

MONTHLY WEATHER REPORT OF THE METEOROLOGICAL OFFICE

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

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JUNE, 1936.—Frequent thunderstorms in England, Wales and parts of Ireland.

The month was distinguished by frequent and sometimes severe thunderstorms particularly in England, Wales and parts of Ireland. Considerably less than the average rain occurred, however, in most of Scotland (especially the northern half), in south-west Ireland and parts of south-west England. Abundant sunshine was enjoyed in the east and extreme north of Scotland.

A secondary depression developed over the Hebrides on the 1st and moved southward to the Bristol Channel and then across England to Germany. Conditions were cool generally and very unsettled weather prevailed for a time in England with local thunderstorms but in Scotland and Ireland rainfall was mostly slight after the 1st. A wedge of high pressure moving south-east gave a mainly fair day on the 5th, though a little rain fell chiefly in the west and north. A period of rather unsettled weather ensued, with pressure high south-westward of the British Isles and depressions moving eastward across Iceland. Between the 11th and 13th a trough of low pressure crossed the British Isles, on the 14th and 15th a depression moved east over Scotland and on the 16th another disturbance approached the Hebrides.

On the 17th pressure began to rise over Scandinavia and later the high pressure extended its influence to Scotland. Meanwhile a depression developed off the coast of Portugal, moved northwards and dominated conditions over the southern half of the British Isles. Temperature rose generally and widespread, frequent and locally intense thunderstorms occurred in England, Wales and parts of Ireland. Local thunderstorms were also reported in the south of Scotland on the 21st and 22nd. Between the 25th and 27th pressure was relatively high over the British Isles and fair weather prevailed in many parts though rain was reported in south-east England and locally in the Midlands on the 25th and 26th. On the 28th a secondary depression moved north-east over northern France and subsequently northward over Britain; unsettled weather was renewed generally with widespread thunderstorms and torrential rain locally on the 29th and 30th.

Pressure and Wind.—Mean pressure slightly exceeded the average in the extreme north of Scotland and was somewhat below average at most places elsewhere.

A gale occurred locally in the north-west on the 14th and a mean hourly velocity of 42 m.p.h. was registered at South Shields on the 3rd. Among the highest speeds recorded in gusts were 60 m.p.h. at Sealand on the 21st and 56 m.p.h. at South Shields on the 3rd, at Bidston Observatory on the 15th and at Calshot on the 19th.

Temperature.—Mean temperature exceeded the average generally, the excess varying from 1.0°F. in Ireland, S. and the Channel Islands to 2.0°F. in Scotland, N.

The first week was unusually cool and some exceptionally low temperatures were recorded; on the 5th, temperature in the screen fell to 25°F. at Dalwhinnie, 26°F. at Braemar and at Balmoral, 27°F. at West Linton and 28°F. at Markree Castle (County Sligo) and on the 2nd, 29°F. was registered at Rickmansworth. Some low day maxima were also recorded; the value 46°F. at West Kirby on the 3rd was the lowest there in June since records began in 1904. The latter half of the month from the 17th or 18th to the 28th was, on the whole, much warmer than the average, the period 19th–22nd being notably warm. Maximum temperatures above 80°F. were recorded at many places in England on the 19th, 20th and 21st, while 89°F. was registered in London (Camden Square) on the 20th and 21st. In Scotland 87°F. was touched at Forres, 86°F. at Achnashellach and 85°F. at Ayr, Prestwick, Auchincruive, Colmonell and Nairn on the 21st and 86°F. at Ardtornish and 85°F. at Nairn on the 22nd. Although temperatures were not quite so extreme in Ireland, 78°F. was reached at Birr Castle on the 26th and 77°F. at Markree Castle and Aldergrove on the 21st. The nights as well as the days were very warm.

The extremes for the month were:—(England and Wales) 89°F. at London (Camden Square) on the 20th and 21st, 28°F. at Castleton on the 11th; (Scotland) 87°F. at Forres on the 21st, 25°F. at Dalwhinnie on the 5th; (Ireland) 78°F. at Birr Castle on the 26th and 28°F. at Markree Castle on the 5th.

Precipitation.—The general precipitation of the British Isles expressed as a percentage of the average for the period 1881–1915 was 124, the values for the constituent countries being England and Wales 151, Scotland 74, and Ireland 115. In England and Wales the excessive rainfall was almost general except in south-west England. More than twice the average occurred at numerous stations and more than three times the average at West Witton in Yorkshire. At Holyhead it was the wettest June since readings were first taken in 1871. In Ireland less than the average rainfall was confined to the south-west, County Mayo and a few rather isolated stations elsewhere. In Scotland rainfall was deficient on the whole, but more than the average occurred in parts of Argyllshire and in small areas in the extreme south.

The month was remarkable for the heavy rains which occurred at times chiefly during thunderstorms. Among heavy falls in 24 hours or less were:—

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| 19th | 56 mm. at Hailsham, Sussex. |
| 20th | 101 mm. at Ciliau Aeron (Cardigan) and 20 mm. in 26 minutes at South Farnborough. |
| 21st | 101 mm. at St. Albans, 80 mm. at Rothamsted mainly in two periods of half-an-hour, and 13 mm. in 10 minutes at Sealand. |
| 22nd | 54 mm. at Wigan, 53 mm. at Castle Kennedy (Wigtownshire) and 51 mm. at Chipperkyle (Kirkcudbrightshire). |
| 25th | 59 mm. in 1½ hours at Ashbourne (Derbyshire). |
| 29th | 79 mm. at Bodmin, 61 mm. at Blaenau Festiniog (Merioneth) and 51 mm. at Horfield (Bristol) and Auchincruive (Ayrshire). |
| 30th | 81 mm. in three hours at Florencecourt (County Fermanagh). |

Thunderstorms were unusually frequent; at numerous places in England they were reported on eight days and at many more on seven days. The thunderstorms were in some cases accompanied by sudden increases of wind and by heavy hail, which damaged market-garden crops, fruit and trees. On the 20th, several hailstones which fell at Horfield, Bristol, measured 1½ inches by 1½ inches, at Malvern, hailstones measured 1¼ inches in diameter and at South Farnborough they were described as the size of cherries or blackbirds' eggs. In thunderstorms on the 21st hailstones at Chester exceeded one inch in diameter and at Rothamsted some measured nearly an inch in diameter. Descriptions of a few notable thunderstorms are given in the "Meteorological Magazine" for July 1936.

Sunshine.—The excess of bright sunshine in the east and extreme north of Scotland was exceptional. At Aberdeen, Craibstone, Stonehaven and Montrose the daily average exceeded 9 hours and at Aberdeen the total, 274 hours, was the highest monthly total ever recorded there in a record which goes back to 1881. Deerness, with 262 hours, enjoyed the sunniest month in the Orkneys since observations began in 1880. On the other hand, in the extreme south-west of Scotland, in the western districts of England and the Midlands there was a marked deficiency of sunshine.

Fog.—Fog was reported at times, particularly on the south-west coasts from the 8th–11th and 20th–22nd. It occurred more generally between the 23rd and 27th and locally at times outside these periods.

Miscellaneous Phenomena.—Solar halos were noted at Oxford on 16 days. A mirage was seen off the south coast between Bexhill and St. Leonards on the 17th.