

# Meteorology

The first weather broadcast on radio was made in 1922. Captions were shown on the television from 1936, and the first live television forecasts started in 1954.

To find out more about careers with the Met Office, go to <http://www.metoffice.com/corporate/recruitment/index.html>

The Royal Meteorological Society is at <http://www.royal-met-soc.org.uk>

## Box 1 EMARC

The Environment Monitoring and Response Centre in Exeter is one of the Met Office services. It provides information and advice to anyone affected by environmental changes. One of its tasks is to help the government decide when cold weather payments should be issued to pensioners in the winter. EMARC also:

- provides a storm warning service
- advises when abnormally high tides are likely to breach sea defences
- monitors and runs computer models of water and air pollution to, for example, predict the path of an oil slick at sea or the direction of spread of air pollution from a fire, chemical leak or radioactive discharge
- monitors volcanic eruptions, for example so that aircraft can be diverted to avoid volcanic ash in the atmosphere, a great danger to jet engines
- offers advice in exceptional circumstances. During the recent foot-and-mouth outbreak EMARC was able to advise on the likely spread of the virus around the country using advanced modelling techniques

*We've all seen the weather man or woman on the telly and weather reports in the newspapers — but how do you become someone who forecasts the weather?*

In Britain the major source of information about the country's weather is the Meteorological or Met Office (<http://www.metoffice.com>). The Met Office has been supplying information about the weather and the natural environment for more than 140 years. It was originally formed to provide meteorological and sea current information to mariners.

The Met Office headquarters is in Exeter, along with its major research facilities, but there are over 900 forecasters and support staff at 80 locations around the UK. There is a network of observing sites, many of which are becoming automated. Two networks of forecasting offices are maintained — the first specialising in information for the armed forces, and the second focused on services to the media, industry and commerce.

## Box 2 Training as a meteorologist

Steven Hadley is a meteorologist who is training to present the weather forecast on television. Here he tells his story:

*It started in 1992 on holiday in Florida. Hurricane Andrew also paid a visit to southern Florida shortly after we arrived. Although we were safe, miles from the eye of the storm, seeing the destruction it caused really opened my eyes to what the weather can do.*

*Back home I saw my careers officer in the school library. She taught me how to pronounce 'meteorologist', and told me I'd need good A-levels in physics and maths to become one. So I grafted hard for my A-levels, and went on to a meteorology degree course at the University of Reading.*

*It was quite intensive but really interesting. For 3 years I studied a split of physics, maths and meteorology, and even opted to learn basic Spanish in the second year. You can find out more about my course at <http://www.met.reading.ac.uk>*

*I decided to apply for the Met Office Forecaster Training Programme, and with a good degree behind me, I got in. I spent 6 months training at the Met Office College, which is now based in Exeter. Then to Newquay, Cornwall, where I worked on an RAF base for 6 months. My duties involved briefing trainee helicopter crew on current and forecast weather conditions around southwest England and Wales. I also prepared forecasts for places much further afield, depending on what the RAF was doing at the time.*



Steven Hadley/Met Office

*Steven Hadley practising presenting the weather forecast in the television studio. The blue background allows the graphics to be added behind the weather forecaster when you see the broadcast — the finished product is visible on the monitor to Steven's left*

*After qualifying I worked in London for 3 years with the Met Office. The forecasts I prepared were generally for energy companies, the Environment Agency, and even the Wimbledon tennis tournament.*

*Nowadays I'm working in Leeds, where I create weather graphics for television broadcasts on a daily basis and advise weather presenters on the forecast, as well as training to have a go in front the cameras myself!*

## Careers at the Met Office

There is a wide variety of jobs in meteorology. Scientists research weather and environmental information and deliver it to the Met Office's customers. Work might be based on:

- improving the numerical models used to forecast the weather
- investigating climate change and how this is influenced by the oceans
- developing communications, remote sensing and computing resources

If you are also good at computing then there is the opportunity to work on internet and extranet development as well as developing software.

In order to obtain a job at the Met Office you need five good GCSE grades, or equivalent, one of which must be in English language; good A-levels in maths and/or physics; and a degree in mathematics, the physical sciences, computer science or meteorology. Most importantly you must have an interest in meteorology. Training is given to all new staff and experienced research meteorologists can earn £33 000.

**David Moore** teaches at St Edward's School and is an editor of CATALYST.



A winter storm floods Marine Drive in Scarborough. It is the responsibility of the Met Office to predict extreme events like this

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