MAGDA
INNOVATIVE SENSING FOR FARMING

www.magdaproject.eu
office@magdaproject.eu
@MAGDA_Project
MAGDA Project

Name of the device:
Meteomatics Meteodrone and Meteobase

Nature of the device

Meteodrones are specially designed drones that carry out measurements of temperature, humidity, air pressure and wind from the atmosphere vertically up to an altitude of 6 km. These are incorporated into weather forecast calculations and can demonstrably improve weather forecasting. The Meteobase enables autonomous drone measurements and is also the drone's „home" from which it takes off, lands and its battery is charged. As a ground station, it provides local support for the operation of the Meteodrones. It consists of a central computer that performs various tasks related to the operation, control and maintenance of the drone and the monitoring and logging of weather parameters at the site. It also contains the complete launch and landing platform, radio link and ground station, as well as cameras for monitoring the immediate surroundings of the box, heating, and air conditioning.

Trivia on the device

The Meteodrone can handle bad weather: It is waterproof, it can be used in rain and snow, and withstands temperatures up to at least -50°C and windspeeds of up to 50 kts.

The demo sites

Three demo sites have been chosen for MAGDA project including this one! Demo sites are in Piedmont, Italy, Braila, Romania and Burgundy, France. The italian demo site is on arboriculture, the romanian site mainly on cereals and the french site focuses on viticulture.

MAGDA project general info

MAGDA aims to provide valuable weather and irrigation information directly to farmers and agricultural operators, by exploiting the strengths of atmosphere and soil sensing technologies.

The developed system will improve the prediction of severe weather events (rainfall, snow, hail, wind, heat and cold waves) as well as of weather-driven agricultural pests. Moreover, in combination with the hydrological model it will improve irrigation performance and therefore increase food security and sustainable water management in Europe.

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Union Agency for the Space Programme. Neither the European Union nor the granting authority can be held responsible for them.

EUSPA European Union Agency for the Space Programme

Funded by the European Union

GReD · cimaFoundation · Meteo Romania · FutureWater · MINDS & SPARKS · cap2020 · meteomatics