

Monthly Weather Report

OF THE METEOROLOGICAL OFFICE

Summary of observations compiled from returns of official stations and voluntary observers

Volume 75 Number 7

Published by HER MAJESTY'S STATIONERY OFFICE

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July 1958—*Changeable; rather wet*

After four days of cyclonic weather with low pressure to the south of the British Isles the situation became weakly anticyclonic until the 12th when an active depression was centred in our South-west Approaches and, on the next day, moved north-east across the country accompanied by widespread rain. Subsequently pressure distribution over the country was somewhat featureless for some days, but from the 21st until the end of the month a series of depressions from the Atlantic brought changeable and rather wet weather to most of the country.

The European blocking pattern at 500 mb., which was prominent during the last week of June, persisted during the first three days of July with a warm high moving west across Scandinavia, and a low moving east across the Bay of Biscay to North France: a shallow depression meanwhile was situated over the western English Channel. Thundery rainbelts moved northward over England and Wales. Rain was rather variable but there were daily falls of an inch or more at many places and, as a result of falls of this order on three successive days, there was flooding in many parts of the country. Over most of Scotland, however, it was sunny and warm.

By the 5th the upper high had reached south of Iceland where it became absorbed in an eastward moving Atlantic ridge which later moved slowly across the British Isles. From 6th to 8th weather was mostly dry, but fog was fairly widespread at night. On the 8th, air from the region of the Azores spread over the country behind the ridge and weather during the day was sunny and warm, afternoon temperatures reaching 83°F. at places as far apart as Cardington, Finningley and Dyce. Extensive fog over the Irish Sea and English Channel kept temperatures in the sixties, however, in adjacent coastal districts. Apart from the 9th, when a cold front to an Icelandic depression gave some slight rain as it moved across the country, weather continued mostly fine until the 11th.

From the 11th to 13th an upper trough, associated with a 500 mb. low centred west of Scotland, swung eastward, crossing the British Isles on the 13th, when a vigorous surface depression moved from our South-west Approaches up the Irish Sea later moving along the Scottish border to the North Sea. Wind rose in gusts to 50 kt. or more along the south and west coasts, and from the 11th to 13th rainfall exceeded 1 in. daily at many places in Northern Ireland and west Wales while most districts, except northern Scotland and south-east England had half an inch or more on one of those days. After the passage of the depression winds were generally light and weather showery with sunny intervals for about six days, the showers being intensified and accompanied by local thunderstorms on the 16th and 20th as troughs moved across the country.

From 21st to 23rd a trough at 500 mb. moved slowly eastward over the British Isles and, for the remainder of the month, the main belt of upper westerlies was situated across the eastern Atlantic around 45°N., considerably south of its normal position for July; in this belt, systems moved quickly eastward, bringing disturbed conditions to the British Isles. The first of a series of depressions moved over the country on the 21st, the next skirted the south coast two days later, a third moved across Ireland and southern Scotland to the North Sea on the 25th and 26th while the fourth and final depression of the series moved north-eastwards from southern Ireland to the northern North Sea two days later. These depressions were all accompanied by heavy rain especially in southern and eastern Scotland, where falls of over 2 in. were recorded in 24 hr., and in western districts of the British Isles.

The month ended with three or four days of showery weather with

sunny periods: heavy thunderstorms occurred locally particularly in southern Scotland where at Eskdalemuir 1.3 in. of rain fell in 24 hr. on the 30th.

Pressure and wind. Mean pressure at 9 h. was below the average except in Scotland, the departure from average ranging from +1.5 mb. at Stornoway to -2.0 mb. at Scilly. Winds were mainly between north-east and east during the first three days of the month backing to northerly on 4th-7th and becoming mainly west to south-west until the 14th and generally light and variable or north-westerly for the next three days. Winds were predominantly south to south-east on the 18th-19th, south-west on the 20th-21st, north-west on the 22nd-24th and thereafter south-west until the end of the month. Gales occurred on 6 days and were widespread on the 13th when gusts of 55 kt. and 56 kt. were recorded at Bidston and Dover respectively.

Temperature. Mean temperature was 0.7°F. below the 1921-50 average in England and Wales, equal to the average in Scotland and 0.2°F. above in Northern Ireland. On the 8th, the warmest day of the month, temperature rose extensively above 80°F. and reached 85°F. at a few places. The coolest period was on 23rd-25th when screen temperature fell locally to 32°F. in the north of England and to 29°F. in Scotland. Ground frost was fairly widespread in Scotland on the 25th when temperature on the grass at Dalwhinnie fell to 20°F.

Extreme temperatures included:—(England and Wales) 85°F. at Leicester (Towers) on the 8th, 32°F. at Kielder Castle and Alwen on the 25th and at Moor House on the 26th; (Scotland) 85°F. at Paisley on the 4th and 5th, 29°F. at a number of places on the 25th; (Northern Ireland) 76°F. at Garvagh on the 3rd and at Nutts Corner and Belfast on the 4th, 36°F. at Parkmore Forest on the 25th.

Precipitation. The general precipitation expressed as a percentage of the 1916-50 average was 117 in England and Wales, 120 in Scotland and 128 in Northern Ireland, where it was the wettest July since 1947. Less than half the average was recorded in north-west Scotland while twice the average was exceeded in parts of Staffordshire, Lincolnshire, East Lothian, around Edinburgh and in Morayshire. On the 1st many places in the Midlands and eastern England recorded between 1 and 2 in. of rain in 24 hr., and 3 in. fell at Penkridge near Stafford.

Among noteworthy falls in short periods were:—
2nd 1.33 in. at Burbage, Derbyshire, in 54 min.
3rd 0.84 in. at Langport, Somersetshire, in 20 min.
14th 0.65 in. at Bwlchyllan, Cardiganshire, in 15 min.
15th 1.00 in. at Alcester, Warwickshire, in 30 min.

Thunderstorms were widespread during the first three days of the month and around the 20th, and thunder was heard on 14 days at one place or another. At some places in the Midlands and eastern England it was reported on 8 days.

Sunshine. The general sunshine expressed as a percentage of the 1921-50 average was 97 over England and Wales, 115 over Scotland and 112 over Northern Ireland. In England and Wales it ranged from 75 at Gulval in Cornwall to 127 at Keswick but most stations were within the ranges 85 to 105.

Fog. Early morning fog was observed at one place or another on 17 days, mainly during the first 9 days of the month.

Miscellaneous Phenomena. The aurora was observed in Scotland on one night.