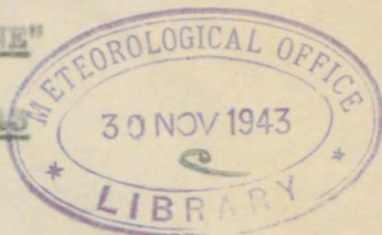


VVB2
"METEOROLOGICAL MAGAZINE"

October-November 1943



Average temperature.

It is useful to be reminded from time to time of the importance of quoting the period used in the determination of various averages of temperature. Averages for the 30 years 1871 to 1900 are available in Temperature Tables for the British Isles Official No. 154 and for the 30 years 1901 to 1930 in M.O.364. There are sufficient long period stations to be able to define the differences in the mean temperature for these two periods in most parts of the British Isles for each month and for the year. In all months the differences reach or exceed 1°F. in some part of the British Isles.

The period 1901-30 gave means 1.5°F. larger in January, October and December at stations in the south-east and Midlands of England and over a smaller area in May. On the other hand August was colder nearly everywhere in the British Isles and June 1°F. colder over much of the Midlands and north of England.

The monthly differences (1901 to 30 - 1871 to 1900) are set out below for Kew in °F.

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
+1.9	+.8	+.9	-.3	+2.0	-.3	+.2	-.1	+.2	+1.9	-.1	+2.2	+.8

The corresponding values for Greenwich are very similar.

The general ^rtend of the decadal change in the mean temperature is shown in the general values below which have been computed in the general values below which have been computed for the British Isles (sea level).

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
	°F	°F	°F	°F	°F	°F	°F	°F	°F	°F	°F	°F	°F
1871-80	42.6	41.9	44.3	46.5	51.6	54.7	59.7	59.7	55.0	52.3	41.8	41.8	49.4
1881-90	39.4	40.0	41.0	45.0	52.2	56.8	59.1	58.2	56.4	47.9	44.3	39.4	48.1
1891-00	38.9	40.0	42.0	46.7	51.0	58.0	60.1	59.6	56.2	48.5	44.9	41.2	49.0
1901-10	40.2	40.0	42.4	45.7	51.3	56.4	59.7	58.7	55.5	50.1	43.4	40.7	48.7
1911-20	40.2	41.0	42.2	46.3	52.9	56.4	59.2	59.5	55.5	49.5	43.8	41.2	49.0
1921-30	41.7	41.1	43.2	45.7	51.2	55.8	59.9	58.8	55.5	50.4	43.6	41.7	49.0
1931-40	40.3	41.0	43.3	46.5	52.1	57.8	60.1	60.5	56.4	49.8	45.2	41.3	49.5

This table shows that the coldest decades were within the period 1871 to 1900 in the case of each month. The decade 1931-1940 gave the highest values in the case of August, September, November and the year, the decade 1871-80 giving the highest values in five months.

J. GLASSPOOLE.

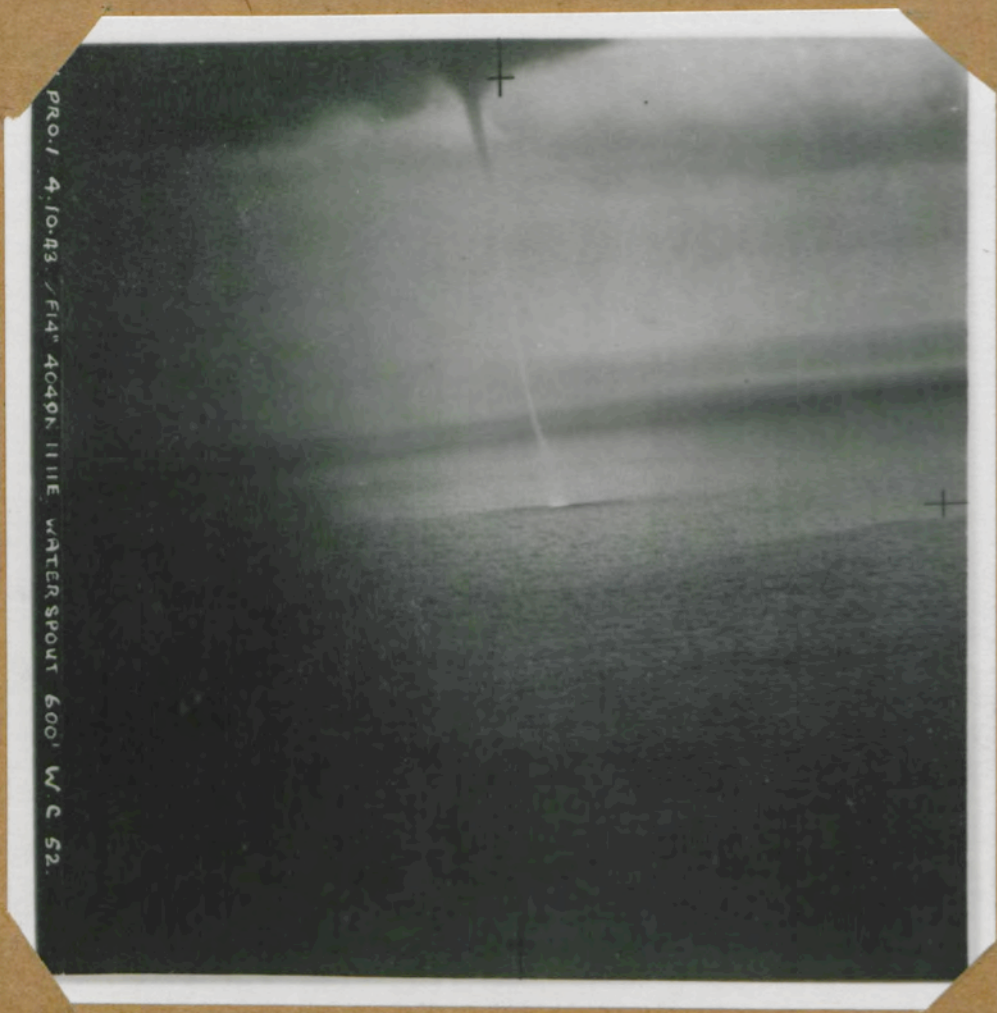
CLIMATE CHANGES IN THE NORTH.

Referring to the interesting article by L.G. Cameron entitled "The changing temperature of Northern latitudes", in the typescript Meteorological Magazine, for March 1941, may I suggest that the charts of temperature variation would be considerably more valuable if a somewhat different change period were used. This if the two 20 year periods 1920-39 minus 1900-19 were used, instead of those for 1895-1914 and 1915-30, there is a considerable increase in the amount of the change and also in the area covered by positive anomalies.

The following figures taken from the few widely spaced stations in this area for which I have accurate data show the much larger change over the suggested periods:-

<u>Change periods.</u>	<u>1915-1936</u>	<u>1920-1939</u>
	<u>Minus 1895-1914.</u>	<u>Minus 1900-1919.</u>
	<u>Mean temperature difference °C.</u>	
HARPARANDA	+0.3	+1.3
STYKKISHOLM	+0.2	+0.9
FAROE ILS.	-0.2	+0.4
BERGEN	-0.2	+0.5
VALENTIA	-0.1	+0.3

The latter change periods are more in line with the chart for water temperatures given by Cameron, as it includes the 1930's when the variation was greatest.



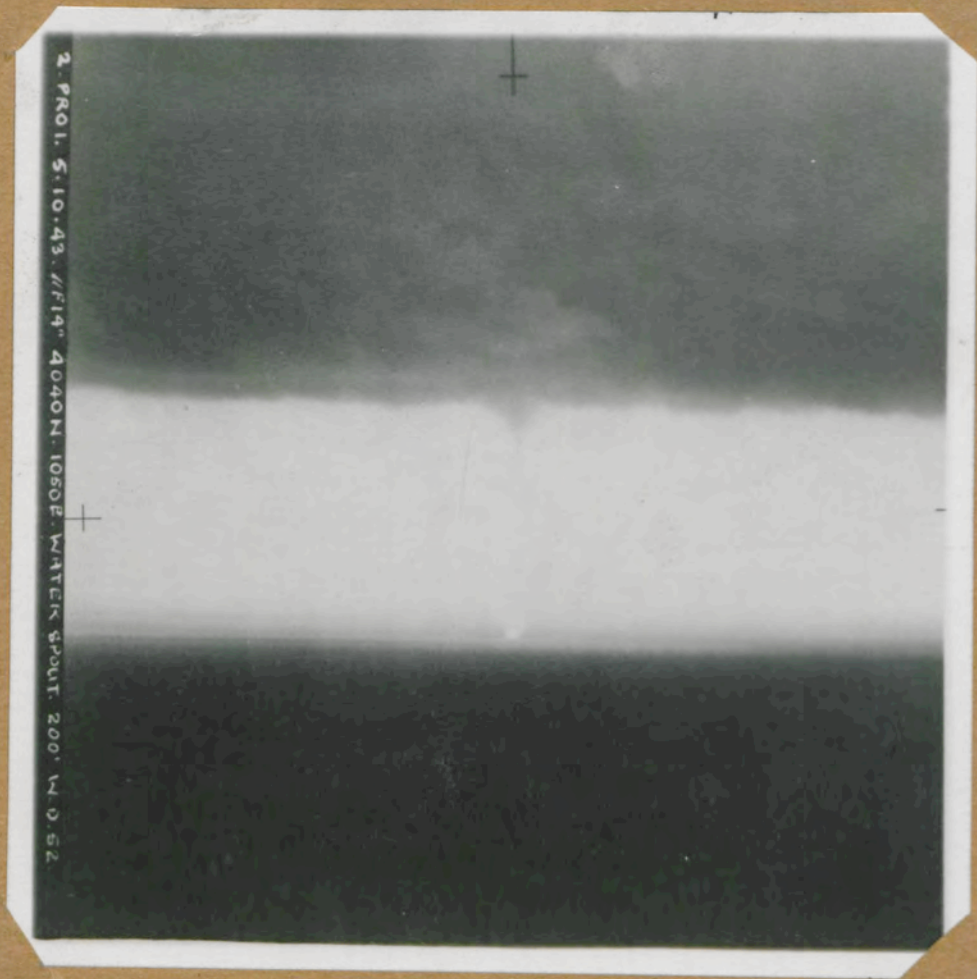
Waterspouts in the Tyrrhenian Sea.

1.



Waterspouts in the Tyrrhenian Sea.

2.



Waterspouts in the Tyrrhenian Sea.

3.

Climatic Changes in the North contd.

My Greenland data are not complete for the 1930s but they indicate that abnormal warmth continued here up to at least 1939.

G.S.Callendar.
23.10.43.

WATERSPOUTS IN THE TYRRHENIAN SEA.

The accompanying photographs have been forwarded by Fl/Lt. R.Kennedy.

Photographs (1) and (2) (dated 4.10.43)

October 3rd, 1943; 1427 G.M.T.

Height of aircraft 600 ft; distance from waterspout, 1 mile.

Sky overcast in east, five-tenths of strato-cumulus to the west. Weather calm but wind freshened to 15 knots from 335° at this point.

Visibility 12 miles to west, 3 miles to east.

"Two spouts appeared stationary and two more were forming.

A large area of water was disturbed."

Photograph 3.

October 15th, 1943; 0720 G.M.T.

Height of aircraft 150 ft; distance from waterspout, 2 miles.

Sky overcast. Wind 8 knots from 320° increasing in squalls.

Visibility decreasing northwards and becoming nil in rain.

"No movement of spout observed. Formed in five minutes from area of extremely turbulent water. Developed pronounced kink after 10 minutes. Total life not known."

A LONG SERIES OF EXTREMES OF PRESSURE.

The Director of Armagh Observatory has supplied a table giving the highest and lowest barometric pressures recorded in each month for each year of the period Jan.1796-May 1825, Jan.1833-May 1943.

SKewed HALO PHENOMENA IN FALSE CIRRUS.

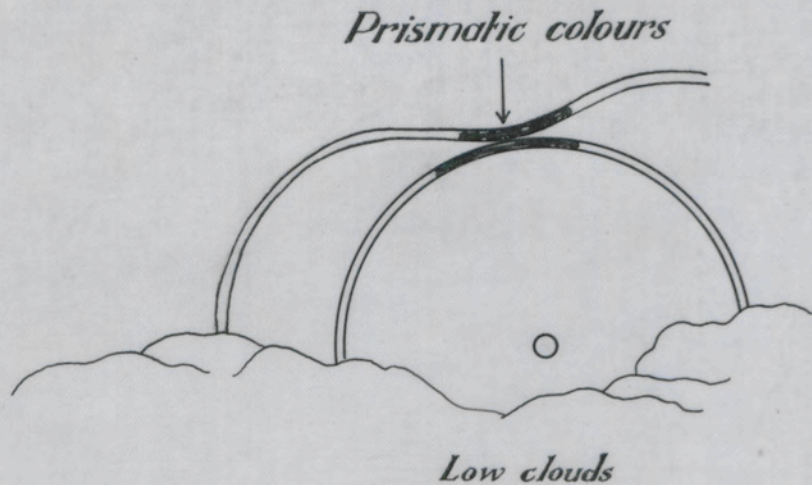
The phenomenon described below, which presents various unusual features, was observed on September 25th 1943 at approximately 14h.42m. G.M.T. from the outskirts of Wrexham. The time is not exact as I was playing tennis at the time, and I waited till the phenomenon was over before going for my watch.

On the day in question, frequent heavy ^{cumulo nimbo}eb. passed over with well defined false cirrus development, and light showers frequently occurred, with spells of brilliant sunshine between. One such shower had just ceased at 14h.42m. and the sun shone through a mass of false cirrus, below which were heavy black low clouds. Part of the halo of 22° became visible together with part of the circumscribed ellipse, the whole being skewed about 6° to the left of the normal position, as shown in the diagram. The lower part of the phenomenon was lost in the heavy low cloud. Prismatic colours occurred only in the vicinity of the point of contact. The display lasted for about five minutes, by which time the false cirrus had left the vicinity of the sun, and a brilliant period ensued.

I wish to record the phenomenon for the following reasons:

(1) I think the circumscribed elliptical halo is always worth putting on record.

(2) The phenomenon took place entirely in what is usually termed "false cirrus". No cloud at all of the common cirrus type was recorded at Wrexham on the day in question. From time to time haloes have been seen in false cirrus; I observed a parheliion and part of an arc of contact on August 12, 1930 (Met.Mag.65, 1930, 187) but I believe that a considerable part of the ellipse occurring under such circumstances is hitherto unrecorded.



Halo phenomena observed at Wrexham Sept. 25th. 1943

Skewed Halo Phenomena in False Cirrus. (Contd)

(3) The circumscribed ellipse was skewed about 6° to the left of its normal position. This is recognised, if rare, occurrence, and has been discussed by Dr. F. J. W. Whipple (Q. J. Royal Met. Soc. 67, 1941, 295, and 68, 1942, 43). Of all the records I have been able to find, only one, that of Prof. R. Stüring on July 18, 1913, shows skewing to the right. In the Wrexham phenomenon, Stüring's shearing hypothesis hardly seems tenable. In the false cirrus top of a cumulo nimbus cloud one would expect to find vigorous vertical air currents, rendering any horizontal shearing unlikely.

S. E. ASHMORE.
26.9.43.

THE SCARCITY OF WASPS.

A number of letters on this subject have appeared in "The Times" in recent months and in a letter on September 28th. Mr. Oswald H. Latter of Godalming suggests that the most probable cause of the scarcity was the mildness of last winter. Mr. Latter points out the resemblance of the periods December-February 1892-1893 and December-February 1942-1943 and adds that a sustained temperature of about 50°F suffices to rouse queen wasps. In a further letter to "The Times" on October 14th he states that: "Gilbert White's statement in Letter 64 that at Selborne there were no wasps in 1781 has been brought to my notice. Through the courtesy of officials at the Meteorological Office and the Royal Meteorological Society I have obtained a list of the temperatures registered daily at 2 p.m. in London by the Royal Society from December 1st 1780 to February 28th, 1781. This shows that there was mild weather from January 28th to February 11th, both inclusive. The average temperature at 2 p.m. for these 15 days is 48.5°F . On February 3rd and 7th, however, the temperature was below 44.0°F . If these two days be ignored the average for the remaining 13 is 49.6°F . Thus it is probable that in 1781, as in 1943 hibernating queens were prematurely and fatally aroused."

THE BLUE FLASH(?)

The following description of a curious sunset phenomenon refers to observations made at sunset on August 20th 1943 from the beach about two miles west of Rhyl. I had gone there on purpose as everything previously had appeared favourable for observation of the green flash. The air was very transparent, and the Isle of Man was visible, which is a rare occurrence. All round was a gorgeous display of colour: it was one of those rare occasions when an artist would be justified in painting the Caernarvonshire mountains in lavish purple. The circus near the sun was golden, and in the east it was red. Just as the upper limb of the sun was disappearing, its colour appeared a beautiful blue, a trifle bluer than the deepest sky-blue seen with maritime polar air in spring.

I was viewing it through powerful binoculars, which, at the moment, excluded from the field of view all the coloured mountains and clouds, so I do not think that the unusual colour of the flash was connected in any way with the coloured surroundings. Perhaps it was due to the use of the binoculars themselves.

S.E. ASHMORE.
22.8.43.

* NOTE. A flash of a vivid blue colour was described by Mr.S.T.A. Mirrless in "The Meteorological Magazine" August 1935.

CLOUD PHOTOGRAPHS.

Mr.Robin Biddulph, who maintains a climatological station at Blandford has for many years taken photographs of unusual or beautiful cloud formations. Recently he lent a set of twenty six negatives to the Office; enlarged prints have been made and one set of the photographs has been added to the Library collection. It is hoped to reproduce some of the prints in the Meteorological Magazine when publication is resumed.

GUMMING OF VICTORIA PLUMS.

In the Annual Report of the Fruit & Vegetable Preservation Research Station, Campden, 1942, Mr.W.B.Adam, F.I.C. and Mr.D.Dickinson comment on the relation of gumming to rainfall. The years of heavy gumming - 1936,1938,1939 and 1940 - have all been remarkable for heavy rainfall during the latter part of the growing season, and the years of light gumming - 1933, 1934, 1935 and 1937 - for light rainfall during the same period. The rainfall during the early stages of growth (March to April) has no relationship to the degree of gumming, but a positive correlation developed in later months and became highly significant in July to August. The results of further investigations are promised and the assistance of the Meteorological Office, Stonehouse is acknowledged.

J.Glasspoole.

ROYAL METEOROLOGICAL SOCIETY,
SYMONS GOLD MEDAL.

The Council of the Royal Meteorological Society has awarded the Symons Gold Medal to Dr.C.W.B.Normand, Director General of Observatories in India. The medal is awarded biennially for distinguished work in connection with meteorological science. Since his Directorship Dr.Normand has been active in promoting research and in organising the service to meet the needs of aviation. Among Dr.Normand's more recent papers may be mentioned. "Outline of Field Sciences of India" (1937) "Sources of Energy of Storms" (1938) and "Symposium on Weather Prediction" (1939.)

METEOROLOGICAL STATIONS.

It is encouraging to note that a number of Climatological stations have recently been set up by private observers. The following have recently been officially approved:-

Blandford, Dorset (R.Biddulph), Preston, Kent (J.H.Dyson), Hankham, Sussex, (A.E.Moon), Wrexham, Denbigh (S.E.Ashmore) and Kings Langley, Herts (H.Dennett).

In addition the meteorological station at Whipsnade Park has been approved and the observations are supervised by Mr.E.L.Hawke.

Climatological returns are being received from Brough Sowerby, Westmorland, which also functions as an auxiliary telegraphic station.

The health-resort station at Margate which was closed in July 1940 was re-opened in January 1943.

The health-resorts stations at Clacton and Bridlington have been closed owing to difficulties in finding observers the climatological station at Newport (Staplers) Isle of Wight has closed as the observer has moved from the district and the climatological station at Taunton has ceased owing to the continued ill-health of Major Kingzett.

The crop-weather station (Forestry Commission) at Thetford has been transferred to Santon Downham.

A number of the instruments at Ramsgate were destroyed by enemy action in June 1943 but were quickly replaced.

Doncaster : retirement of Mr. F.Oscar Kirby - see page 14.

OBITUARY.

H.Sowerby Wallis F.R.Met.Soc., F.R.San.Inst.

Born 13th Dec.1856. Died 10th October 1943.

Sowerby Wallis was descended from John Wallis, Savilian Professor of Geometry at Oxford 1649, Chaplain to Charles II, one of the revisors of the Prayer Book in 1661, and an original member of the Royal Society. His maternal grandfather was J.de Carle Sowerby, the well-known Botanist, and he had French blood in his veins from Robert de Carle, who escaped massacre after the revocation of the Edict of Nantes in 1685, by swimming to an English vessel off the coast of France. This French lineage had a material influence on his scientific outlook.

After education at private schools Sowerby Wallis joined G.J.Symons in 1872, eight years after the latter had resigned from the Meteorological Department of the Board of Trade, in order to devote his whole time to rainfall. From this time British Rainfall became Wallis's life work. He joined the British - afterwards Royal - Meteorological Society in 1879 and later was elected a Member of Council and Hon. Auditor and designed a new set of books for the Society. He became joint editor of British Rainfall in 1890. He was Secretary of the Smoke Abatement Society in 1886 and in the same year was elected a Member of the Sanitary Institute, becoming a Fellow in 1903. He joined the Scottish Meteorological Society in 1895 and the Zoological Society in 1901. Letters from him on scientific subjects appeared in The Times from 1887 to 1903.

On the death of G.J.Symons in 1900 Sowerby Wallis became Chief of the Rainfall Organisation and solely responsible for British Rainfall and the Meteorological Magazine, and was subsequently appointed adviser on rainfall to the London County Council, the Thames Conservancy and the Metropolitan Water Board. The United States Government, when revising their Meteorological Department in 1902 asked his advice on matters relating to rainfall.

As an expert on rainfall he gave evidence before many Parliamentary Committees and was appointed Referee under the Newcastle and Gateshead, Kettering and Stockport Water Acts to determine the amount of water available from the proposed Gathering-grounds.

...

Finding the whole responsibility too great for his strength he invited Dr.H.R.Mill to join him, but in 1902, when he was retained in seventeen Parliamentary and Legal cases, his health entirely broke down after a severe attack of influenza.

In September 1903 he left the headquarters of the Rainfall Organisation in Camden Square and his connection with British Rainfall ceased, responsibility devolving entirely upon Dr.Mill.

NOTE. This obituary was prepared by Mr.Sowerby Wallis himself and was received in an envelope addressed in his own handwriting.

7. F.Oscar Kirby. It is with regret that we learn of the resignation of Mr.F.Oscar Kirby, B.Sc.,C.E. owing to ill-health. Mr.Kirby who had been associated with the County Borough of Doncaster for over 40 years succeeded the late Mr.W.H.R. Crabtree as Borough Surveyor and Water Engineer and became the responsible authority for the various rainfall stations maintained by the Borough of Doncaster.

F.W.Cock. It is with regret that we learn from a recent notice in The Times, of the death of Frederick William Cock, J.P. M.D. which occurred at his home at The Well House, Appledore, Kent.

Dr.Cock, who was aged 85 at the time of his death, first set up a rainfall station at Appledore in 1924 and forwarded rainfall returns to the Meteorological Office for every subsequent year, the last record being for 1940, when he was compelled by failing sight to relinquish his rainfall observations.

7: Note: This is not an obituary notice and should have been included on page 8.

William Henderson Hogg, Principal of Seale Hayne Agricultural College, Newton Abbot died suddenly on July 29th, 1943. He had been Principal since 1933 and is succeeded by Mr. A. W. Ling, formerly an agricultural advisory Officer of the University of Bristol. Seale Hayne College has co-operated with this Office as a Crop-Weather station since 1924.

J. Moorby who had been responsible for the climatological observations at Bradford since 1928 died in September 1943. The observations are being continued.

George Howard, a well-known Rotherham meteorologist and naturalist died on April 15th 1943 at the age of 83. He was a fellow of the Royal Meteorological Society and contributed rainfall records to the Office from 1908 onwards.
