56·0	54·0	3·02
Wick	62·2	49·2	56·1	53·8	2·25
Nairn	64·7	51·4	57·2	53·6	2·57
Aberdeen	64·4	51·1	58·0	54·4	2·74
Leith	67·1	51·7	58·6	55·3	2·84
Shields	64·4	52·0	58·6	55·4	2·63
York	68·5	52·1	59·4	56·2	2·57
Loughborough	72·1	53·0	62·0	58·2	2·34
Ardrossan	63·3	53·2	57·5	54·8	2·91
Donaghadee	63·1	51·6	57·4	55·6	2·67
Holyhead	63·9	54·7	58·2	55·9	2·32
Liverpool	66·1	54·4	59·6	55·9	2·99
Parsonstown	66·4	51·9	58·3	54·8	3·01
Valencia	64·1	53·6	58·7	56·3	3·91
Roche's Point	66·7	53·3	58·7	55·8	3·16
Pembroke	62·9	55·0	58·1	55·9	2·31
Scilly	64·5	56·3	60·1	58·0	2·29
Jersey	68·8	56·3	62·2	59·2	2·21
Hurst Castle	67·9	55·7	61·3	58·8	2·15
Dover	67·2	56·9	62·6	58·8	1·82
LONDON	73·0	54·1	62·3	58·1	2·17
Oxford	69·9	53·7	60·2	56·8	2·51
Cambridge	72·3	52·4	61·4	57·9	2·30
Yarmouth	66·8	55·2	61·2	58·1	2·68

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

GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30·0 ins: to 30·1 ins: and more, over France, Spain, the Bay of Biscay, and southern parts of our Islands.
Lowest, 29·6 ins: and less, over Norway and the Shetland Islands.
Gradient slight in the south, moderate in the north and west.
Barometer falling at our extreme western stations—not rapidly.

TEMPERATURE

Highest, 68° at Nisby, 68° at Stockholm, Lyons, and Perpignan, 67° at Berlin and Wiesbaden.
Lowest, 53° at Sumburgh Head, 54° at Stornoway, Aberdeen, and Aberystwyth, 57° at Oxford, 58° at Paris.
In London it is 60°, but has been as low as 48° in the shade and 39° on the grass during the night.

WIND

S.W. in Sweden, S. to E. in Norway, light generally.
In England it is W., in the west of Scotland S.W., and in Ireland S.; moderate generally, but strong at Valencia.

WEATHER

Very fine over Scandinavia, fair over Great Britain and France, dull and unsettled in Ireland.
Thunderstorms have occurred on the eastern shores of the North Sea, and a little rain has fallen over our eastern counties.
In Scotland and Ireland, also, there has been rain, but not over England as a whole.

SEA

Rough at Valencia, moderate in the far north, slight or smooth on our coasts generally.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The new disturbances, advancing from the Atlantic seems likely to cause a good deal of rain in the west and north, but it is doubtful at present whether any will fall over our Midland, Southern, and Eastern counties.

FORECASTS

For the 24 hours ending at NOON on 30th JULY 1890.

DISTRICTS.	FORECASTS.	DISTRICTS.	FORECASTS.
0 SCOTLAND NORTH	S.W. breezes, freshening; some rain	6 SCOTLAND WEST	S. and S.W. winds, fresh or strong; some rain at times.
1 SCOTLAND EAST	S.W. breezes, light; fair but not settled.	7 ENGLAND N.W.	
2 ENGLAND N.E.		8 ENGLAND S.W.	
3 ENGLAND EAST	S.W. to S. breezes, light to moderate; fine generally, warm.	9 IRELAND NORTH	
4 MIDLAND COUNTIES		10 IRELAND SOUTH	
5 ENGLAND SOUTH		WARNINGS	NONE ISSUED.

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

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

YESTERDAY'S 2 P.M. REPORTS.

	BAR.	THER. D.	THER. W.	WIND D.	WIND F.	WEA.	SEA
Skudesnaes ...	29.71	58	55	SSE	6	o	4
Sumburgh Head	29.46	58	54	S	2	b	4
Stornoway	29.85	53	51	SW	5	o	5
Aberdeen	29.55	60	52	SSW	4	cq	4
Shields	29.72	66	56	WSW	3	c	2
Ardrossan	29.68	60	56	WSW	5	c	4
Malin Head ...	29.66	59	54	WSW	6	o	4
Mullaghmore ...	29.77	59	53	W	6	c	5
Belmullet	29.79	59	54	W	4	b	*

	BAR.	THER. D.	THER. W.	WIND D.	WIND F.	WEA.	SEA
Holyhead	29.83	60	56	WSW	4	cq	4
Valencia	29.54	61	57	WSW	4	cfp	4
Scilly	29.98	60	57	WSW	3	c	2
Jersey	not received.						
Dungeness	29.87	66	61	W	5	bc	3
London	29.83	71	62	WNW	2	bc	*
Yarmouth	29.83	65	60	W	3	bc	2
Rochefort	not rec.	75	72	NW	3	b	0

GENERAL REMARKS ON THE WEATHER OVER EUROPE

DURING THE PAST 24 HOURS.

Weather fine over the greater part of Europe, but dull over Northern Russia as well as on the extreme western coasts of our Islands, Norway, and France, with rain at Bodö, Helsingfors, and Riga, and passing showers in the north of Ireland. Slight showers falling during day in many parts of the United Kingdom, and thunderstorms with heavy rain occurring in Denmark.

Temperature highest, 79° at Brindisi, 78° at Rome, 77° at Alicante and La Galle, and 76° at Barcelona and Tunis; above 60° in many parts of England and also in Sweden. Lowest 52° at Moscow, 54° at Stornoway, Malin Head, and Prague, and 55° at Bodö, Sumburgh Hd, Ardrossan, and Cracow; below 60° in most parts of Central and Eastern Europe. Daily maxima very little above 70° in any part of the United Kingdom, and below 65° in the west and north, but thermometer exceeding 80° at some of the French and German stations.

Wind SW in all the more ~~the more~~ northern and eastern parts of our Islands, and also over the Baltic Provinces; strong in force on our extreme northwest coasts. Chiefly S in Scandinavia and Denmark; strong in force in the south of Norway. Light from W in the south of our Islands and the west and north of France; variable in the east and south of France; E in Spain, S or SE in Algeria, NW or N in Italy, Austria, and Russia. Subsequently veering to the W over the greater part of the United Kingdom.

Barometer highest 30·1 ins. to 30·2 ins. and upwards, in an anticyclone lying over Austria and the south of Russia. Lowest, 29·4 ins. and less, in a depression lying off the northwest of Scotland; very shallow disturbances lying over the Mediterranean and the south of Spain. Depression off the northwest of Scotland subsequently travelling northeastwards, and new high pressure system appearing over Bay of Biscay.

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. July. 1890.

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

	STATIONS.	YESTERDAY EVENING. Barom.: Reading at 32° F. and Sea Level.	Temp. Dry.	Wind. Direc.	Wind. Force (0 to 12.)	Weather.	8 A.M. TO DAY. Barometer. Reading at 32° F. and Sea Level.	Barometer. Difference from 8 a.m. yesterday.	Shade Temp. Dry.	Shade Temp. Wet.	Shade Temp. Difference from 8 a.m. yesterday.	Wind. Direc.	Wind. Force (0 to 12.)	Weather.	Sea. (0 to 6.)	PAST 24 HOURS. Shade Temp. Max.	Shade Temp. Min.	Amount of Rainfall.
SCANDINAVIA.	Haparanda ...	29.76	61	2	0	c	29.66	-.20	67	61	+1	SE	2	b	*	72	55	—
	Hernösand ...	29.62	58	2	0	c	29.62	-.16	58	54	-2	W	2	b	*	68	55	0.12
	Stockholm ...	29.71	59	SW	2	0	29.70	-.06	57	53	-11	W	4	0	*	73	57	—
	Wisby	29.77	61	WNW	4	c	29.81	+.01	57	53	-12	WNW	6	b	*	77	[illegible]	—
	Bodö	29.64	54	2	0	r	29.64	+.06	51	50	-12	SW	4	r	2	63	50	0.85
	Christiansund	29.64	?	WSW	?	?	29.67	+.09	54	52	-2	W	2	bc	2	61	50	—
	Skudesnaes ...	29.78	57	WSW	2	c	29.74	+.02	57	55	0	SSE	6	r	5	63	54	0.08
	Christiania Fjord (Færder)	29.68	59	WSW	5	b	29.78	+.05	57	53	-2	WSW	5	b	3	61	55	—
	Skagen (The Scaw)	29.78	56	W	4	bc	29.86	+.11	57	53	0	W	3	bc	3	63	52	—
	Fanö	29.93	56	W	4	b	29.92	+.08	59	59	-1	S	4	0	*	64	55	—
	Sumburgh Head	29.64	54	W	3	bc	29.49	-.10	54	54	+1	SE	2	m	3	58	49	—
	Stornoway ...	29.61	56	SW	3	r	29.41	-.26	58	57	+4	W	4	bc	4	60	52	0.04
	Wick	29.65	54	W	1	r	29.45	-.25	60	57	+2	SW	1	bc	1	62	50	0.22
	Nairn	29.69	58	W	1	c	29.48	-.24	64	61	+7	W	1	b	1	64	52	0.13
	Aberdeen ...	29.73	59	SW	1	cq†	29.54	-.23	59	57	+5	SE	2	c	3	65	52	0.22
BRITISH ISLANDS.	Leith	29.77	62	WSW	3	c	29.59	-.22	63	60	+7	WSW	2	0	*	67	53	0.22
	Shields	29.85	68	SSW	4	c	29.69	-.20	64	60	+7	SSW	2	c	2	66	54	0.10
	Spurn Head ...	29.91	64	WSW	1	c	29.80	-.12	62	58	+2	SSW	6	bc	4	67	52	0.01
	York	29.92	62	WSW	1	0	29.76	-.17	61	59	+3	SSW	2	c	*	68	53	0.11
	Loughborough	29.96	65	W	2	c	29.85	-.14	62	58	+1	SW	4	cq	*	69	55	0.01
	Ardrossan ...	29.75	56	SSW	4	cq	29.62	-.22	58	57	+4	SSW	3	0	3	60	53	0.30
	Malin Head ...	29.89	59	S	5	0	29.58	-.22	58	56	+2	SSW	4	0	2	62	56	0.13
	Mullaghmore ...	29.60	60	S	7	cq	29.64	-.21	59	58	+3	SW	5	c	4	60	55	0.25
	Belmullet ...	29.61	59	WSW	6	cq	29.62	-.20	59	57	+1	WSW	2	0	*	60	56	0.25
	Donaghadee ...	29.77	57	SW	4	r	29.66	-.24	62	60	+6	WSW	4	c	2	68	55	0.06
	Liverpool (Bidston)	29.52	59	SW	2	0	29.76	-.20	64	60	+6	WSW	4	bc	4	65	55	0.11
	Holyhead ...	29.87	57	SSW	5	rmq	29.78	-.18	58	58	-1	SSW	4	m	4	60	56	0.15
	Parsonstown ...	29.72	60	SW	1	0	29.72	-.21	60	58	+6	S	0	0	*	62	54	0.09
	Valencia	29.79	61	SW	2	omq	29.73	-.15	61	60	+1	SSW	5	omq	5	61	57	0.40
	Roche's Point ...	29.82	58	SW	5	r	29.79	-.15	60	60	+2	SW	3	0	4	60	56	0.40
	Pembroke (St. Ann's Hd.)	29.93	59	SW	5	c	29.85	-.17	59	58	+1	SSW	4	cqf	5	61	57	0.21
	Scilly	30.02	61	SW	4	0	29.95	-.10	61	61	-1	SW	3	f	3	65	57	0.02
	Prawle Point ...	30.05	58	SSW	3	c	29.95	-.11	59	58	+1	SSW	5	f	4	63	55	—
	Jersey (St. Aubin's)	30.09	64	W	2	b	30.05	-.06	63	59	+1	SSW	4	cq	3	66	52	—
	Hurst Castle ...	30.04	60	W	4	bc	29.95	-.08	60	59	0	SW	6	od	3	66	58	0.02
	Dungeness ...	30.01	62	WSW	5	bc	29.98	-.04	61	57	0	WSW	5	c	4	67	57	—
	London	30.00	65	SSW	2	bc	29.95	-.07	60	57	0	S	2	0	*	73	55	0.02
	Oxford	29.98	61	WSW	3	c	29.92	-.11	59	58	+2	SSW	3	d	*	69	55	0.01
	Cambridge ...														*			
	Yarmouth ...	29.97	68	WSW	2	b	29.93	-.03	59	56	-1	SW	4	bc	3	70	55	0.01
GERMANY & HOLLAND.	Cuxhaven ...	29.96	61	WNW	2	b	30.01	+.13	58	57	-7	SSW	2	b	*	69	56	—
	Berlin	29.93	68	WNW	1	b	30.07	+.20	62	55	-5	WNW	3	b	*	73	55	0.20
	Wiesbaden ...	*	*	*	*	*	30.08	+.09	59	56	-8	N	1	b	*	75	52	—
	Munich	30.10	65	2	0	c	30.14	+.06	65	61	-1	NE	1	b	*	75	57	0.08
	The Helder ...	30.00	61	W	1	b	29.95	+.02	60	57	-1	SW	2	c	5	66	52	—
FRANCE AND BELGIUM.	Brussels (9 a.m.)	*	*	*	*	*	30.05	+.03	59	54	0	SW	1	c	*	71	50	—
	Cape Gris Nez	30.03	61	W	4	bc	30.02	+.02	60	56	+3	WSW	4	c	4	66	55	—
	Paris	30.06	68	N	2	bc	30.09	0.0	59	56	0	NW	2	bc	*	75	50	*
	Brest	30.02	64	NW	1	0	30.01	-.07	61	60	+2	SW	3	0	3	66	52	—
	Lorient	30.09	63	WNW	2	b	30.10	0.0	61	59	+6	SW	2	b	3	66	54	—
	Rochefort ...	30.12	70	WNW	4	b	30.15	0.0	64	63	+1	N	3	b	2	75	55	—
	Belfort	29.94	67	W	1	bc	30.07	+.12	64	52	0	W	1	b	*	85	59	—
	Lyons	30.01	72	N	1	0	30.07	+.03	66	60	-2	N	2	b	*	80	60	—
	Nice	30.01	69	S	5	c	30.02	-.01	69	64	+1	E	4	c	0	82	61	—
	Perpignan ...	29.97	73	SE	2	0	30.05	0.0	75	66	+7	NE	2	bc	*	79	65	—
	Biarritz	30.04	68	NNE	4	0	30.11	+.04	67	64	+3	NNW	2	0	2	75	63	—
PENINSULA.	Corunna	*	*	*	*	*												
	Lisbon	30.00	64	NNW	5	b	30.01	-.03	66	61	+1	N	3	b	2	72	61	—

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

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

WEATHER CHARTS

for 8 a.m. on Wednesday, 30th July, 1890.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP.

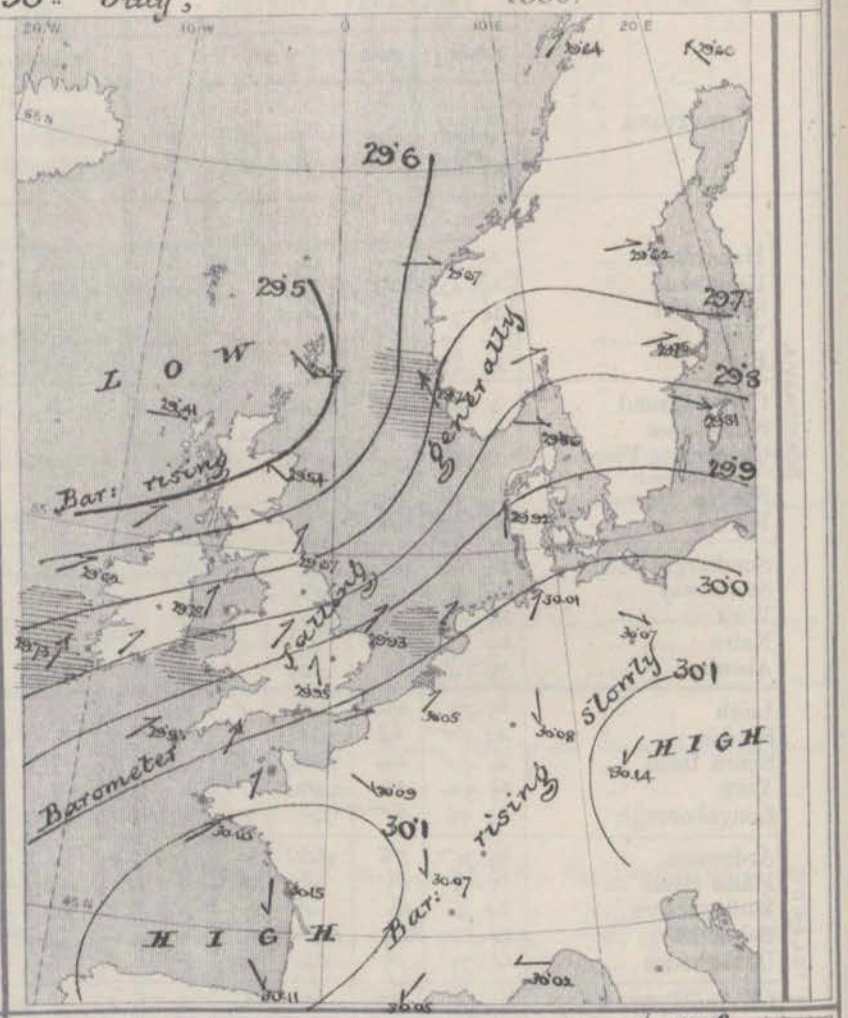
BAROMETER—Isobars are drawn for each tenth of an inch. Changes since previous morning are stated in words.

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

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

SEA DISTURBANCE—Where considerable, is shewn thus:

= Rough. = High.



MEAN HEIGHT OF THE BAROMETER

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

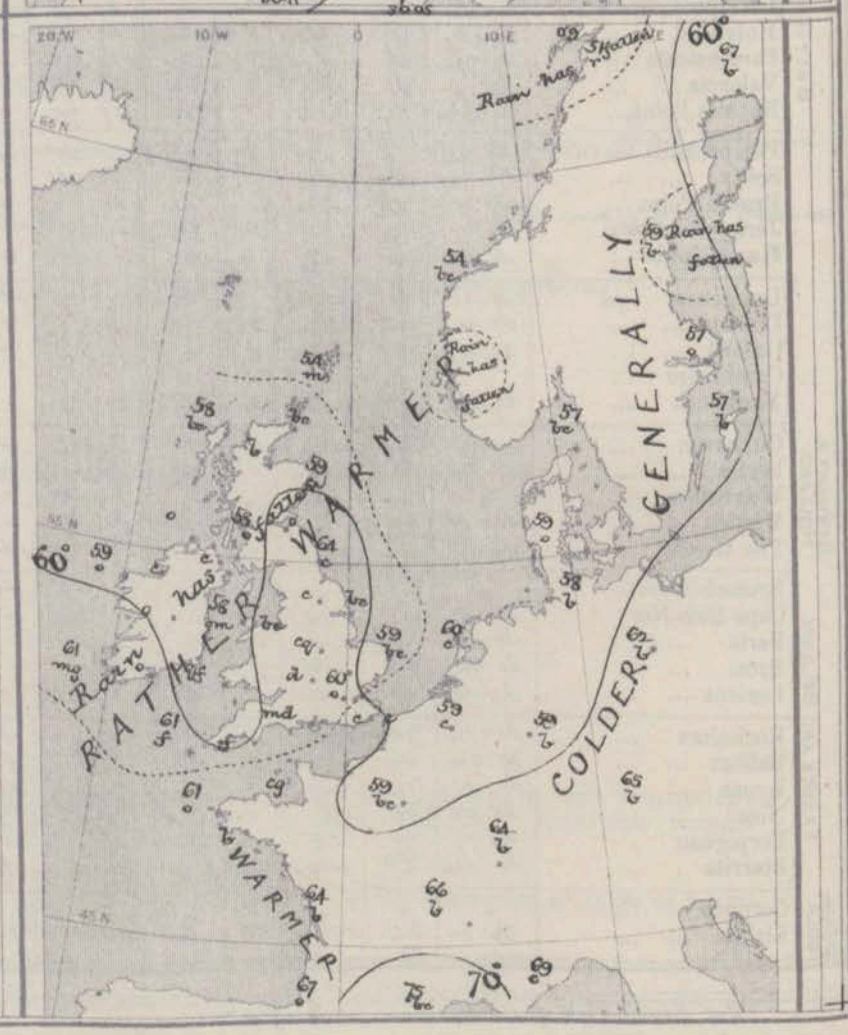
STATIONS.	MEAN READINGS. ins.
Sumburgh Head	29 · 794
Stornoway	29 · 797
Wick	29 · 810
Nairn	29 · 821
Aberdeen	29 · 831
Leith	29 · 859
Shields	29 · 876
York	29 · 910
Loughborough	29 · 936
Ardrossan	29 · 862
Donaghadee	29 · 881
Holyhead	29 · 918
Liverpool	29 · 913
Parsonstown	29 · 921
Valencia	29 · 939
Roche's Point	29 · 938
Pembroke	29 · 942
Scilly	29 · 984
Jersey	30 · 009
Hurst Castle	29 · 974
Dover	29 · 970
LONDON	29 · 967
Oxford	29 · 953
Cambridge	29 · 947
Yarmouth	29 · 943

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 July.)

STATIONS.	TEMPERATURE. Daily Max.	Daily Min.	at 8 a.m. Dry.	Wet.	RAINFALL (Inches.)
Sumburgh Head	57 · 8	48 · 3	53 · 6	52 · 0	2 · 09
Stornoway	60 · 2	49 · 5	56 · 0	54 · 0	3 · 02
Wick	62 · 2	49 · 2	56 · 1	53 · 8	2 · 25
Nairn	64 · 7	51 · 4	57 · 2	53 · 6	2 · 57
Aberdeen	64 · 4	51 · 1	58 · 0	54 · 4	2 · 74
Leith	67 · 1	51 · 7	58 · 6	55 · 3	2 · 84
Shields	64 · 4	52 · 9	58 · 6	55 · 4	2 · 63
York	68 · 5	52 · 1	59 · 4	56 · 2	2 · 57
Loughborough	72 · 1	53 · 0	62 · 0	58 · 2	2 · 34
Ardrossan	63 · 9	53 · 2	57 · 5	54 · 8	2 · 91
Donaghadee	63 · 1	51 · 6	57 · 4	55 · 6	2 · 67
Holyhead	63 · 9	54 · 7	58 · 2	55 · 9	2 · 32
Liverpool	66 · 1	54 · 4	59 · 6	55 · 9	2 · 99
Parsonstown	66 · 4	51 · 9	58 · 3	54 · 8	3 · 01
Valencia	64 · 1	53 · 6	58 · 7	56 · 3	3 · 91
Roche's Point	66 · 7	53 · 3	58 · 7	55 · 8	3 · 16
Pembroke	62 · 9	55 · 0	58 · 1	55 · 9	2 · 31
Scilly	64 · 5	56 · 3	60 · 4	58 · 0	2 · 29
Jersey	68 · 8	56 · 3	62 · 2	59 · 2	2 · 21
Hurst Castle	67 · 9	55 · 7	61 · 3	58 · 8	2 · 15
Dover	67 · 2	56 · 9	62 · 6	58 · 8	1 · 82
LONDON	73 · 0	54 · 1	62 · 3	58 · 1	2 · 17
Oxford	69 · 9	53 · 7	60 · 2	56 · 8	2 · 51
Cambridge	72 · 3	52 · 4	61 · 4	57 · 9	2 · 30
Yarmouth	66 · 8	55 · 2	61 · 2	58 · 1	2 · 68

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, in an anticyclone lying over the greater part of France and the Bay of Biscay, and also in a smaller system lying over South Germany.
Lowest, 29·5 ins: and less, in a depression lying over the north of Scotland.
Gradients moderate over our Islands and the North Sea, slight elsewhere.
Barometer falling at nearly all but the French and German stations, but inclined to rise again on our extreme northwest coasts.

TEMPERATURE

Highest, 75° at Perpignan, 69° at Nice, 67° at Haparanda and Biarritz, 65° at Munich, and 64° at Nairn, Shields, Holyhead, Belfort, and Rochefort.
Lowest, 51° at Bodö, 54° at Christiansund and Sumburgh Head, and 57° at Stockholm, Westy, Sweden, Skudenaes, and Skagen.
The highest maxima registered over our Islands yesterday were 75° in London, 70° at Yarmouth, and 69° at Loughborough and Oxford.

WIND

SW^{ly} over the greater part of our Islands, but SE^{ly} at Sumburgh Head and Aberdeen, as well as in the west of Norway; fresh or strong in force on our south and east coasts.
W^{ly} in Sweden and the north of France.
Light from the N^{rly} or NW^{rly} at most of the French and German stations, but E^{ly} or NE^{ly} in the south of France.

WEATHER

Fine in the northern and eastern parts of the United Kingdom, as well as at most of the Continental stations.
Dull in the west and south of our Islands, with fog at the mouths of English and Bristol Channels; rain at Bodö and Skudenaes.
Since yesterday morning rain has fallen in nearly all parts of the United Kingdom. Solar and lunar halos were seen yesterday in the south of England.

SEA

Rather rough on our southwest coasts and also at Skudenaes and the Helder, but moderate to smooth elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

Although the barometer appears to be rising slightly on our extreme northwest coasts it is still falling at Valencia, and the wind there shows a tendency to back to the southward again. Another depression is therefore in all probability approaching our western coasts.

FORECASTS

For the 24 hours ending at NOON on 31st JULY 1890.

DISTRICTS.	FORECASTS.	DISTRICTS.	FORECASTS.
0 SCOTLAND NORTH 1 SCOTLAND EAST	S^{ly} and SW^{ly} winds, moderate or fresh; fine to cloudy and some rain.	6 SCOTLAND WEST 7 ENGLAND N.W.	S^{ly} and SW^{ly} winds, freshening; cloudy, some rain.
2 ENGLAND N.E. 3 ENGLAND EAST 4 MIDLAND COUNTIES	Same as No 5.	8 ENGLAND S.W. 9 IRELAND NORTH 10 IRELAND SOUTH	S^{ly} and SW^{ly} winds, fresh or strong; dull, some rain.
5 ENGLAND SOUTH	SW^{ly} winds, fresh; fair generally, but perhaps 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: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Skudesnaes ...	29.76	63	53	WSW	4	c	3
Sumburgh Head	29.63	56	52	W	3	c	4
Stornoway	29.65	58	58	SW	3	c	3
Aberdeen	29.76	62	55	SW	1	c	2
Shields	29.87	65	56	SW	2	c	2
Ardrossan	29.83	59	55	SSW	4	c	3
Malin Head ...	29.73	55	55	S	4	o	2
Mullaghmore ...	29.74	58	56	S	5	o p	4
Belmullet	29.68	58	55	SSW	3	o	*

	BAR:	THER: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Holyhead	29.55	58	55	SW	4	o g	4
Valencia	29.81	60	53	S	7	r m	6
Scilly	30.05	65	62	SW	1	o	3
Jersey	30.12	65	57	WSW	3	b	3
Dungeness	30.03	65	59	WSW	5	b e	3
London	30.02	70	61	WSW	3	b e	*
Yarmouth	29.95	65	60	ENE	3	b	2
Rochefort	30.14	74	66	WNW	3	b	0

GENERAL REMARKS ON THE WEATHER OVER EUROPE

DURING THE PAST 24 HOURS.

Weather fine and bright over the greater part of Europe, as well as in many parts of England and Scotland, overcast and gloomy in Ireland, Denmark, and Spain, rainy at Paris and Copenhagen. Rain later in most parts of the United Kingdom, and solar or lunar halos seen in the south of England.

Temperature risen over Algeria, Southeastern Europe, and Russia, changed fitfully elsewhere. Morning readings above 70° at most Mediterranean stations, and above 60° in most other places; below 60°, however, in many parts of our Islands and Norway, and as low as 53° at Sumburgh Head, 54° at Stornoway, Ardrossan, and Aberdeen, 56° at Oxford, 55° at Brussels and Paris. Rising later to between 65° and 70° over the Eastern and central parts of Great Britain and to 73° in London; exceeding 80° at some of the French stations.

Wind moderate NE^{ly} over Spain, very variable over France, Germany, and Russia. S^{ly} over Austria, Poland, and the Baltic, SE^{ly} in Norway, W^{ly} to SW^{ly} over Great Britain, SSW^{ly} to S^{ly} in Ireland, and blowing strongly at Valencia. Wind freshening at our extreme western and northwestern stations generally later, and beginning to back over England.

Barometer highest, 30·2 ins: and more, over Southern Russia, 30·1 ins: (and more) to 30·0 ins: over France and the Bay of Biscay, Portugal and Southeastern Europe, lowest 29·6 ins: and less, off our extreme northern coasts and the west of Norway. Gradients moderate to slight. Falling decidedly in the west and northwest of our Islands later, and gradients becoming steep off the west of Ireland for a time.

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 July. 1890.

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

	STATIONS.	YESTERDAY EVENING. Barom: Reading at 32° F. and Sea Level.	Temp. Dry.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	8 A.M. TO DAY. Barometer. Reading at 32° F. and Sea Level.	Barometer. Difference from 8 a.m. yesterday.	Shade Temp. Dry.	Shade Temp. Wet.	Shade Temp. Difference from 8 a.m. yesterday.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	Sea. (0 to 9.)	PAST 24 HOURS. Shade Temp. Max.	Shade Temp. Min.	Amount of Rainfall.
SCANDINAVIA.	Haparanda ...	29.63	61	2	0	c	29.69	+.03	63	61	−4	E	2	0	*	77	55	0.28
	Hernösand ...	29.72	59	2	0	b	29.75	+.13	60	55	+1	E	0	b	*	79	54	—
	Stockholm ...	29.83	59	W	4	c	29.86	+.11	62	57	+5	SW	2	0	*	68	58	—
	Wisby	29.84	60	WNW	4	bc	29.86	+.05	60	57	+3	SSW	4	0	*	66	54	—
	Bodö	29.74	53	2	0	b	29.71	+.07	58	54	+7	E	2	b	1	?	50	0.35
	Christiansund	29.62	59	ENE	3	c	29.53	−.14	60	56	+6	ESE	4	c	3	?	54	—
	Skudesnaes ...	29.73	55	SSE	6	r	29.60	−.14	58	55	+1	SSW	6	of	4	?	53	0.39
	Christiania Fjord (Færder)	29.80	58	SSW	4	0	29.73	−.05	58	54	+1	S	3	r	3	59	55	0.12
	Skagen (The Scaw)	29.83	58	SW	3	0	29.76	−.10	59	58	+2	SSW	3	0	3	63	55	0.08
	Fanö	29.90	59	SW	4	0	29.85	−.07	61	61	+2	SW	4	0	*	63	59	0.16
	Sumburgh Head	29.49	55	SW	1	0	29.53	+.06	55	55	+1	W	2	bc	3	59	51	0.11
	Stornoway ...	29.46	57	SW	2	0	29.53	+.09	56	56	−2	SW	5	r	5	60	51	0.48
	Wick	29.45	62	SW	1	r	29.61	+.16	58	56	−2	SW	1	0	0	68	46	0.12
	Nairn	29.51	57	W	1	0	29.59	+.11	60	54	−4	WSW	1	bc	1	67	53	0.03
	Aberdeen ...	29.55	59	SSW	1	r 0 m	29.65	+.11	58	56	−1	SSW	2	c	3	70	45	0.10
BRITISH ISLANDS.	Leith	29.58	64	WSW	2	r	29.69	+.10	62	58	−1	WSW	1	c	*	68	54	0.15
	Shields	29.66	66	SW	4	0	29.75	+.08	63	59	−1	SW	2	c	2	71	60	—
	Spurn Head ...	29.78	69	SSW	4	c	29.83	+.03	67	63	+5	SSW	5	0	4	70	63	—
	York	29.75	70	SSW	4	bc	29.81	+.05	65	61	+4	WSW	1	0	*	72	60	—
	Loughborough	29.83	70	SW	4	c	29.88	+.03	66	63	+4	SW	3	0	*	74	62	—
	Ardrossan ...	29.53	56	SSE	1	mp	29.69	+.07	58	55	0	S	3	c	3	59	54	0.22
	Malin Head ...	29.51	58	WSW	1	or	29.62	+.04	58	56	0	S	4	0	2	63	55	0.11
	Mullaghmore ...	29.54	60	W	2	c	29.66	+.02	58	55	−1	SSW	4	or	3	62	55	0.56
	Belmullet ...	29.56	58	WSW	3	0	29.66	+.04	59	57	0	WSW	3	c	*	61	56	0.43
	Donaghadee ...	29.53	62	SW	4	0	29.73	+.07	58	57	−4	SW	3	c	1	68	56	0.23
	Liverpool (Bidston)	29.71	68	SW	6	bc	29.81	+.05	64	60	0	WSW	2	c	4	65	61	—
	Holyhead ...	29.70	60	SSW	6	m or g	29.75	+.01	58	57	0	SW	2	or	3	62	56	0.01
	Parsonstown ...	29.62	64	SW	2	r	29.75	+.03	61	60	+1	S	0	bc	*	68	55	0.15
	Valencia	29.70	62	S	6	or	29.75	+.06	61	59	0	SW	5	c	5	63	58	0.20
	Roche's Point ...	29.71	60	SW	5	r m	29.82	+.03	59	57	−1	SW	3	c	4	61	55	0.15
	Pembroke (St. Ann's Hd.)	29.82	60	SSW	6	0	29.84	−.01	59	59	0	SSW	5	rf	6	61	58	0.40
	Scilly	29.52	62	SSW	5	0	29.52	−.03	61	61	0	SSW	5	f	3	65	58	—
	Prawle Point ...	29.57	61	W	3	m	29.55	+.03	60	60	+1	SSW	4	f	4	61	55	0.07
	Jersey (St. Aubin's)	30.05	64	SW	3	of	30.08	+.03	64	62	+1	S	4	obfg	3	69	61	0.01
	Hurst Castle ...	29.98	61	WSW	6	mfd	30.01	+.02	61	61	+1	SW	6	m	4	65	59	0.02
	Dungeness ...	29.57	62	SW	5	omp	30.02	+.04	62	61	+1	WSW	4	og	3	67	60	—
	London	29.93	65	SW	3	c	29.57	+.02	65	63	+5	SW	3	0	*	68	60	—
	Oxford	29.51	65	S	3	0	29.54	+.02	65	62	+6	SW	3	0	*	69	59	—
	Cambridge ...	29.88	69	SW	4	0	29.54	+.04	67	64	+6	SW	3	c	*	71	59	—
	Yarmouth ...	29.89	68	SW	4	bc	29.53	0.0	66	63	+7	SW	4	bc	3	70	58	—
GERMANY & HOLLAND.	Cuxhaven ...	29.58	63	W	2	b	29.57	−.04	64	62	+6	WSW	3	c	*	68	?	—
	Berlin	30.03	69	ESE	2	c	30.07	0.0	67	61	+5	WSW	3	c	*	77	59	—
	Wiesbaden ...	*	*	*	*	*	30.14	+.06	63	59	+4	S	0	b	*	75	54	—
	Munich	30.15	67	NW	1	bc	30.24	+.10	67	63	+2	SE	2	b	*	77	55	—
	The Helder ...	29.93	63	SW	2	c	29.96	+.01	64	62	+4	SW	3	bc	3	66	?	—
FRANCE AND BELGIUM.	Brussels (9 a.m.)	*	*	*	*	*	30.09	+.04	65	62	+6	WSW	2	0	*	75	56	—
	Cape Gris Nez	30.02	63	WSW	5	c	30.02	0.0	63	62	+3	SW	5	0	4	66	55	—
	Paris	30.06	75	WSW	2	b	30.13	+.04	63	56	+4	S	0	b	*	81	52	—
	Brest																	
	Lorient	30.10	64	SW	3	0	30.11	+.01	63	62	+2	SW	2	b	2	68	61	—
	Rochefort ...	30.17	68	NW	4	b	30.20	+.05	64	61	0	SE	3	b	2	75	54	—
	Belfort	30.07	66	W	1	b	30.14	+.07	64	52	0	W	1	b	*	80	59	—
	Lyons	30.08	77	ENE	1	b	30.16	+.09	68	61	+2	S	0	b	*	82	59	—
	Nice	30.01	68	ENE	6	c	30.09	+.07	71	62	+2	S	0	b	0	84	63	0.04
	Perpignan ...	30.02	80	SE	2	b	30.12	+.07	74	67	−1	W	2	b	*	88	64	—
	Biarritz	30.10	71	NNE	3	b	30.10	−.01	68	65	+1	SSE	2	b	2	75	63	—
PENINSULA.	Corunna	*	*	*	*	*												
	Lisbon	29.99	70	NNW	5	b	30.04	+.03	67	61	+1	N	1	b	2	82	63	—

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 July, 1890.

BAROMETER, WIND AND SEA.

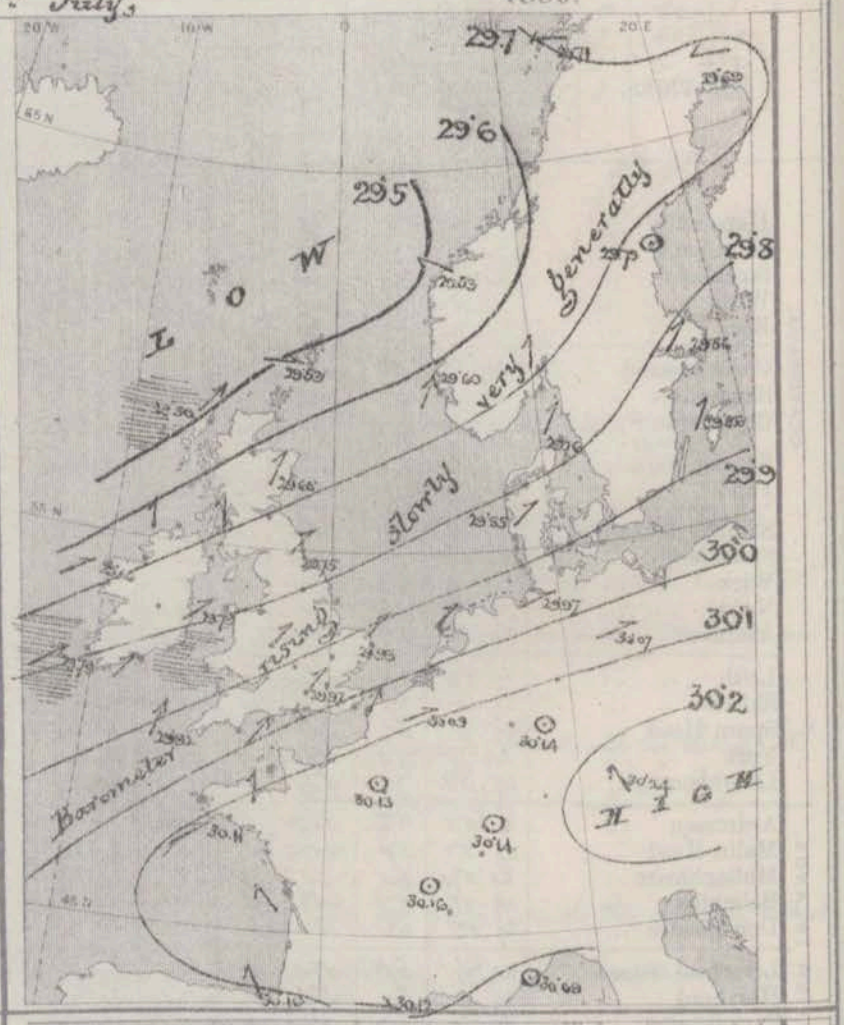
EXPLANATION OF MAP.

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

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

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

SEA DISTURBANCE—Where considerable, is shown thus:
= Rough. = High.



MEAN HEIGHT OF THE BAROMETER

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

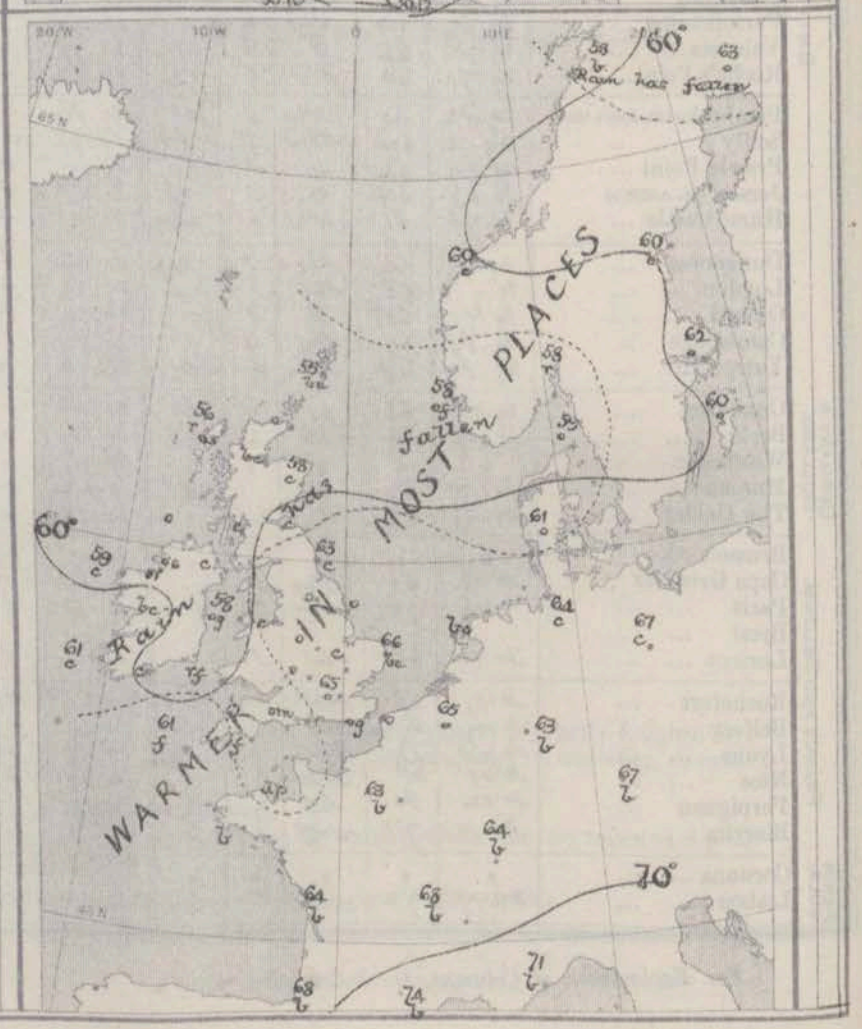
STATIONS.	MEAN READINGS.
	ins.
Sumburgh Head	29·794
Stornoway	29·797
Wick	29·810
Nairn	29·821
Aberdeen	29·831
Leith	29·850
Shields	29·876
York	29·910
Loughborough	29·936
Ardrossan	29·862
Donaghadee	29·881
Holyhead	29·918
Liverpool	29·913
Parsonstown	29·921
Valencia	29·939
Roche's Point	29·938
Pembroke	29·942
Scilly	29·984
Jersey	30·009
Hurst Castle	29·974
Dover	29·979
LONDON	29·967
Oxford	29·953
Cambridge	29·947
Yarmouth	29·943

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 July.)

STATIONS.	TEMPERATURE. Daily Max.	Daily Min.	At 8 a.m. Dry.	Wet.	RAINFALL (Inches.)
Sumburgh Head	57·8	48·3	53·6	52·0	2·09
Stornoway	60·2	49·5	56·0	54·0	3·02
Wick	62·2	49·2	56·1	53·8	2·25
Nairn	64·7	51·4	57·2	53·6	2·57
Aberdeen	64·4	51·1	58·0	54·4	2·74
Leith	67·1	51·7	58·6	55·3	2·84
Shields	64·4	52·9	58·6	55·4	2·63
York	68·5	52·1	59·4	56·2	2·57
Loughborough	72·1	53·0	62·0	58·2	2·34
Ardrossan	65·9	53·2	57·5	54·8	2·91
Donaghadee	63·1	51·6	57·4	56·6	2·67
Holyhead	63·9	54·7	58·2	55·9	2·32
Liverpool	66·1	54·4	59·6	55·9	2·99
Parsonstown	66·4	51·9	58·3	54·8	3·01
Valencia	64·1	53·6	58·7	56·3	3·91
Roche's Point	66·7	53·3	58·7	55·8	3·16
Pembroke	62·9	55·0	58·1	55·9	2·31
Scilly	64·5	56·3	60·1	58·0	2·29
Jersey	68·8	56·3	62·2	59·2	2·21
Hurst Castle	67·9	55·7	61·3	58·8	2·15
Dover	67·2	58·9	62·6	58·8	1·82
LONDON	73·0	54·1	62·3	58·1	2·17
Oxford	69·9	53·7	60·2	56·8	2·51
Cambridge	72·3	52·4	61·4	57·9	2·30
Yarmouth	66·8	55·2	61·2	58·1	2·68

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

GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30·0 ins. to 30·2 ins. and more, over the Channel, Germany, France, and Spain.
Lowest, 29·5 ins. and less, off the extreme northwest of Scotland and west of Norway.
Gradients still moderate for SW. winds.
Barometer inclined to rise in most places, but the tendency is not very decided.

TEMPERATURE

Highest, 74° at Perpignan, 71° at Nice, 67° at Lisbon, Munich, Berlin, Cambridge and Spurn Head, 65° in London.
Lowest, 55° at Sumburgh Head, 56° at Stornoway, and 58° at Mullinhmore, Androssan, Aberdeen, and Bodö.
The daily maxima yesterday exceeded 70° over our eastern and northeastern counties, and varied between 80° and 88° in some parts of France; in London, Lowestoft, it was only 68°.

WIND

SE. to S., light, over the Bay of Biscay, calm over France, SW. in our Islands (fresh to strong at the western and southern stations); S. in the south of Norway, E. in the north.

WEATHER

Fine and bright over France, cloudy and close over the British Islands, with much fog on our southwestern coasts, and rain at a few western stations.
The rainfall measured this morning is considerable at some of the western and northern stations.

SEA

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

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

Changeable unsettled weather is likely — especially in the west and northwest, with slight rain at times over England.

FORECASTS

For the 24 hours ending at NOON on 1st AUGUST 1890.

DISTRICTS.	FORECASTS.	DISTRICTS.	FORECASTS.
0 SCOTLAND NORTH	SW. breezes, fresh or strong; rain at times.	6 SCOTLAND WEST	SW. and S. breezes, fresh to strong; showery.
1 SCOTLAND EAST	Same as No. 5.	7 ENGLAND N.W.	
2 ENGLAND N.E.		8 ENGLAND S.W.	
3 ENGLAND EAST		9 IRELAND NORTH	
4 MIDLAND COUNTIES		10 IRELAND SOUTH	
5 ENGLAND SOUTH	SW. breezes, fresh; cloudy, some slight passing 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: D.	THER: W.	WIND D.	WIND F.	WEA.	SEA
Skudesnaes ...	29.69	58	56	SSE	6	of	5
Sumburgh Head	29.47	58	57	SW	1	o	3
Stornoway	29.46	60	56	SW	4	c	3
Aberdeen	29.56	68	60	SSW	4	cq	4
Shields	29.70	66	61	SSW	3	c	2
Ardrossan	29.63	55	56	SSW	1	ozp	1
Malin Head ...	29.53	59	58	ENE	4	or	2
Mullaghmore ...	29.55	58	56	S	1	or	3
Belmullet	29.51	58	58	SSW	1	o	*

	BAR:	THER: D.	THER: W	WIND D.	WIND F.	WEA.	SEA
Holyhead	29.75	61	60	SSW	3	ozq	5
Valencia	29.58	62	62	SSW	2	r	6
Scilly	29.54	65	64	SSW	5	c	3
Jersey	30.06	68	63	SSW	3	ozp	3
Dungeness	29.55	64	60	SW	5	c	4
London	29.54	66	62	SSW	4	o	*
Yarmouth	29.50	70	64	WSW	4	c	3
Rochefort	30.15	72	66	NW	4	b	2

GENERAL REMARKS ON THE WEATHER OVER EUROPE

DURING THE PAST 24 HOURS.

Weather fine in the north and east of our Islands, as well as over the greater part of the Continent, but dull in the west and south of the United Kingdom, with fog at the mouths of the Bristol and English Channels. Dull weather also reported over the north of Italy, and rain falling at Bodö and Skudesnaes. Considerable amount of rain falling later in the Hebrides and north of Ireland, and smaller quantities in the southwest and extreme north of our Islands generally.

Temperature highest, 79° at Trieste, 78° at Brindisi, 77° at Tunis, 76° at Barcelona, and 75° at Cagliari, Palermo, Malta, and Aumale; above 65° in Lapland and the extreme north of Russia, and above 60° over the eastern and central parts of Great Britain. Lowest, 51° at Bodö, 54° at Christiansund, Sumburgh Head and Le Mans, and 57° at Stockholm, Westy Faender, Skudesnaes, and Skagen. Rising during day to between 70° and 75° over the eastern and central parts of Great Britain, and to 80° or more in France and Spain.

Wind SW. over the greater part of our Islands, but SE. at Sumburgh Head and Aberdeen, as well as in the west of Norway; fresh or strong in force on our south and east coasts. Moderate from the W. over Sweden and the Baltic; light from the NW. at many of the German and Italian stations; N. or NE. in Spain and the west and south of France; S. in Algeria. Subsequently increasing to a moderate or fresh gale from the S. in the west of Ireland.

Barometer highest 30·1 ins. and upwards, over the Bay of Biscay and west of France and also over South Germany; 30·0 ins. and upwards, over nearly the whole of Southern, Eastern, and Central Europe. Lowest 29·5 ins. and less, in a depression lying off the north of Scotland. Depression moving slowly northeastwards later, but barometer continuing to fall a little over Ireland and England.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

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

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

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

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

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. Direc.	Wind. Force (0 to 12.)	Weather.	Barometer. Reading at 32° F. and Sea Level.	Barometer. Difference from 8 a.m. yesterday.	Shade Temp. Dry.	Shade Temp. Wet.	Shade Temp. Difference from 8 a.m. yesterday.	Wind. Direc.	Wind. Force (0 to 12.)	Weather.	Sea (0 to 9.)	Shade Temp. Max.	Shade Temp. Min.	Amount of Rainfall.
1	Biarritz	29.87	66	WNW	6	r	29.89	-.08	60	-	0	WNW	8	a	?	73	57	0.20
-	Corunna	*	*	*	*	*	30.02	.	61	56	-	W	5	o	6	66	55	0.11
2	Corunna	*	*	*	*	*	30.17	+.17	63	59	+ 2	WNW	1	o	4	66	55	-
3	Corunna	*	*	*	*	*	30.19	+.02	66	64	+ 3	WNW	2	o	2	68	59	-
4	Corunna	*	*	*	*	*	30.03	-.16	64	62	- 2	W	4	f	?	?	?	-
5	Corunna	*	*	*	*	*	30.05	+.02	62	59	- 2	W	4	o	4	73	55	0.20
7	Corunna	*	*	*	*	*	30.25	+.02	62	59	0	NE	1	b	4	70	55	-
8	Corunna	*	*	*	*	*	30.07	-.18	66	63	+ 4	SSW	4	f	4	70	59	-
9	Corunna	*	*	*	*	*	30.10	+.03	69	66	+ 3	SW	1	bc	3	72	63	-
10	Corunna	*	*	*	*	*	30.13	+.03	68	65	- 1	SW	1	c	2	73	59	-
12	Corunna	*	*	*	*	*	30.19	+.08	67	60	+ 4	NNE	1	b	4	68	52	-
13	Christiania Fjord	29.53	59	NSW	6	bc	29.69	+.21	57	50	- 1	NSW	6	b	4	61	54	-
14	Christiania Fjord	29.75	56	S	5	o	29.68	-.01	57	56	0	S	7	?	4	59	55	-
15	Christiania Fjord	29.66	58	SSW	7	o	29.80	+.12	58	56	+ 1	SSW	5	o	4	?	55	0.04
-	The Helder	29.91	62	SSW	2	o	29.84	?	66	-	+ 4	SSW	1	c	0	68	61	0.08
..	Corunna	*	*	*	*	*	30.05	+.08	63	61	- 4	NNW	2	b	2	72	59	-
16	Christiania Fjord	29.76	57	ESE	5	m	29.88	+.08	58	54	0	NSW	5	b	4	?	55	-
..	Mullaghmore	-	-	-	-	-	30.11	+.40	58	55	+ 3	N	2	c	2	60	49	0.01
..	Corunna	*	*	*	*	*	30.00	-.05	70	66	+ 7	SSE	6	c	3	79	61	-
17	Corunna	*	*	*	*	*	30.10	+.10	64	61	- 6	SW	5	bc	4	79	57	-
18	Corunna	*	*	*	*	*	30.26	+.16	65	60	+ 1	NNW	1	o	4	70	54	-
19	Brussels	*	*	*	*	*	29.80	-.04	58	-	- 3	SSW	2	o	*	67	53	0.39
-	Corunna	*	*	*	*	*	30.29	+.03	66	63	+ 1	N	1	f	3	72	59	-
21	Corunna	*	*	*	*	*	30.34	+.08	65	62	+ 4	NNE	5	b	8	68	57	-
22	Corunna	*	*	*	*	*	30.36	+.02	64	63	- 1	N	6	o	6	68	59	-
24	Corunna	*	*	*	*	*	30.17	-	65	62	.	N	6	o	6	70	61	-
26	Lorient	30.18	64	NW	1	bc	30.18	+.02	61	-	+ 3	W	1	bc	1	73	52	-
28	Lyons	30.02	74	ENE	2	b	30.02	-.08	67	60	+ 4	ESE	1	b	*	78	56	-
..	Corunna	*	*	*	*	*	30.05	.00	68	65	- 1	SW	1	o	3	73	61	-
29	Corunna	*	*	*	*	*	30.05	.00	67	64	- 1	NNE	5	o	6	75	59	-
30	Cambridge	29.96	66	SW	2	c	29.99	-.10	61	58	+ 1	SSW	4	c	*	70	55	0.08
..	Corunna	*	*	*	*	*	30.08	+.03	69	67	+ 2	NNW	4	bc	4	72	59	.
31	Corunna	*	*	*	*	*	30.10	+.02	62	62	- 7	NW	6	f	3	72	57	-

REPORTS FOR JULY 1890.

2. CORRECTIONS.

DATE.	STATIONS.	YESTERDAY EVENING.					8 A.M. TO-DAY.									PAST 24 HOURS.		
				WIND.			BAROMETER.		SHADE TEMP.			WIND.				SHADE TEMP.		
		Barometer at 32° F. and Sea Level.	Temp. in Shade.	Direc.	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.	Direc.	Force (0 to 12.)	Weather.	Sea (0 to 9.)	Max.	Min.	Amount of Rainfall.
1	Parsonstown	-	-	-	-	-	29.58	+ .38	-	-	-	-	-	-	-	-	-	-
2	Ardrossan	-	-	-	-	-	-	-	-	-	-	-	-	-	-	63	53	-
3	Belmullet 2 pm	-	-	-	-	-	-	-	58	-	-	-	-	-	-	-	-	-
4	Scilly	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	51	-
5	Ardrossan	-	-	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-
7	Loughborough	29.88	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	Mullaghmore	29.65	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
..	Pierle Point	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.03
10	Hurst Castle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	61	-	-
11	Loughborough	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	49	-
16	Aberdeen	-	-	-	-	-	30.10	+ .46	-	-	-	-	-	-	-	-	-	-
18	Yarmouth	29.81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	Wick	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	39	-
..	Spurn Head	29.80	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
..	Bungeness	-	-	-	-	-	-	-	-	-	-	-	-	-	4	-	56	-
21	Ardrossan	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.11
..	Scilly	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	55	-
-	Hurst Castle	30.25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	Nairn	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	No rain
-	Jersey	-	-	-	-	-	30.30	-	-	-	-	-	-	-	-	-	-	-
..	Hurst Castle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	72	-	-
25	Jersey	30.11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	Mullaghmore	29.69	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31	Holyhead	29.65	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-