



Weather Logistics

Seasonal Forecast



Seasonal Weather Forecast for summer

Valid: June 1st to August 31st, 2010

Issued: 24th February, 2010

Overview: A north-west divide in cloudiness and temperature will tend to dominate the weather conditions for the UK during summer 2010. The cloudiness and cooler temperatures will tend to dominate the north-west of England and Scotland, with warmer than average conditions to the south with the exception of some infrequent and localised rainfall events. In general the UK will tend to see temperatures slightly above or well-above average during the summer period. Extremes of heavy rainfall are likely to be limited to localised spots in the south-east, and some more regional parts of central-southern England during the early summer. General large-scale rainfall in parts of north-west England, west Midlands and south-west Scotland will mean that some regions are likely to be at risk of flooding for much of the summer period. The average pressure will be on the low side of the norm at 1014mb, dominated by a series of compact low pressure systems. A prolonged period of coastal fog will dominate the weather of the north-eastern coasts for the first half of the summer period. Hot or very warm conditions will affect parts of the south on occasions, and heat-watch events posing health risks will particularly dominate the south-east of England during large periods later in the summer.

(1) Blocking Features

- During the summer period it is likely that a blocking high will maintain a firm hold over the North Atlantic Ocean around 300 km due west of the United Kingdom. The blocking feature will be centred to the West Coast of France at 45°N, and will be an elongated affair, extending between the Azores and 55°N. The usual pattern for the UK summer is for the Azores to be more symmetric, whilst during summer 2010 a strong south-westerly or southerly advection of unusually mild and moist air will dominate the central Atlantic Ocean, bringing well above average temperatures to south-west and southern-tip of Greenland. Periodically during the summer, a south-westerly jet-stream will bring some heavy rainfall to parts of the south-west and north-west of the UK. Though the dominating signal is that cloudy, cooler and moist conditions will tend to infiltrate from the north-west during the summer.

(2) Synoptic Features

- During the summer the polar jet-stream will tend to meander further southwards across the Netherlands and central European countries, resulting in very humid, unstable and thundery conditions. These weather conditions will be associated with a semi-permanent trough in the zonal jet-stream about central Europe. On occasions mesoscale thunder-storms will track north to north-eastwards across the channel, giving rise to some extreme deluges of rain / hail in the south-eastern counties of the United Kingdom. In contrast, the jet-stream will be positioned further northwards in the mid-Atlantic due west of the UK, bringing a modified

tropical maritime air-stream from the north. This air-stream will draw a stubborn bank of low stratus cloud across the northern-western counties, leaving milder and warmer conditions to prevail over the southern-facing slopes lee of the air-flow and south of the Midlands.

(3) Regional Weather

- Despite the risk of extreme rainfall in localised spots of the **south-east England**, the precipitation will be generally below average or well-below average for the summer period. Sunshine totals will be above average throughout much of the summer period, however cloud will affect some of the hottest days during the late summer. It will feel very warm and humid; during times when southerly winds prevail and mesoscale lows track up from the European continent.
- During large parts of the summer period warm or hot conditions will affect the south. Parts of **southern England** will experience some stormy weather at times, particularly early in the summer period, as rapidly intensifying Atlantic storms move north-eastwards from the Brittany coast. Severe gales and intensive precipitation associated with these systems will bring floods to parts of **central-southern England**.
- Wales and **south-west England** will see a largely dry and sunny summer associated with the Azores high blocking the flow of tropical maritime air. In these regions the mean temperatures will remain largely above average, or well above average. Due to a series of compact storms approaching from the south-west during the summer period, the rainfall totals will generally be close to average.
- Overcast but mild conditions over **north, north-west and mainland Scotland** will see temperatures around average or slightly below, with precipitation below average for much of the summer. **Northern-Ireland** will see similar conditions to mainland Scotland; overcast and rather cool for the summer period.
- **North-west England** and **south-west Scotland** will see some large deluges of rainfall during the summer period. The dominating conditions will largely be overcast or with scattered clouds. Temperatures will be around the seasonal average if not slightly below.
- **North-East England** and east coasts of Scotland will see mainly dry and warm conditions for much of the summer with temperatures around average. Parts of the coastal north-east may see temperatures slightly below the seasonal average. This is in part due to the preceding cold Winter and late Spring, resulting in cooler north-sea temperatures. The onset of summer will therefore be pronounced with an unusually extensive period of "haar" conditions continuing well into June and early July, 2010. Precipitation will be below average for the north-east, in striking contrast to the north-western counties of the UK.

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