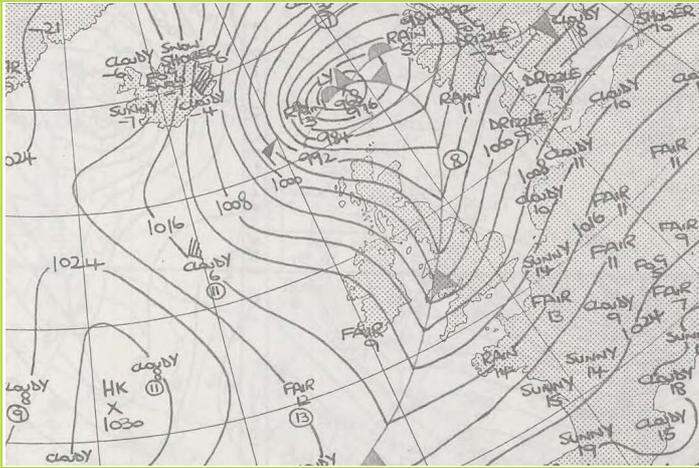


Weather chart for 1200 UTC 23 November 1981



General summary

A strong cold front associated with a rapidly deepening area of low pressure centred just north of Scotland began to cross the UK from west to east during the morning and early afternoon of 23 November. Meanwhile to the south high pressure was building from the continent, creating an unusually strong upper level temperature gradient between the low and high pressure systems as arctic air from the north met humid sub-tropical air from southern Europe.

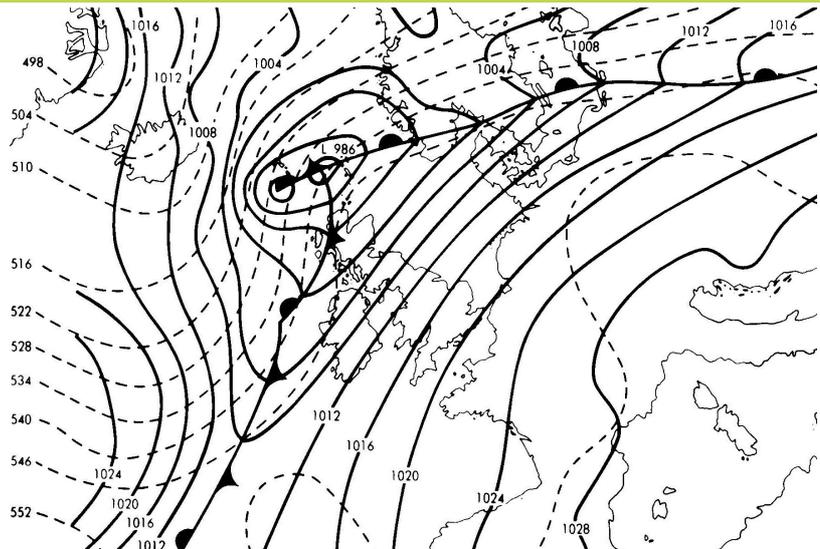
The temperature gradient caused a number of thunderstorms to form on the southern edge of the cold front and spawned a significant outbreak of tornadoes.

Significant weather event

The Tornado and Storm Research Organisation (TORRO) collected reports of 104 confirmed tornado touch downs over 5hrs 26 minutes. They occurred in a belt 200 - 250km wide and 400km long stretching from Anglesey across central, north and Eastern England with outbreaks in areas near Liverpool, Manchester Hull and Birmingham although most were in rural locations.

Although most of the tornadoes were only F0 - F1 on the Fujita scale with a few reaching F2 hundreds of properties were damaged.

The single day outbreak recorded more tornadoes than normally experienced in an entire year in the UK.



Surface pressure chart for 00 GMT on 23 November 1981 giving surface pressure (full lines) and 1000-500mb thickness (dashed lines). This shows the low pressure area to the north of the UK, front line moving W-E and high pressure in the south.

Daily weather extremes

Highest Maximum Temperature

14.7 °C at Yeovilton (Somerset)

Lowest Minimum Temperature

-0.8 °C at Knockanrock (Ross & Cromarty)

Most Rainfall

39.3 mm at Millbeck (Cumbria)

Most Sunshine

5.9 hours at Castle Archdale Forest (County Fermanagh)