MAY 1997.

The anticyclone which had developed in late April was centred over the North Sea at the beginning of the month. This introduced a warm southerly flow across the U.K. giving a maximum temperature of 22.5C on the 1st and 13.4 hours of bright sunshine. Under its influence temperatures rose to 24.1C on the 2nd with 13.9 hours of sunshine, near to the maximum possible in early May.

The high pressure centre began migrating towards Europe on the 3rd allowing frontal systems to approach from the SW giving more in the way of cloud and light rain. A warm front had passed overnight on the 3rd/4th and with a continuing SW air stream it remained mild, though windier, with gusts to 29 knots and temperatures reaching 21.8C

The 5th began warm, temperatures reaching 14.2C by 14.30 U.T.C. An active kata cold front passed southwards resulting in the arrival of cold Arctic air, temperatures falling to 7.0C by 1600 U.T.C. This brought heavy rain, a fall of 15mm occurring in 2.5 hours as winds backed rapidly from SW to N. The U.K. remained under the influence of this cold Arctic air for the next few days, with spells of snow, sleet and hail between the 6th and 10th. The maximum air temperature was only 9.9C on the 6th as opposed to the 24.1C of 4 days earlier. Thunder occurred over wide areas in this unstable air mass, storms passing over the Midlands on both the 7th and 10th as a low centre developed off NE England. Measurable rain fell on every day from the 5th and 12th.

By the 12th this low centre was filling, and the resultant SW air flow was both brisk and showery, bringing a gradual recovery in daytime temperatures. Rising pressure killed off the shower activity by the 13th and a ridge of high pressure brought a warmer and sunnier day on the 14th with 12.3 hours of sunshine and a maximum of 17.7C.

A thundery low developed in the Bay of Biscay by the 15th with a line of storms lying NW to SE across France. With daytime temperatures now recovering to 20C. These storms moved steadily across the Channel and into the U.K. overnight on the 16th/17th bringing dull and very humid conditions with heavy rain and, in some places, hail By early on the 18th this slack thundery area of low pressure had moved across the SW peninsula and into Wales taking with it a line of storms and leaving in its wake clearing skies. A weak cold front crossed southwards over the Midlands with a wind veer from NE to SSW at 0445 U.T.C. to be followed by a dry, warm day with broken sunshine maximum temperatures reaching 20.6C.

By the 19th a further depression developed in the SW Approaches, its attendant warm front moving NW during the day bringing heavy rain in the afternoon, in excess of 50mm/hr at 1415 U.T.C. Over the ensuing 2 days an occluded front moved NW across the Midlands bringing spells of rain on the 20th, only to return as a cold front on the 21st resulting in a slack SE air stream becoming established.

On the 22nd a ridge began to develop from a high over Iceland building quite strongly across the U.K. over the next 3 days. This brought sunnier, though cooler weather with N to NE winds and a widespread ground frost overnight on the 23rd/24th giving the coldest night of the month to date over grass The 24th saw 14.7 hours of almost unbroken sunshine under an anticyclone centred over the UK with light winds mainly from the north or north east. Despite this maximum temperatures only peaked at 14.6C.

Aeven sharper ground frost to -1.9C occurred in the small hours of the 25th. with a touch of air frost of -1.0C in the open.. The anticyclone persisted with its centre from the Irish Sea to Dogger and this allowed temperatures to rise under clear skies to a maximum of 18C with 15 hours of unbroken sunshine on the 25th. Total global radiation for the 25th amounted to over 7 kilowatts per square metre. Overnight on the 25th/26th a weakening front transferred southwards bringing, in the main, a cloudier end to the 26th after a sunny and warm morning and early afternoon during which maximum temperatures reached 21.5C, the warmest since the 3rd.

The remainder of the month was dominated by this anticyclone which meandered around the North Sea with little change in pressure producing a mainly easterly or north easterly wind flow. The 28th saw more cloud as winds fetched across the North Sea bringing almost total cloud cover to the area at least for the early morning. Temperatures peaked at 17.4C with 10.8 hours of bright sunshine.

From the 29th to the 31st global radiation totals reached over 8 kilowatts per square metre daily, peaking at 8.47 kw/sqm on the 29th.

Temperatures gradually rose over the next two days reaching 25C on the 30th with 15.5 hours of sunshine. This set a new record for the sunniest May day first established in 1994 with 15.1 hours.

The final day saw the centre declining gradually as pressure fell to the south over Iberia giving somewhat lower temperatures of 23.4C though again with 15.4 hours of sunshine.

The month as a whole was somewhat warmer than average, the mean maximum of 17.0C being 1.2C above the 30 year mean. The 25.0C recorded on the 30th was the first time temperatures had breached this value since August 19th last year. The intrusion of Arctic air from the 5th to the 11th brought down temperatures giving a mean minimum of 6.1C,some 0.2C below expectation.

Rainfall was almost normal at 61.9mm, though this belies the fact that the annual deficit for 1997 to date is at the alarmingly high value of 138mm which is approximately 9 weeks average rainfall. So far only February and May have been "normal" rainfall months.

Sunshine has also been well above average giving the sunniest May since 1992 and the third sunniest on record. The 15.5 hours on the 30th set a new May record for the area. The final 8 days produced 112.2 hours, or 46.6% of the entire month's total with 4 days of over 15 hours each.

On the down side, the Arctic blast on the 6th brought the first snowfall to the area since May 1983 which was only the fourth such incidence in over 40 years of records.