

MONTHLY WEATHER REPORT OF THE METEOROLOGICAL OFFICE.

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

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JANUARY, 1925: WINDY AND VERY MILD. WET IN THE SOUTH.

General.—During the first few days there was a continuance of the rough weather which prevailed towards the end of December, and gales were experienced in many parts of the country. In some places the average wind velocity reached about 60 m.p.h., while a velocity of 80 m.p.h. was attained in gusts at Weaver Point on the 1st and Southport on the 2nd. Heavy rain occurred widely during the first two days of the month, the greatest falls being in Wales and Westmorland. A fall of 51mm. was recorded at Orton (Westmorland) on the 1st and one of 99mm. at Blænan (Brecon) on the 2nd. In many parts of Scotland the precipitation at first occurred in the form of snow; there was a renewal of flooding, especially on the Border. "Snow lying" was recorded in Scotland and northern England during the first week, a depth of 5½ in. being noted at Balmoral on the 3rd.

In the rear of a secondary depression, which crossed the British Isles on the 3rd and 4th, a ridge of high pressure spread northwards to Iceland from the Azores anticyclone, and a period of fairer, colder weather set in which, except for the passage of a V-shaped depression causing rain generally, lasted nearly a week. Six or seven hours of bright sunshine were experienced on several days, notably at stations in England S.E., and some low minimum temperatures were recorded. By the 10th, western Ireland and Scotland came under the influence of depressions passing north-eastwards across the Atlantic; anti-cyclonic conditions, however, still persisted in the south-east, and dense fog prevailed over a wide area in and around London from the 10th to 12th. On the 11th day temperatures did not rise above 32°F. at several stations.

Mild weather with local rain and strong south-westerly winds spread over the whole country by the 13th. On the 12th there was a fall of 46mm. at Killarney and one of 48mm. on the following day. A fall of 62mm. was recorded at Killin (Perthshire) on the 13th. Severe gales were experienced on the night of the 13th to 14th. Gusts of 74 m.p.h. were registered at Paisley and at Weaver Point, and one of 71 m.p.h. at Holyhead. Many large trees were blown down in North Wales in the Menai Straits neighbourhood. At Lerwick the wind exceeded gale force continuously from 22h. on the 13th to 8h. on the 15th; for 6½ hrs. on the 14th the lowest lull was above gale force and in a gust at 17h. 30m. on the 14th a velocity of 96 m.p.h. was reached. Rainfall on one or other of these days amounted to nearly 50mm. at many places in Ireland. A line squall occurred at Kew on the morning of the 15th.

There was a subsequent change to sunny and drier conditions, with local mist and fog, but after the 22nd, which was wet and stormy in Scotland, the weather again became unsettled. There was much rain on the 25th and 26th, especially in south-west England; a fall of 48mm. was recorded at Ippleden (Devon) on the first of these days. Heavy rain also occurred in the north of England and parts of Scotland on the 28th to 30th; on the latter day, 83mm. fell at Kinlochquoich (Inverness-shire). Severe gales were widely experienced on the 29th and 30th. A line squall occurred in south-eastern England and the south midlands on the 31st.

The general character of the month is illustrated by the following remarks taken from observers' notes:—Cleethorpes,—Very cloudy month with little frost. Copdock,—The driest January since 1909, and the mildest since 1902, except 1916 and 1921. Land still very wet. The fog on 19th was the densest I remember here. A warm month. Falmouth,—A very mild month. Since 1871, the percentage of southerly wind components has only twice been higher in January, in 1872 and 1875. Morwenstow (Cornwall),—A very wet mild month, with many very dark days. Newport (I. of Wight),—An exceptionally wet month with local floods and serious landslips. Ross-on-Wye,—The tenth successive month with excess of rain. This has not occurred since January to October, 1903. Teignmouth,—A warm, dull and cloudy month with a considerable amount of fog from 12th to 20th inclusive. Torquay,—Wet, cloudy and unsettled weather prevailed almost throughout the month. The temperatures were generally high. Sunshine was below normal and rainfall considerably in excess. Falkirk,—Wet and stormy with intervals of fine weather. Ullapool (Ross-and-Cromarty),—A remarkably mild month. Cork (Univ. Coll.),—A wet, gloomy month with gale, flood and thunderstorm on the 13th. Dublin,—For the third year in succession January has proved an open month. There was a complete absence of winds from northerly points of the compass.

Pressure and Winds.—The mean pressure was everywhere above normal. The deviation of monthly means of pressure at fixed hours varied from 8.0mb. at Southampton to 1.3mb. at Lerwick. The prevailing winds were southerly to south-westerly, the isobars of mean pressure trending from S.W. to N.E.

The tracks of five depressions crossed some part of the British Isles. The depression (Track J) crossed the north-east of Scotland on the 23rd, passed over the North Sea and then westwards down the

English Channel on the 25th to 26th; the track made a complete loop south of Ireland and the depression moved eastwards up the Channel on the 27th, traversing the Netherlands, Germany and Denmark, finally passing into Sweden. The highest recorded pressure was 1044mb. at Aberdeen on the 19th and the lowest 957mb. at Stornoway on the 1st and Lerwick on the 2nd. The pressure of 1042.7mb. observed at Edinburgh on the 19th was the highest for this month since 1907.

The month was very windy and many high velocities were recorded, that at Lerwick on the 14th (*see* General Section) being the greatest. A gust of 81 m.p.h. was experienced at Weaver Point (Cork) on the 1st and gusts of 80 m.p.h. occurred at Southport on the 2nd and Edinburgh on the 14th. A number of others exceeded 70 m.p.h. at various stations. There were 10 days at Lerwick on which the mean speed of the wind exceeded 38 m.p.h. for not less than an hour, and 8 such days at Holyhead.

Temperature.—The mean temperature of Districts 1-10 was 42°F. That of every District was above normal, the largest excess, 3.7°F., occurring in England E. (mean temperature 42°F.), and the smallest, 2.5°F., occurring in Scotland E. (mean temperature 40°F.) and Channel Isles (mean temperature 47°F.). The week 11th to 17th was the warmest, and very high deviations from the weekly normals were registered in Scotland, the greatest being 8.1°F. in Scotland N.

Some warm nights were experienced; at Renfrew on the night of the 17th to 18th the temperature did not fall below 50°F.

The extreme screen temperatures for the month were:—(England and Wales) 60°F. at Wistanstow on the 2nd, 22°F. at several stations on the 11th to 13th; (Scotland) 57°F. at Onich on the 13th, 16°F. at Braemar on the 5th; (Ireland) 58°F. at Trinity College, Dublin, on the 13th and at Glasnevin on the 14th, 26°F. at Newtownbarry on the 16th.

Ground frosts occurred generally throughout the month. On the 4th and 5th the temperature on the ground was 12°F. at Balmoral, while 17°F. was registered at Leuchars (Fife) on the 23rd and at Sealand on the 25th.

Precipitation.—Precipitation was below normal in the majority of Districts: it was in excess only in England S.E. and S.W., the Channel Isles and Ireland S. Small areas in the extreme south of Sussex, Hampshire and Devonshire experienced precipitation of more than twice the normal. Precipitation was below normal in the English and Welsh coastal areas (with the exception of the south coast of England) and part of the midlands, also over the greater part of the Scottish coastal areas and a considerable part of the north of Ireland. Over the remainder of the British Isles precipitation was mainly between 100 and 150 per cent. of the normal. The general precipitation of the British Isles expressed as a percentage of the normal was 108; the values for the several countries were:—England and Wales 107, Scotland 106, Ireland 114.

The week 11th to 17th was the driest generally and the last week of the month the wettest.

One or more days of thunder were reported at a number of stations, chiefly in the north and west; Baltasound had as many as 6 days. Hail was also variously reported, with 11 days at Baltasound.

There was little snowfall in the south. Snow fell on several days at many Scottish stations, the largest number reported being 8 at West Linton.

Sunshine.—Sunshine was in excess in five Districts and deficient in the remaining seven Districts. The largest mean daily excess, 0.29 hr., was experienced in Scotland N. and the largest deficiency, 0.41 hr., in England S.W. The Channel Isles and Scilly had 23 per cent. of the possible duration, while the Midland Counties had only 15 per cent. Daily durations exceeding 7 hrs. were recorded at a number of stations, notably in the south-east of England. The week 4th to 10th was the brightest and the last week of the month the least sunny. The largest total duration of sunshine was experienced in small areas of the East Anglian, Kent, Sussex and Hampshire coasts.

Fog.—The number of days of fog reported were very variable. Aberystwyth had as many as 20 days and Geldeston and Balbriggan (Dublin) 18 days. The fog of the 10th to 12th in the London area was very dense.

Miscellaneous Phenomena.—Halos were of frequent occurrence. Aurora was seen at Gordon Castle (Elgin) on the 16th, 17th and 19th, and at Baltasound on the latter date. It was also seen at Seskin (Carriek-on-Suir) during moonlight on the 2nd, 3rd and 5th. The Zodiacal Light was seen at Oxford on the 15th, 17th, 23rd and 28th. On the 23rd the Zodiacal Band was also seen. At Wadhurst (Sussex) the Zodiacal Light was observed on the 12th, 14th and 15th, and the Counter-glow on the 24th.