EGNOS Success Story

EGNOS supports fight against Covid in multi-purpose devices

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Credits: FEDE atomizers

Pulverizadores Fede has been dedicated to developing, designing, and manufacturing air blast sprayers and trailed mist blowers for over fifty years, being specialists in the precision agriculture sector at an international level.

With its R&D projects, in active collaboration with European research centres and universities, it promotes digitising the fields. Its goal is to make agriculture a more sustainable and environmentally-friendly activity and help agricultural companies achieve maximum profitability by offering healthy products to fruit and vegetable consumers.

It has been using EGNOS since 2019. It is automatically configured in H3O technology (Healthy crop, Healthy environment, Healthy finances through Optimization) and the SCG system (Specialty Crops Gateway), leading agronomic management tools in the high-value crop sector.

H3O technology is incorporated into the spraying equipment, forming part of their Smartomiser, an intelligent atomiser connected to a digital platform to manage treatments. Following the instructions from this platform, the device performs precision spraying according to the vegetable mass and records the treatment data for subsequent visualisation and analysis on a map, allowing actual traceability of the treatments. On the other hand, the SCG is a device installed on the tractor that allows recording all the tasks carried out on a map to provide valuable integrated information for tracking fieldwork and its costs.

Dr Lars T. Berger, Chief Technology Officer, explains they use EGNOS because “it improves the positioning of their solutions, which involves precision spraying, traceability, technology proactivity, as well as data collection for visualization and analysis. The value of these digitisation solutions relies on the precision and integration of the IoT (Internet of Things) applied to the tasks carried out in the field”.

Thanks to the precision provided by EGNOS, machinery guidance and treatment monitoring are improved. It makes it possible to carry out Zone Spray treatments to automatically adapt spraying parameters to the density of plants in the area of each field to be treated. It entails a significant reduction in the environmental impact due to the decrease in the amount of agricultural chemicals sprayed, improving Agri-Food safety and savings in production costs.

Users of Pulverizadores Fede experienced a high level of satisfaction with the H3O and SCG technology and, as Mr Berger expressed: “part of this success is thanks to the benefits provided by EGNOS” which is currently present in more than 400 devices. Some of the equipment has been used during the pandemic to disinfect public spaces against COVID-19. EGNOS enabled precise disinfectant spraying, which was then visualised and analysed on a digital platform to ensure optimal disinfection.

EGNOS service solutions have been developed in the FieldCompanion Project, which has received funding from the Eurostars-2 Programme and co-funding from the CDTI and Horizon 2020 Programme.

ESSP

EUSPA European Union Agency for the Space Programme

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