



# Biofuel Producer

Developing an innovative wind monitoring system for accurate and real-time tracking of odor dispersion through the air from the refinery of a leading biofuel company.

## The Challenge

The biofuel company is fully committed to the environment since 2001. Its innovative technology produces environmentally friendly fuel from rapeseed oil as well as from animal fats and used cooking oils, which translates into improved emissions, less soot and fewer harmful substances.

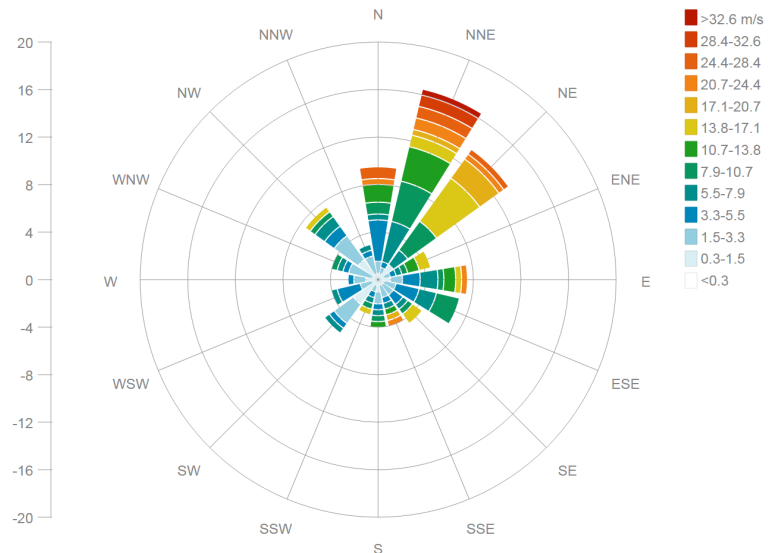
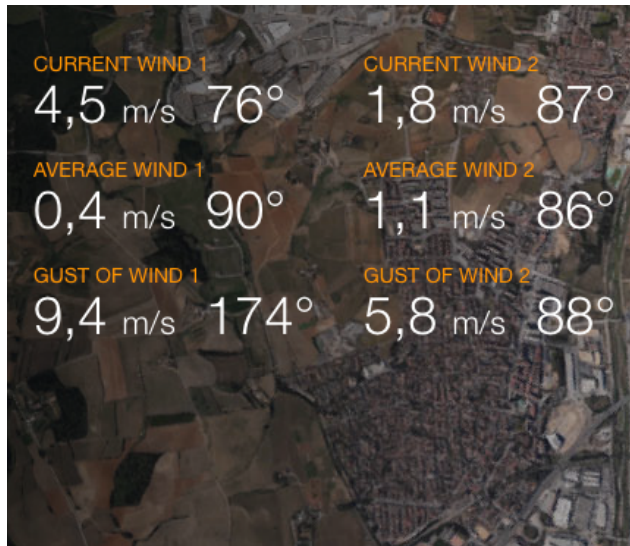
The challenge was to develop a system that would help the company to control the spread of odors in real time from its facilities in order to prevent them from reaching nearby towns in the area.

## The Solution

The system consists of a complete weather station with 2 anemometers at different heights. All data including wind, temperature, humidity, rain and atmospheric pressure is stored in a Weathercloud meteOS server that provides real-time monitoring, powerful custom plots and data export in spreadsheet format.

The real-time screen displays the location of the facility and its surrounding area on a map. The wind speed and direction of both anemometers are represented by a wind rose diagram for quick and easy monitoring.





Weathercloud meteOS is a virtual server providing real-time weather monitoring and data storage.

## Overview

Weathercloud meteOS is an extremely robust Linux-based server that efficiently combines sensor data retrieval with accurate real-time weather monitoring and SQL data storage.

The server can be fitted with unlimited sensors of any type, and is fully customizable to suit even the most demanding requirements.



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## Built-in Features

- Fully customizable and expandable system.
- Wide range of compatible sensors and protocols.
- Clean and stylish browser-based user interface.
- Responsive design for easy mobile monitoring.
- Automatic data transfer to FTP server and email.
- Quick data export to most spreadsheet formats.
- Easily integrable virtual server.

## Optional Features

- Configurable warnings and alarms.
- Configurable plots and diagrams.
- Open database for remote data extraction.
- METAR, SPECI and SYNOP ready.
- RAID-ready for local backups and data protection.
- Cloud service for remote data backups.
- Local touch screens for data visualization.