

MONTHLY WEATHER REPORT OF THE METEOROLOGICAL OFFICE.

SUMMARY OF OBSERVATIONS COMPILED FROM RETURNS OF OFFICIAL STATIONS AND VOLUNTEER OBSERVERS.

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JANUARY, 1932.—Very mild; sunny in Northern England and Eastern Scotland; very wet in the north and west of Scotland.

The exceptional mildness of December, 1931, was maintained during a large part of this month.

Frosty weather due to an influx of polar air during the last few days of December was changing suddenly to very mild weather at the moment when the new month began. In many parts of England the rise of temperature that took place in about twelve hours on the 1st amounted to 25 degrees or more, and where rain occurred during the early part of this period glazed frost resulted. This caused some dislocation of traffic in parts of London, but not nearly so much as did a similar occurrence on December 21st, 1927.

The very mild and damp south-westerly winds that were established so suddenly throughout the British Isles proved persistent, and blew very strongly at times in the north-west, especially when intense depressions were moving north-eastwards between Scotland and Iceland. The mild weather was interrupted temporarily by polar winds from between North and West on the 7th and 8th, and eventually gave way about the 20th to lighter winds, which over England were often of Continental origin. These lighter winds were due to a very well developed anticyclone whose centre lay for the most part to the east of England, but which was over England on the 26th and 31st. Pressure slightly exceeded 1,050 millibars (31 inches) over a part of England on the 26th, this being for many places in the Midlands the highest reading recorded for 50 years or more. The anticyclonic spell made the second half of the month comparatively dry even in the north-west, and there was practically no rain over a large proportion of England during this period.

Temperature now became comparatively low, and there were frequent night frosts of slight or moderate severity over England and Scotland.

Pressure and Winds.—Pressure was well above the normal in all parts of the British Isles, generally by about 5 millibars. The highest readings occurred on the 26th. Among the most notable were:—1,051·0 mb. at Sheffield and Meltham, 1,050·4 at York and Stonyhurst, 1,050·3 at Sealand. The figure for Meltham had only once been approached since January 9th, 1896, when the slightly higher reading of 1,051·4 was registered. Gales occurred widely on several days between the 5th and the 14th. The most widespread and destructive in Scotland came on the 13th, 14th and 19th; the wind in gusts reached 86 mi./hr. at Butt of Lewis on the 5th and 13th, 95 mi./hr. at Bell Rock on the 13th, and 84 mi./hr. at Edinburgh on the 14th.

Temperature.—It is very rare indeed for temperature to reach 60 deg. in this month, as happened in many parts of the country. In Scotland this value was reached or slightly exceeded at Gordon Castle, Banff and Inverness on the 18th; in England on the same date at Wakefield and Llandudno, and in Ireland at Newcastle (Co. Wicklow). Similar readings were obtained on other days, 60 deg. being reported from Colwyn Bay on the 2nd, 62 deg. from Killarney on the 3rd. The warmth of some of the nights was

equally remarkable, new records for January being obtained on the night of the 2nd to 3rd as follows:—Valentia and Greenwich minimum 54° F., Ross-on-Wye 53° F.

In the colder intervals there were occasional sharp frosts; the minimum was 20° F. at Braemar on the 8th, 17° F. at Eskdalemuir on the 26th. The 1st gave the lowest readings over most of England; on the morning of that day temperature fell to 12° F. at Rickmansworth. The exceptionally rapid rise of temperature on the 1st is well shown by the figures for Rickmansworth; at 6 a.m. the temperature was 12° F.; at 9 a.m. 23° F.; and by 6 a.m. on the 2nd 52° F., a rise of 40° F. in 24 hours.

The extreme temperatures for the month were:—England and Wales: 60° F. at Colwyn Bay on the 2nd and at Llandudno and Wakefield on the 18th, 12° F. at Rickmansworth on the 1st; (Scotland): 61° F. Gordon Castle on the 18th, 17° F. at Eskdalemuir on the 26th; (Ireland): 62° at Killarney on the 3rd and Newcastle (Wicklow) the 18th, 24° F. at Kilkenny on the 1st.

Precipitation.—The general precipitation of the British Isles expressed as a percentage of the normal for the period 1881–1915 was 123 per cent.

The western half of Scotland had a great excess, and contrasted strongly with Eastern Scotland, where there was less than the normal for January in some instances. Among those places having more than twice the normal were Rothesay and Eskdalemuir, with 256 mm. and 309 mm. respectively. At Glenquoich the total was 807 mm., at Glenbranter 476 mm. and at Achnashellac 431 mm. There were some very small totals in the east of England; 15 mm. at Tynemouth and Felixstowe, 18 mm. at Cranwell and 19 mm. at Cambridge (University Farm).

Sunshine.—The excess of sunshine (about 60 per cent.) in the east of Scotland and north-east of England in a month when rain was so heavy at no great distance to the west, is noteworthy, and may be attributed partly to the fact that there was an almost complete absence of winds from the North Sea such as so often bring clouds formed by turbulence. The sunny days in these parts were not concentrated to any notable extent within the period of high pressure late in the month, and this quite dry period gave many dull periods further south.

Fog.—Most of the fog that occurred in this month came during the quiet dry period late in the month; it was rather frequent over England except in the south-west. Scotland and Ireland had little on account of the frequent strong winds.

Miscellaneous Phenomena.—Aurora was seen in parts of Scotland on the nights of the 6th, 7th, 11th and 25th. Thunder and lightning occurred rather often during the unsettled windy period. The solar or lunar halo was unusually frequent; it was observed on ten dates between the 5th and the 16th at Oxford.