

# SUMMARY of the OBSERVATIONS made at the STATIONS included in the DAILY and WEEKLY WEATHER REPORTS for the CALENDAR MONTH,

## OCTOBER 1897.

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**General Summary.**—The weather of October was upon the whole fair, mild, and very dry, each of these characteristics being especially marked in the south-eastern parts of the United Kingdom, where the absence of rain was quite phenomenal. In the west and north some heavy falls occurred between the 14th and 17th, with thunder and lightning in a few places. Fog and mist were very prevalent during the latter half of the month, and in many cases were sufficiently damp to cause a measurable deposition in the rain gauge. Pressure and temperature were both very high; the winds showed an anticyclonic circulation round the highest pressures in the east and south-east, a singular absence of gales being reported on the English coasts; rainfall was very deficient, as above mentioned; bright sunshine was, as a rule, in excess of the average.

**Pressure.**—*Mean at 8 a.m.* ranged from 30·15 ins. and upwards over all the more eastern and central parts of England to 30·05 ins. and less in the extreme western and northern parts of our islands generally, and to 30·0 ins. and less in the Shetlands and Hebrides. The general distribution was of an anticyclonic type, and the actual values were considerably above the average,\* the excess amounting to more than a quarter of an inch over Great Britain as a whole, and to as much as 0·3 in. at Spurn Head. At all but the Irish stations and those situated in the extreme western and northern parts of Great Britain the mean pressures were higher than in any October of the previous 31 years. *Highest* readings were observed on the 21st, when the barometer rose to 30·6 ins. and upwards over eastern and central England, and to 30·5 ins. and upwards in all but the extreme western and northern parts of the kingdom. *Lowest* readings occurred on the 15th., the mercury falling below 29·0 ins. in the west of Ireland, below 29·3 ins. in the western and northern parts of the kingdom generally, and below 29·6 ins. in all but the extreme south-eastern portions of England. *Range* was moderate in the west and north, but slight elsewhere.

**Depressions.**—The only depressions of any importance observed in the immediate neighbourhood of our islands were:—(1) A well-marked system which skirted our extreme northern coasts on the 10th, and which afterwards moved in an irregular track across Norway; and (2) Three somewhat deep depressions which travelled in a northerly or north-north-easterly direction outside the Irish and Scotch coasts between the 15th and 18th.

**Anticyclones.**—Shortly after the commencement of the month a large anticyclone spread over our islands from the south-westward, the system ultimately embracing all but the southern parts of Europe. After the 7th, however, it drifted southward and broke into two portions—one moving away to the north-eastward, and the other to the south-westward. On the 18th another large system extended over us from the Atlantic, its central area being situated on the 19th and 20th immediately over England, but afterwards moving slowly away to the north-eastward. The borders of the system remained, however, over our islands until the 28th, and over our eastern districts for a day or two longer.

**Winds** varied greatly in direction in the south-east, but were chiefly from the South-eastward on our south-west coasts, and from the South-westward in the north, a somewhat undue proportion of calms being, however, reported in most places. On the English coasts there was an almost entire absence of gales, but in Ireland and Scotland they were rather frequent, the number of days affected being as large as 10 at Aberdeen, 9 at Wick, and 8 at Malin Head. The absence of any severe general gale is without parallel in the October records of the past 27 years.

**Temperature.**—*Mean at sea level* ranged from between 55° and 56° over the western parts of the English and Bristol Channels, to 51° and less over the inland parts of the north of Ireland, and to between 47° and 49° over the north of Scotland and many inland portions of the east and north-east of England. The winter type of distribution which begins to show itself in October was more strongly marked than usual, and this in spite of the fact that over the country generally the actual values were considerably in excess of the average.\* Over the southern parts of England and Ireland the excess amounted in many instances to between 3° and 4°. *Highest* readings occurred over England mostly on the 17th, but in Ireland at somewhat irregular dates between the 19th and 21st., the highest of all being observed, singularly enough, at Lairg, where the thermometer, on the 21st is reported to have reached 72°. *Lowest* readings occurred in the east and south of England between the 6th and 8th., but in other districts, as a rule, between the 12th and 14th, when sharp frosts occurred at all inland stations in the northern parts of Great Britain. In these latter regions the extreme range was large,—as much as 43° at Lairg. *Vapour Tension* ranged from between 0·36 in. and 0·39 in. on our south-west coasts, to between 0·26 in. and 0·28 in. over central England and the eastern and central parts of Scotland. *Relative Humidity* varied from 95 per cent. at Cambridge and 94 per cent. at Wick, to 82 per cent. at Jersey, and to only 80 per cent. at Liverpool.

**Rainfall** was less than the average\* in all localities excepting the south of Ireland, the deficiency being very large in most parts of Great Britain, and especially so in the south of England, where the month proved the driest October for many years past. The largest aggregates reported were 6·2 ins. at Fort William, 6·1 ins. at Glencarron, and 5·7 ins. at Killarney; the smallest being 0·1 in. at Hastings, 0·2 in. at Dungeness, and 0·4 in. at the North Foreland. Over England and the south-east of Scotland the number of rainy days was also very small, less than 10 being reported in many places. At Hastings there were only 3, at Dungeness only 4, and at Durham only 5 days with a measurable quantity. Snow and sleet showers occurred in the north of Scotland on the 12th.

**Bright Sunshine** was in excess of the average\* in most places, but rather deficient in the south-west of England. More than 40 per cent. of the possible duration was recorded on most parts of our southern coasts, and as much as 52 per cent. at Hastings. At Falmouth and Scilly, however, as well as at some of the stations in the northern parts of England and Ireland, the percentage value was below 30.

\* The averages employed are—*Pressure* and *Temperature* for the 25 years, 1871–95; *Rainfall* for the 30 years, 1866–95; and *Bright Sunshine* for the 15 years, 1881–95.