meteo matics

METEODRONE Mobile Weather Stations

Meteorological Data From the Atmospheric Boundary Layer

To date, weather models have been limited by a lack of sufficient observations from the atmospheric boundary layer, hindering accurate predictions of local weather phenomena. Weather drones present a solution to bridge this data gap.

Empowering 600+ global brands with profitable growth.



Japan Meteorological A



Deutscher Wetterdienst







The Home of Our Meteodrones

The Meteobase is a ground station for remote Meteodrone operations. It functions as a control center for autonomous flights, handling various tasks, including the operation, control, and maintenance of the drone, as well as the monitoring and logging of weather parameters at the site.



What Are Meteodrones?

Waterproof in rain and snow

Emergency rescue system

Wind measurement using aircraft pitch & roll

State of the art battery systems

De-icing capabilities

Meteodrones are weather drones developed by Meteomatics to collect weather data. They fly in the Earth's lowest atmospheric layer, called the boundary layer, and have sensors to collect weather data like temperature, humidity, and wind conditions. The data gathered by Meteodrones helps improve weather forecasts and gives a better understanding of atmospheric dynamics.

Advantages of Meteodrones: What Can They Do?

Meteodrones are highly maneuverable, capable of withstanding sudden wind changes, making them ideal for collecting vertical data. They can also gather measurements near buildings and structures in urban settings or offshore environments. This real-time data greatly enhances the accuracy of weather forecast models, enabling meteorologists to deliver much more precise, hyperlocal forecasts and nowcasts. Furthermore, data collected from the boundary layer contributes to long-term climate change research and supports a wide range of other applications.

Hyperlocal Weather Forecasts for Fog, Hail and Thunderstorms

Meteodrone measurements can be integrated into weather models to enhance forecast accuracy through realtime data feeds. The more observational data a model receives, the more precise its output becomes, leading to hyperlocal forecasts that are vital for various operations, including, for instance, aviation, agriculture, and meteorological research.

CLOSING THE METEOROLOGICAL DATA GAP IN THE EARTH'S LOWER ATMOSPHERE WITH METEODRONES



Talk to our experts



Brad Guay Meteorologist & Meteodrone Specialist



Matthias Piot Senior Meteorologist & Client Manager



Dr. Martin Fengler CEO & Founder

www.meteomatics.com | Meteomatics AG Unterstrasse 12, 9000 St.Gallen | sales@meteomatics.com