



Met Office



Reliability

Keeping you moving with our weather and climate change services for rail



With over 150 years' experience, the Met Office is a world-leading provider of weather and climate change services, dedicated to innovation, accuracy and safety.

Today, we support many people and organisations, from the general public, government and local authorities, to civil aviation, utilities, transport and almost every other industry sector.

Our capacity to predict the weather for the next hour, day, five days or ten and our longer-term climate forecasts make us a critical partner in decision-making and contingency planning the world over. And the world-leading Met Office Hadley Centre looks years and decades into the future, helping people plan for and adapt to the effects of climate change.

We provide training, consultancy services, and important weather data – developing and delivering the specific weather and climate services that you need. Our experience and expertise mean that we can tailor our weather services for different types of transport whether it's for aviation, marine, road or rail.

Collisions, derailments, cancellations of services and overheating – adverse weather conditions can cause chaos for train operating and maintenance companies.

We can help you plan for these events with our range of services, making sure your services are safe and on time.

Operational forecasts

OpenRail

OpenRail provides site-specific forecasts for railways and stations in an easy to use web format. It enables you to make fast decisions to improve planning and resources for weather related events which could affect the safety and punctuality of services.

Key benefits

- Enables confident, immediate and safe decision making

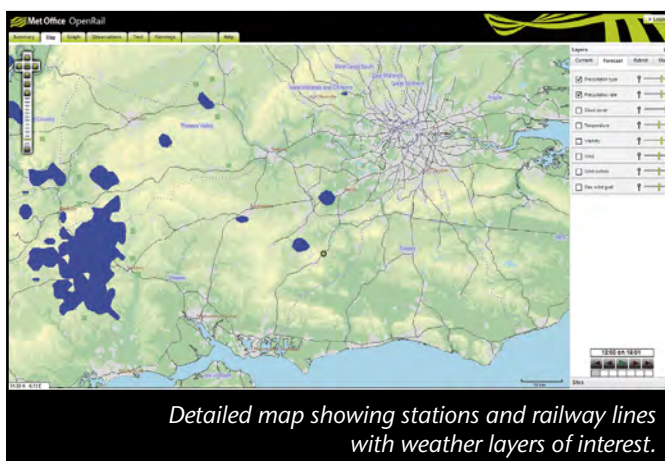
You can view current and forecast data over a map of rail stations and lines and be informed of weather events specifically affecting lines up to five days ahead. This helps you plan more efficiently, helping you to improve the punctuality and reliability of your rail service.

- Maximises operational efficiency and helps reduce expenditure with better management of resources

Up-to-date weather information and forecasts up to five days ahead help you plan resources for disruptions more effectively.

- Clear weather information

This easy to use service features an interactive map designed for any user regardless of weather expertise to make fast decisions on weather events. Available around the clock, every day of the year.



Low adhesion (leaf fall) forecasts

Our forecasts of leaf fall and the resulting low adhesion are produced in collaboration with the Agriculture Development Advisory Service (ADAS).

We provide site-specific data which details where adhesion may be a problem and a daily forecast for the next 24 hours. The weather elements featured include precipitation, wind and leaf fall risk with forecast layers for temperature, precipitation, wind, cloud cover and visibility.

Key benefits

- Enables planning for rail treatment and advance warnings to drivers to employ appropriate braking methods.
- Reduces risk of trains missing signals, overrunning stations and delays. In extreme cases could prevent collision.
- Helps you plan more efficiently, improving the punctuality and reliability of your rail service.

Overtopping forecasts

Overtopping can make rail lines that run close to the sea impassable and in severe cases can derail carriages.

Our forecasts provide details of prevailing sea conditions (including wind, water level, swell direction, wave height and wave period) both near-shore and inshore at sea defences, providing a warning of the risk of waves encroaching on the track.

This forecast is delivered by email and provides a simple display of risk of overtopping by a colour warning code (red, amber, green).

Key benefits

- Coastal forecasts enable you to address safety concerns regarding integrity of coastal defences at key identified risk locations.
- Clear warnings of when action is required are displayed in simple colour coding.

Rail ice forecasts

Rail ice forecasts provide information on the risk of icing and the risk of freezing rain, sleet, and rail temperature. You can choose your forecast location and you will be provided with an outlook up to five days ahead including a daily view of hazards.

Key benefits

- Helps you understand where damage or disruption could occur.
- Helps you plan and manage your anti-ice treatments.
- Can help improve the reliability and safety of your rail service.



Hazard and warning forecasts

Our hazard and warning forecasts are designed to alert you to weather events affecting your rail services.

Our warning forecasts can be tailored to your requirements, for example weather events such as high wind, lightning or wave overtopping, for specific locations or regions.

Our hazard forecasts enable you to choose your own critical thresholds such as high temperatures, snow, gales or frost and will warn you of when these thresholds are at risk of being exceeded.

Key benefits

- Helps you understand where damage could occur or service could be disrupted.
- Enables forward planning of resources for maintenance/engineering works and aids contingency planning process.
- Helps improve the reliability of your rail service.



Data services

We offer a range of data services tailored to your requirements.

We offer site or area-specific data, both forecast and historical for the weather parameters of your choice.

- Available in time periods of interest.
- Site or area-specific data.
- Forecast and historical data.
- Weather parameters including rail head moisture state, temperature, rainfall, wind speed and direction.

Key benefits

- Enables you to choose specific time periods and sites helping you plan for short-term site projects.
- Applicable to all aspects of your business, short and long-term from works maintenance, contingency planning to day to day decision making on your rail operations.
- Simplifies your decision making process.



Training

We offer a one-day course developed for those who work in a control-room environment, who have access to the daily weather forecast supplied by the Met Office and have to make operational decisions about running the railway based on this information.

The course provides a basic understanding of the weather in the UK and its impact on the rail industry. Particular attention is paid to weather hazards that cause the most damage.

Key benefits

- The course will enable you to make informed decisions leading up to and during periods of adverse weather.
- Helps you improve your contingency planning process.
- A full set of notes are supplied for handy reference, and course certificates are awarded on completion.

Expert advice

Talk direct with a Met Office forecaster and discuss the weather in detail with our telephone consultancy.

Key benefits

- Enables you to speak to a forecaster for any advice or clarification you require on a forecast.
- Real-time advice as and when you require it helps improve your short and long-term planning processes.

Research and consultancy

Working closely with our rail customers we have developed a range of services that meet rail industry requirements. We offer tailored research and consultancy services to help develop the most advanced scientific solutions to meet your needs. If you have a specific problem that requires a tailored service please contact us to find out how our experience can be of benefit to you.

As a world leader in weather forecasting and climate change science, you can rely on the information we provide.

Act now to make the best decisions

To find out more about how we can help you to improve the punctuality and reliability of your rail service contact us at rail@metoffice.gov.uk or call 0870 900 0100