

## MONTHLY WEATHER REPORT OF THE METEOROLOGICAL OFFICE.

(Supplement to the Weekly Weather Report.)

SUMMARY OF OBSERVATIONS COMPILED FROM THE RETURNS OF OFFICIAL STATIONS AND VOLUNTEER OBSERVERS IN THE UNITED KINGDOM  
WITH A CHART CONTRIBUTED BY THE BRITISH RAINFALL ORGANISATION.

ISSUED BY THE AUTHORITY OF THE METEOROLOGICAL COMMITTEE,

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## SUMMARY OF OBSERVATIONS.

**General Summary.**—After five consecutive months of dull and rather cold weather the atmospheric conditions underwent a change of considerable magnitude in the early days of September. A depression of moderate depth crossing the northern districts, and a small shallow secondary crossing the southern districts occasioned somewhat unsettled weather all over the country during the greater part of the first week, and in most localities a decidedly low temperature for the time of year, the sheltered thermometer falling to and below the freezing point on the mornings of the 3rd and 4th, the frost causing a good deal of damage in places. During this cold period snow showers were experienced in some of the higher grounds in the north of Scotland. By the close of the week, however, the influence of the low pressure systems had ceased, anticyclonic conditions became established, and for more than a fortnight were maintained without any notable modification. The result was a prolonged spell of the finest and driest weather the country has experienced for a long time. Speaking generally the comparatively wet weather of the opening days came to an end between the 4th and the 7th, and was immediately followed by a period of absolute drought—more than 14 rainless days in succession—over nearly the whole of England and Wales, and in some places in Scotland and Ireland, while in many localities the drought was only interrupted by one or two measurements of 0·01 in., probably the result of dew or damp fogs. At a very large number of stations distributed throughout England and Wales the drought was maintained over at least 20 days, at Portland Bill, Whitmead Park (Gloucestershire), and Bettws-y-Coed 24 days (7th–30th), and at Portsmouth, Bath, Edgehills Lodge and Dursley (Gloucestershire), Ruthin, Manchester and Leeds 25 days (6th–30th). This very dry period was marked by a pleasant and equable temperature, there being relatively few records of abnormally high or low day and night readings. Another feature associated with the drought was the decided increase which took place in the frequency of fog in the inland districts, on some occasions the fog continuing for several hours after sunrise, so that the registered duration of bright sunshine, although as a rule good, was appreciably curtailed in consequence. On the coasts fog was reported at one or more places on as many as 26 days. The most extensive regions affected were the south and east of England on the 12th and 13th; the eastern and western coasts on the 20th and 21st; and nearly all coasts during the greater part of the last week, very dense and persistent in the north and north-east in the closing days.

Towards the end of the month the weather in the north-western, western and south-western districts was of a somewhat less settled type than in the east, owing to disturbances at some distance from our Atlantic coasts. A slight depression which advanced to the Portuguese coasts on the 28th, passed across the Peninsula to the south of France, and was accompanied by phenomenally heavy rains, and devastating floods over south-western Europe.

With so much fine and dry weather there were only a few reports of the occurrence of thunder or lightning during the month. Thunderstorms, apparently of no great magnitude, were experienced in the north of Ireland and west of Scotland on the 10th; at Kilmarnock on the 11th; at Falmouth, Pembroke, Darwen and Strathpeffer on the 26th; at Clacton-on-Sea and Dunmow on the 29th; and at Lowestoft on the 30th.

For the month as a whole pressure and temperature were higher than usual throughout the country; the wind was Southerly to Westerly in direction over the northern districts, mainly from between South-East and North-East in the south; there was a well-marked deficiency in the rainfall in all localities; and bright sunshine was deficient over Ireland, but in excess over Great Britain.

**Pressure.**—Mean at 8 a.m. ranged from 30·15 ins. at Oxford, and above 30·1 ins. over nearly the whole of England and Wales to less than 30 ins. in the extreme north of Scotland, 29·93 ins. at Sumburgh Head, the gradual diminution being maintained northward to 29·86 ins. in the Færøe, and to 29·67 ins. at Seydisfjörð (Iceland). In all cases the mean results were well above the average, by 0·10 in. at Scilly, and about 0·17 in. at various northern stations between Liverpool and Aberdeen. The excess was thus fairly uniform, so that the distribution of mean pressure did not differ materially from the normal, but with the higher values it was more of an anticyclonic type. Highest readings occurred on the 8th, 30·51 ins. at Aberdeen; on the 9th, 30·50 ins. at Nottingham and Oxford; on the 16th, 30·49 ins. at Valencia and Jersey; on the 21st, 30·50 ins. and upwards over Scotland, 30·54 ins. at Aberdeen; and on the 22nd, 30·50 ins. at Nottingham, and 30·51 ins. at Shields. Lowest values were registered on the 2nd, 29·32 ins. at Leith; on the 5th, 29·37 ins. at Stornoway; on the 25th, 29·45 ins. at Valencia; and on the 27th, 29·46 ins. at Scilly. Range, in the absence of any deep disturbances, was moderate, from 0·8 in. on the Straits of Dover, and less than an inch generally over the southern half of England to about 1·2 in. in the east of Scotland, in Shetland and the Hebrides.

**Depressions.**—During such a quiet, fine weather month the British Isles were but rarely affected by cyclonic systems, which in all cases were shallow, and produced showery rather than windy conditions. The observations on the evening of the 1st pointed to the existence of a disturbance beyond Ireland, and on the following morning the minimum of pressure was found near the coast of Donegal. Its path of progression was to the north-eastward across Scotland, reaching the Norwegian coast next morning, then taking a more northerly course and disappearing beyond the Arctic Circle. On the 2nd it occasioned a South-Westerly gale at Pembroke, and a strong North-Westerly gale at Malin Head, but few other localities felt as much as a strong breeze. A very shallow disturbance appeared over southern Ireland on the evening of the 3rd, and by next evening it dispersed over western Germany, its advance having been marked by considerable quantities of rain in some localities, but little or no wind. A depression near Iceland on the 6th caused a South-Westerly gale at Stornoway; and another moving eastward near the Arctic Circle on the 16th caused a strong Westerly gale in Caithness and Shetland. A small disturbance which formed on the eastern end of the English Channel in the evening of the 28th produced slight falls of rain locally on both sides of the Channel.

**Anticyclones.**—The month opened with a high pressure system, barometer at about 30·15 ins. over the south-west quarter of the kingdom, but by the evening of the 1st it had already been transferred to Belgium. For the remainder of the week the regions of highest pressure were found over various parts of the Continent, but by the morning of the 8th the area of maximum readings above 30·4 ins. appeared over the British Isles, and thenceforward down until the 23rd the anticyclone continued in the ascendant in our neighbourhood, its central space sometimes being found on the Continent or off our south-western coasts, and on the 20th and 21st, when the highest pressure during the month was reached (above 30·6 ins.) it was over the Iceland-Færøe region.

**Winds.**—In fair agreement with the distribution of pressure the northern half of the country had a decided prevalence of winds from between South and West, with a considerable proportion of North-Westerly breezes in some localities, but over the southern districts, more directly under the influence of the anticyclonic pressure distribution, the direction was much more variable, with North-Easterly to South-Easterly breezes predominating. The days on which the force of a gale was attained numbered 2 at Balmoral, Castlebay and Malin Head. At no station at which anemometrical records are kept did the hourly velocity throughout the month indicate the force of a gale.

**Temperature.**—Mean at sea level ranged from 62° at Jersey, 61°·5 at Guernsey and Newquay, and 60° or a little above at various stations in the more southern counties of England and on the shores of Cardigan Bay to below 55° over a great part of North Britain, and to less than 50° at Sumburgh Head. The distribution differed somewhat from the normal over Ireland, where the values showed a gradual decrease from south-west to north-east, and indicated no cooler area in the inland districts. Over southern England also there were some variations from the usual distribution. With few exceptions, the actual values were above the average in all districts, the excess being as a rule considerable, more than 2° at a number of stations, amounting to 2°·5 at Armagh, Birr Castle, Markree and Waterford, 2°·7 at Newquay, 3°·3 at Barnet and Foynes, and 3°·9 at Kilkenny, most of the largest differences being thus found at the Irish stations. Highest readings were registered on very varied dates all over the kingdom, comparatively small areas being affected on different days. Jersey attained its maximum, 81° on the 8th; Ireland had its warmest day on the 9th, when Clongowes Wood and Valencia rose to 77°, and Birr Castle and Foynes to 75°. Over Scotland generally the 10th was warm, with 78° at Nairn, 77° at Balruddery, Crathes and Strathpeffer, and 76° at Balmoral, while in North Wales, Bettws-y-Coed touched 80°. On the 12th and 13th the highest values were found in the south and south-east of