

"METEOROLOGICAL MAGAZINE"

July 1940

As the publication of the Meteorological Magazine is temporarily suspended it is proposed to circulate a short manuscript magazine about matters of interest arising from time to time. Short contributions will be welcomed, and it is hoped that a selection will be printed when publication is resumed

Meteorology in Spain.

A decree has been issued by the Air Ministry modifying the Regulations governing the National Meteorological Service. It is decreed that this service shall be responsible for the development of meteorology in all its aspects; likewise for the issue of information and meteorological safeguarding of Aviation, constituting an integral organ of the service for the safe-guarding of aircraft in flight, under the Air Ministry. It is to facilitate the obtaining of meteorological information and meteorological research for which the various official organs subordinate to the Air Ministry are responsible, issue the official weather forecasts required by the competent authorities and private individuals, collaborate in the instruction given in Science faculties, Engineering Schools, Institutes and other educational centres, facilitating the practical study of Meteorology at its observatories and stations, and keep in touch with the international meteorological organisations.

An Iridescent Cloud.

On the evening of May 14th 1940, a very fine example of an iridescent cirrocumulus cloud was observed at this station. The attached drawing was made at 19h.22m.G.M.T., but the phenomenon lasted between 19h.10m. and 19h.30m, and the shape of the cloud was constantly varying. The colours were of a very delicate pastel shade, and would tax the skill of a painter. The elevation of the cloud was 14° , and since the sun was just setting, this is very nearly the angle between the sun and the cloud. A nephoscope observation on the cloud gave $233^{\circ} 9$ radians hour. The bearings of the ends of the clouds were 290° and 313° at 19h.22m G.M.T.

Meteorological Office,
Bassingbourn,
Herts.

P. KING.
15th May.1940.

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Disposal of Cloud by Aircraft.

At 12h.G.M.T. on June 2nd 1940 a clear path left by the passage of an aircraft through a sheet of low alto-cumulus was observed in East Anglia.

The cloud layer which covered $\frac{3}{10}$ of the sky, was thin and showed intense and relatively small cellular structure. Beneath the alto-cumulus at a height of about 3,000 ft. about $\frac{4}{10}$ of squat fair weather cumulus with rather frayed edges were forming. Small bands of lenticular alto-cumulus were also observed near the horizon.

The clear path left by the passage of the machine was rather wider than three times the span of the machine and extended the whole length of the layer. It subtended an angle of 15 to 20 degrees.

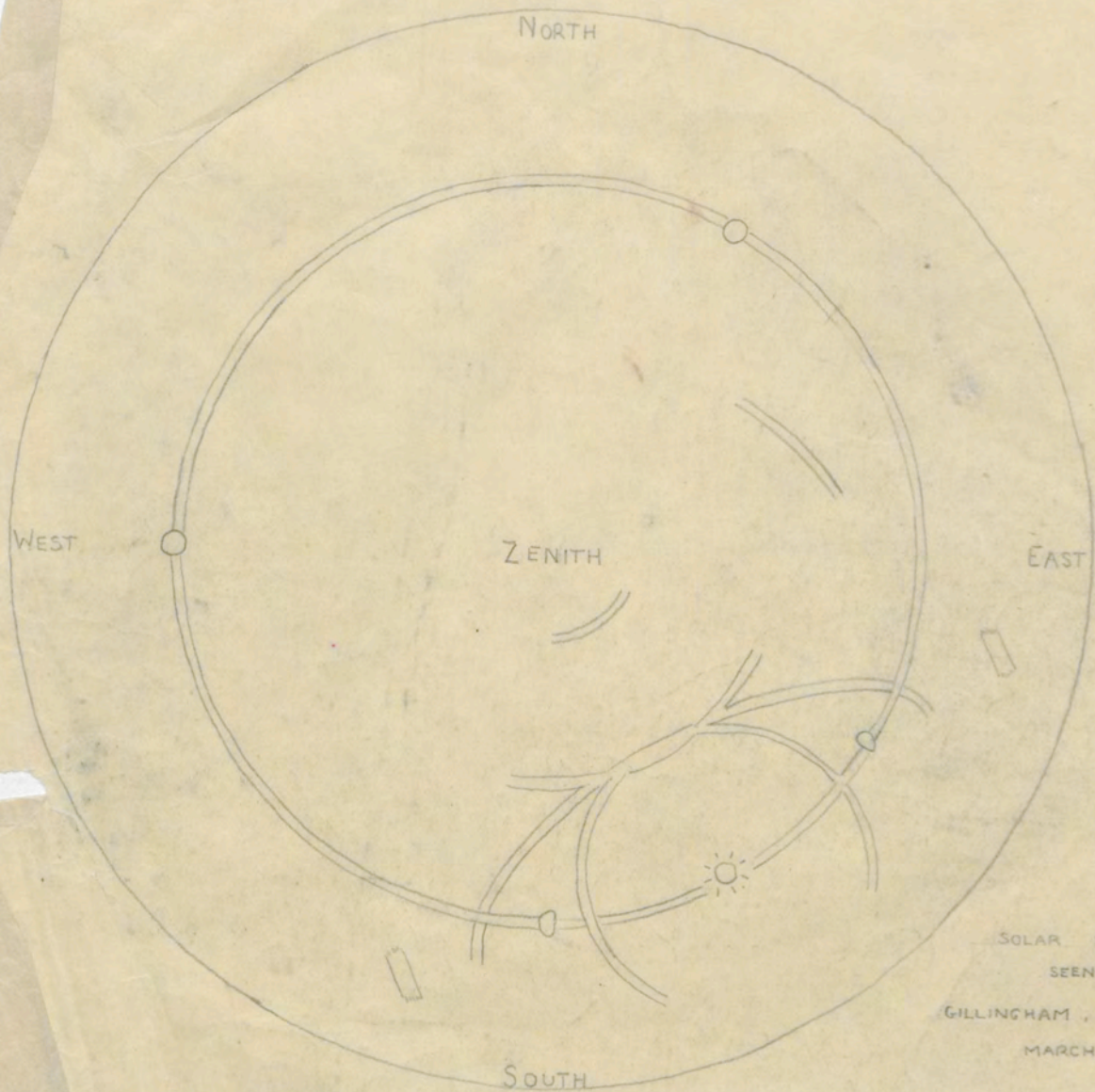
The screen relative humidity at the time was 55% and the air at the cloud height was drier still. A pilot balloon gave the cloud height as 6,000 ft. a figure subsequently corroborated by the Pilot of the aircraft who also gave the temperature at that height as 48°F.

A suggested explanation for this phenomenon is that the cloud sheet was actively disintegrating in dry air and that the turbulence set up by the aircraft brought about sufficient mixing for the water drops to evaporate.

Meteorological Office. E.D. Roberts.
West Raynham.
2nd June.1940.

Black rain.

Mr.H.V. Sims reports that at Earls Colne on June 10th 1940 the sun at 9h. was shining brightly through a thin haze although the sky was shaded from grey-blue in the east to almost black in the west with no dividing line whatever. The wind was E.2. At about 11h.30m. the dark part had spread eastwards and was patterned by low cirrus, or fracto-cumulus, at a lower level. Later on, cloud edges appeared and the sky took on a flat ugly appearance suggesting heavy rain or a thunderstorm. At 13h.30m. there was a shower for five minutes which spotted everything with black.



SOLAR PHENOMENA
SEEN AT
GILLINGHAM, KENT ON
MARCH 7TH 1940