

MONTHLY WEATHER REPORT OF THE METEOROLOGICAL OFFICE.

SUMMARY OF OBSERVATIONS COMPILED FROM RETURNS OF OFFICIAL STATIONS AND VOLUNTEER OBSERVERS IN THE UNITED KINGDOM, AND AT GIBRALTAR AND MALTA, WITH A CHART OF RAINFALL CONTRIBUTED BY THE BRITISH RAINFALL ORGANIZATION, ISSUED BY THE AUTHORITY OF THE METEOROLOGICAL COMMITTEE.

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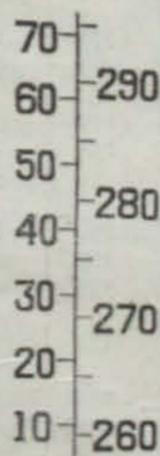
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Abnormally Mild; Little Snow and Frost; Rainy in North and West.

Owing to the influence of winds which very generally blew from points between South and West, the mean temperature of the month was above the normal. There was little snow, and the number of ground frosts was comparatively small, so that not only was FEBRUARY more favourable than JANUARY, but the weather, as a whole, was unusually advantageous for outdoor operations, nothing of a really wintry nature being encountered. In Scotland and Ireland, however, owing to frequent rains, the conditions were less favourable than in England. The following notes supplied by observers illustrate the general character of the month:—*Allans Green, Northumberland*, "FEBRUARY, 1918, will long be remembered in this district as one of the best, finest, and most open months of a winter. There has been hardly any frost, and no snow, with fine, quiet days. Much ploughing on the stiff clay has been done, which in an ordinary winter would have been quite impossible. Wheat has been sown during the month, and the open weather has saved the fodder, which was not plentiful, so that there is not much fear but that the farmers will have plenty of hay to see them through until the grass comes. Sheep are doing well on the dry land." *Bromyard, Hereford*, "A mild, pleasant month; trees and shrubs very forward." *Carrigoran, Clare*, "The weather throughout the month has been of a most gloomy character, with rain nearly every day, but only during the last week was there any frost." *Dublin (City)*, "A very mild, frostless month, with frequent though not very heavy rainfall. The mean temperature was 2.9a above the normal, thus establishing with FEBRUARY, 1903, a record for mildness in the second month of the year." *Fethard, Waterford*, "The weather was extremely monotonous, fog, rain, and strong South-East to South-West winds being almost uninterrupted. The last day brought a sudden change to a North-West gale and driving snow squalls, with the only frost of the month. Vegetation is unusually advanced." *Great Billing, Northampton*, "The best weather we have had for years." *Totland Bay, Isle of Wight*, "13th, tortoiseshell butterflies seen. In the last thirty-two years, only twice, 1903 and 1914, has the mean temperature for FEBRUARY been so high." *Wallington, Surrey*, "10th, white crocus out and coltsfoot in flower; 15th, purple crocus out, almond in flower." *Weston Turville, Bucks.*, "A remarkably dry month, highly favourable to the progress of field work, the ground being quite in order for cultivation."

On the 21st, according to a "Times" report, strawberries were in flower in an open garden at Hitchin.

Temperature.—The temperature was above the normal in all districts, the excess varying from 2.5a in England North-West and Ireland South to 1.2a. in the English Channel. In this connexion it is of interest to compare the isotherms on the map given on p. 15 with those for last FEBRUARY, the difference in favour of the present month being very marked. In Scotland the first ten or twelve days were exceptionally mild, but the highest reading recorded during the month was 28.9a at Crathes on the 23rd. On various days during the third week there was a cold current from East and South-East, but very mild conditions again became dominant until the 27th, when cold Northerly winds caused a decided fall in temperature. The very high mean temperature of the month was at many places equalled in 1914, but, taking a general view, a milder FEBRUARY has occurred in Scotland during the last sixty years only in 1882 and 1903. In England the highest temperatures occurred very generally on the 23rd, the maximum being 28.9a at Halstead, Essex. Somewhat paradoxically, the highest temperatures were recorded on a day that was sunless, the lowest readings, on the other hand, being associated with a period which was unusually sunny. The lowest temperatures occurred locally between the 17th and 19th, there being at this time an anticyclone over the Baltic region and North Germany, a cyclonic system at the same time moving in from the Atlantic and bringing disturbed weather to the northern and western districts. With these conditions the variations in the minimum temperatures recorded were very marked. Thus, on the 18th, the readings at South Farnborough and Benson were 26.5a and 26.6a, and at Scilly and Castlebay 28.0a and 27.9a. On the 18th 26.4a was recorded at Wokingham and 26.5a at Raunds. During this cold spell the sunshine at some of the eastern and southern stations was unusually abundant. Felixstowe and St. Leonards during the four days 16th to 19th registering 35 hr., Brighton, Cromer, and Margate 32 hr., and Little Massingham and Skegness 29 hr. In Wales the lowest temperature was 26.8a at Gwernyfed on the 17th, and the highest 28.7a at Colwyn Bay on the



Temperature Scales.

7th. In Ireland the corresponding values were 26.9a at Markree Castle on the 17th, and 28.7a at Waterford on the 23rd and at Killarney on the 24th.

Air Pressure.—As shown by the map on p. 15, the general trend of the isobars was from South-West to North-East, but although this distribution was in close agreement with the normal, the gradients were much steeper than usual, pressure varying from 1025 mb. over the Channel Islands to 1008 mb. to the northward of Scotland. As a rule the depressions moved along tracks which took them well to the northward of the British Isles. There was a notable exception, however, on the last day of the month which brought a severe spell of wintry weather to all districts. This disturbance came from the North-Westward, and by 7 h. on the 28th was centred over the North Sea, where the pressure was below 995 mb. The blizzards and gales which accompanied this storm-centre were especially severe in the eastern, inland, and northern parts of Scotland, the snow falling in places to a depth of 15 cm., with very deep drifts. Many trees also were blown down. Similar reports were received from Cumberland, Westmoreland, Durham, north Yorkshire, and Dartmoor, the loss of ewes and lambs on some of the sheep-walks in the latter locality being great. The highest gusts recorded during this gale were 33 m/s. at Aberdeen and Eskdalemuir, 31 m/s. at Holyhead and Rosyth, 30 m/s. at Edinburgh, Quilty, and Scilly, and 27 m/s. at Weaver Point. The lowest air pressure of the month was 985 mb. at Stornoway at 7 h. on the 9th, and the highest 1047 mb. at 21 h. at Scilly on the 25th.

Rainfall.—The rainfall was above the normal in Scotland, England North-West, and Ireland, and below it in all other districts, the differences varying from + 73 mm. in Scotland North to - 31 mm. in the English Channel. In Scotland West there was an excess of 54 mm. At Glenquoich the total fall for the month was 506 mm., this being the second wettest FEBRUARY during the last forty years, and surpassed only in 1903 (542 mm.). At Crieff there was precipitation on every day of the month, and in the wet areas in Scotland generally there were only three or four dry days. On the 17th at Gruline (Mull) 60 mm. were registered, and at Glenquoich on the 23rd 79 mm. There were also some very heavy individual falls in twenty-four hours at some of the English and Welsh stations. Thus, Meltham, Yorkshire, recorded 53 mm. on the 6th, 35 mm. on the 9th, and 27 mm. on the 21st; Beddgelert, 74 mm. on the 6th, 39 mm. on the 10th, 63 mm. on the 12th, and 56 mm. on the 21st. Falls of 25 mm. and above were also experienced on the 6th in many parts of Lancashire. In Snowdonia, at Copper Mill and Intake, the total falls for the month were 594 mm. and 548 mm. In Ireland the heaviest falls occurred on the 1st and 18th, Seskin having 37 mm. on the former date and Lisburn 28 mm. on the latter. At Markree Castle and Killarney there were only two dry days, several other places having only four.

Sunshine.—Except in England East, where there was a slight excess of 0.11 hr. per day, the sunshine was in all districts below the normal. In England South-West and in Ireland South the mean daily deficiency was 1.0 hr. There was most sunshine in the English Channel (2.83 hr. per day) and least in Scotland West (1.22 hr. per day). Some of the individual records were large, the daily mean, for instance, at Felixstowe being 3.54 hr., Clacton 3.39 hr., Ramsgate 3.32 hr., and Guernsey 3.29 hr., compared with only 0.64 hr. at Manchester and 0.75 hr. at Bolton. For London (Kew Observatory) the corresponding figure was 2.29 hr.

Fogs were experienced locally over eastern Britain from the 12th to 14th, but, with a few exceptions, the number recorded during the month over the country generally was not large.

Thunderstorms were reported from a large area in the north of England, with **Hail** in places, on the 9th, and in Ireland and the south-west of England on the 8th.

Optical Phenomena.—Solar and lunar haloes were seen on many occasions, the former mainly on the 5th and 20th to 22nd, and the latter from the 17th to 21st. A sun pillar was seen at Aberdeen on the 28th, parhelia on the 10th, and paraselenæ on the 26th. Zodiacal light was observed at Oxford on the 8th and 10th.

Aurora.—Aurora was seen at Eskdalemuir on the 5th, and at Aberdeen on the 9th, 10th, 11th, and 28th, the display of the 9th being widely observed.

Audibility.—Distant sounds were reported as being unusually audible at Aylesbury and South Farnborough on the 18th (barrage fire in London heard), at Isleworth on the 19th (remarkable audibility), and at Redruth on the 17th and 23rd (sea heard very clearly 3½ miles away).