

MONTHLY WEATHER REPORT OF THE METEOROLOGICAL OFFICE.

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

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FEBRUARY, 1925: VERY WET; MILD IN GREAT BRITAIN.

The unsettled weather which had prevailed from January 22nd continued throughout the greater part of February. During the first six days centres of depressions passed well to the northward of the British Isles, and high winds and gales occurred at times in a few exposed places. Showers of rain, hail or snow were recorded on most of these days but there were many bright intervals. A fall of 32 mm was registered at Castle Lough (Tipperary) on the 3rd. Snow fell in many parts of Scotland on the 6th.

On the 7th a ridge of high pressure moved rapidly across England and sunshine records of more than 8 hrs. were obtained in southern England.

There was a renewal of unsettled weather in Ireland on the evening of the 7th, which subsequently spread over the whole country and continued until the 16th. Heavy rain fell on the 10th to 12th, among the larger falls being 82 mm. at Snowdon (No. 9 gauge), 45 mm. at Penrhyn Quarries (Carnarvon) and 38 mm. at Arkengarthdale (Yorks.) on the 10th, 52 mm. at Bettws Garmon (Carnarvon) on the 11th and 39 mm. at Newport (Isle of Wight) on the 12th. Gales were recorded on several days and velocities of 78 m.p.h. were attained in gusts at Valencia and Birmingham on the 9th and also at Shoburyness on the 11th. A gust of 82 m.p.h. was recorded at Rosyth on the 10th. A line squall was noted at South Farnborough and at Hampstead on the 11th. On the 14th a fall of 61 mm. was recorded at Langholm (Dumfries) and one of 49 mm. at Grantown-on-Spey on the 16th.

During the third week the weather became quieter, colder and somewhat fairer. Daily durations of from 8 to 9 hrs. bright sunshine were experienced in many parts of the country between the 18th and 22nd but snow, sleet and rain showers were of general occurrence. A considerable amount of snow fell in Scotland on the 21st to 23rd and on the first of these days snow lying to a depth of 6 in. was reported from Crieff (Perth). On the 22nd to 24th maximum temperatures did not reach or exceed 35°F. at a few places in northern England and Scotland; thus 32°F. was recorded at Eskdalemuir on the 22nd and 35°F. at Harrogate on the 23rd.

A depression approaching from the Atlantic caused high winds and unsettled weather in Ireland on the 22nd and by the 24th these conditions had become general. The precipitation at Cahirciveen on the 22nd was 37 mm. The heaviest rainfall was recorded on the 25th, on which date 62 mm. fell at Llyn Fawr (Glamorgan) and 38 mm. at Dormans Park (Surrey). The low pressure system to the west of Ireland gradually deepened in intensity until on the 26th pressure was unusually low (below 970 mb.) in many parts of the British Isles. There were extensive floods in the Thames Valley and in Kent at the latter end of the month. Subsequently the depression began to fill up and in some parts of southern England the brightest weather of the month was experienced on the 28th.

The general character of the month is illustrated by the following remarks taken from observer's notes:—Blundellsands.—The wettest February since records were started in this district 50 years ago. Cheltenham.—A wet month, the rainfall being exceeded in February only five times since records commenced in 1867. Sunshine duration just above normal. Copdock.—For the third year in succession February has yielded a smaller amount of sunshine than January. A wild and stormy month. Newport I. of W.—An excessively wet month with frequent showers of hail and occasional thunder and lightning. Redruth.—Rainfall much above the average but cloud and humidity both below the average. Sidmouth.—Many gales, mainly from S. and S.W. Much damage done by extraordinarily high seas. Southport.—The wettest February since that of 1881. Mean air pressure exceptionally low. A westerly month; N.E. and E. winds particularly scarce. Teignmouth.—Exceptionally severe gales during latter part of month. Rainfall, sunshine and temperature above the average. Torquay.—Exceptionally wet and wild, with frequent showers of hail and sleet; temperature and sunshine above the average. Totland Bay.—Twice only in 38 years has so much rain been registered. On only three occasions has the February mean temperature been higher. The first February in my records with only two sunless days. Walton-on-Naze.—An exceptionally mild and windy month. Vegetation too far advanced. Ardross Castle (Ross-shire).—Very wet and cold, with snow lying on the hills. Dirleton (E. Lothian).—Considerable amounts of bright sunshine. Edinburgh.—The wettest February since 1903. Dublin.—The month brought an after-winter of some severity; other notable features were its extreme wetness and the over-

whelming prevalence of winds from WSW. Only four days failed to yield a measurable rainfall.

Pressure and Winds.—The mean pressure was everywhere markedly below normal. The deviation of monthly means of pressure at fixed hours varied from 14.4 mb. at Aberdeen to 7.9 mb. at Scilly. The prevailing winds were SW. to W, the isobars of mean pressure trending roughly from west to east. There were very few easterly winds.

The chart of depression tracks for the month is a complex one, and shows a number of closed and open loops in the neighbourhood of the British Isles. Ten of the tracks crossed some part of our islands. The highest recorded pressures were 1036 mb. at Cattewater, Guernsey and Pendennis on the 2nd and the lowest 959 mb. at Valencia on the 26th. At some stations the pressure on this day was the lowest for many years, e.g., at Cheltenham the pressure of 966 mb. was the lowest since 1886.

There was a prevalence of high winds and gales but on the whole the month was less windy than January.

Temperature.—The mean temperature of Districts 1-10 was 41°F. That of Ireland S. was normal and of Ireland N. below normal but in all remaining Districts temperature was in excess. The largest excess was 2.7°F. in England E. (mean temperature 42°F.) and the deficiency in Ireland N. was 0.1°F. (mean temperature 41°F.). The first half of the month was the warmest.

The extreme temperatures for the month were:—(England and Wales) 59°F. at several stations on various dates, 22°F. at Sprowston (Norfolk) on the 22nd; (Scotland) 54°F. at Perth on the 2nd and 15°F. at Eskdalemuir on the 22nd; (Ireland) 56°F. at Glasnevin on the 3rd and Killarney on the 8th, 24°F. at Phoenix Park on the 14th.

Ground frosts were numerous throughout the month and a few stations had as many as 24. A ground temperature of 12°F. was recorded at Lympne on the 22nd.

Precipitation.—Precipitation was above normal in all Districts. The only areas with precipitation less than normal were two small regions of the western Scottish coast. Over the whole of Wales, parts of northern and southern England, considerable areas of the eastern Scottish coast and a small area in central Ireland precipitation exceeded twice the normal. At Grantown-on-Spey precipitation was 267 per cent. of normal and at Logie Coldstone 317 per cent.

The second and fourth weeks of the month were the wettest.

There was a considerable amount of snow during the month, notably in Scotland. The Grampians and the Cairngorms were snowed throughout. Most stations reported hail, and in some cases the number of days with hail was as great as 13 to 16. At Weymouth on the 14th some of the hailstones measured half an inch in diameter. Some thunderstorms were reported and a few stations had as many as 4 or 5 days of thunder.

Sunshine.—Sunshine was in excess in all Districts save those in Scotland and England N.W. and E. The largest mean daily excess, 0.61 hr., was experienced in the Channel Isles and Scilly, and the largest deficiency, 0.54 hr., in Scotland, W. The former District had 38 per cent. of the possible duration and the latter only 18 per cent. The largest total duration of sunshine was experienced in parts of the extreme south western coasts of England and in the Channel Isles.

Fog.—This was very variously reported and some stations showed a large number of days of fog. There were, however, no serious fogs in London.

Miscellaneous Phenomena.—Halos of 22° were of frequent occurrence. Parhelia and other additional halo phenomena, mainly the upper contact arc and portions of the 46° halo, were observed at Oxford on the 6th, 7th, 12th, 13th, 14th, 18th and 24th; a sun pillar was seen at Oxford on the 21st. Parhelia were also recorded at Felixstowe on the 6th, at Ross on the 6th and 12th and at Larkhill on the 17th. A fine example of mammato-cumulus was seen at Holton Heath on the afternoon of the 26th and a mirage was observed over Spithead from Calshot on the morning of the 7th. Lunar rainbows were seen at Durham and at Worksop on the 8th. Aurora was observed at Aberdeen and Baltasound on the 8th, Wick and Lerwick on the 9th, Dublin on the 18th and Armagh, Lerwick, and Baltasound on the 19th. The Zodiacal Light was seen at Oxford on the 12th, 16th to 18th, 23rd and 24th and at Wadhurst (Sussex) on the 12th, 14th, 15th, 24th, 27th and 28th. The Counterglow was noted at Oxford on the 23rd and at Wadhurst on the 24th.