Met Office

Trusted services. When it matters.

Case Study

Met Office data helps Trackplot to keep outdoor lone workers safe

Overview

Trackplot, founded in 2009, developed its lone worker monitoring system in response to the tragic fatality of a young worker in the Scottish Borders. The system aims to ensure safety of lone workers who face unique challenges and heightened risk hazards in their daily operations.

Lone workers, particularly those operating outdoors, face increased hazards due to isolation and lack of immediate support. They often encounter higher risk situations, especially in remote areas beyond mobile phone coverage and this lack of communication creates additional complexity when the worker faces difficulties.

In 2022, the Trackplot team identified that environmental hazards and severe weather conditions were critical factors to monitor to keep outdoor workers safe, particularly in light of climate change impacts. Met Office predictions for 2070 compared to 1990 indicate that winters will be between 1 and 4.5 °C warmer, and up to 30% wetter with rainfall intensity to increase by up to 25%. Days when rainfall exceeds 30mm per hour will happen twice as often. Changing weather patterns like these significantly impact outdoor worker safety and require comprehensive solutions.

How we help

After extensive research, Trackplot selected the Met Office as their weather data provider for their lone worker monitoring system due to readily accessible datasets, a growing dataset range for future functionality, flexible licensing agreements including Open Government Licence (OGL), and their reputation as the UK's national meteorological service.

Working with the Met Office's Data Provisioning Team, Trackplot selected the National Severe Weather Warning Service (NSWWS) to integrate the delivery of weather warnings into their system, alongside Met Office DataPoint to display the actual weather conditions for an individual lone worker at their current location. These services also complemented their existing real-time Environmental Mapping functionality which provides current conditions including rain, temperature, wind, Fire Weather Index and active fires.

Our impact

Following the launch of the collaboration between the Met Office and Trackplot in March 2024, Trackplot has been able to enhance its service with Personal Notifications, alerting lone workers and managers via SMS, email or automated voice service when entering severe weather regions.

- The impact has been significant across various sectors:
- Supporting timber clearing operations with data to predict heavy rain and plan in between storm fronts
- Improving safety for lone workers who travel long distances to isolated sites
- Enabling managers to crisis manage a situation if a lone worker is caught in serious weather
- Minimising disruptions for operations UK-wide with local weather condition assessments

The system plays a crucial role in keeping people safe, by allowing managers to assess vulnerability to real time weather conditions. For example, assessing the risk of the lone worker for hypothermia or heat exhaustion and executing an appropriate rescue mission. The service has become an essential tool to minimise disruptions while maximising lone workers' safety directly impacted by increasingly challenging weather conditions.

" The Met Office Data Service was the obvious choice for the development of our Weather Warnings Service. The data needed to be easy to visualise on maps for a quick 'at a glance' interpretation and the Met Office data helped us to deliver this."

Gert Riemersma,
Technical Director Trackplot

"The Met Office National Severe Weather Warnings Service data has increased our ability to support our customers through development of additional in-demand services like Personal Notifications, helping them to keep their outdoor and isolated lone workers safe. Customers now have the ability to plan work and assess schedules based on forthcoming weather, which can be vital to their safety and overall peace of mind."

Emma Thomas,
Commercial Director Trackplot

To find out more:

Met Office
0370 900 0100
www.twitter.com/MetOfficeB2B

Trackplot
0131 563 0781
www.trackplot.com