wialon

Monitoring the delivery of useful insects to fields in Russia

PROBLEM

The Flyseeagro company from Russia is engaged in applying useful insects (entomophages) and fertilizers in agricultural fields. It might sound trivial if you don't know that they do it with the help of air drones.

Entomophages are used in agriculture for pest control. Before landing the "troops" on the field, insect eggs and pupae must be purchased from the manufacturer, delivered to the storage location, and then to the drone's departure point.

- The company was looking for a solution to track the movement of portable refrigerators carrying nymphs.
- It was also necessary to monitor the temperature regime and humidity level in the container. Violation of the recommended conditions during transportation may result in the death of expensive insects.
- In addition, Flyseeagro needed the evidence base to resolve disputes with customers and suppliers. If nymphs died for some reason during transportation, it was necessary to confirm that Flyseeagro had met all the required transport conditions. Thus, the expenses would be on the other company.

SOLUTION

Geolid Service, the Wialon partner from Russia, has developed a solution that allows the client to take the freight carriage conditions of their live cargo under control.

The main challenge while implementing the project was the integrity preservation of a refrigerating chamber and manufacturer's seals. Otherwise, its breakage would void the equipment warranty. Thus, it was impossible to use a wired sensor or wire up to the refrigerator controller.

REFRIGERATORS FOR TRANSPORTING THE ENTOMOPHAGE EGGS AND NYMPHS

COMPANY PROFILE

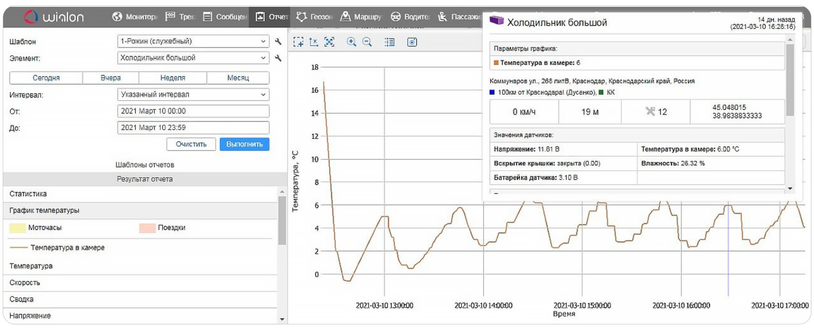
COUNTRY:
Russia

INDUSTRY:
Agriculture

MONITORING UNIT:
Perishable products

WEBSITE:
flyseeagro.ru

- The problem was solved with the help of the Neomatica wireless temperature sensors and a GLONASSsoft telematics terminal, which was connected to the refrigerator's power supply. The connection diagram was developed considering the refrigerator and terminal manufacturers' recommendations.
- Sensors collect data; the terminal sends it to the monitoring system. The client looks through the data using the Wialon mobile application and also receives reports on the movement of refrigerating chambers, temperature, and humidity inside them.
- Notifications on the cargo status are sent to the customer's Telegram channel.



DATA ON REFRIGERATOR TRACKING PARAMETERS IN WIALON

RESULT

PThe solution offered by Geolid Service allowed the client to reduce the financial costs associated with the possible loss of cargo due to violations of the transportation conditions.

DATA AT HAND

The client has continuous access to data on the state and location of mobile refrigerating chambers via the Wialon mobile app.

CARGO SAFETY

In case of a threatening temperature change in the container and other alerts, the client is notified and can quickly resolve the problem, save the cargo, and avoid financial losses.

TRANSPARENCY

Flyseeagro can provide customers and suppliers with reports confirming that the required conditions for insect transportation are met. This rescues the company from expenses when the cargo is damaged because of the counterparties' actions.

CUSTOMER TESTIMONIAL

Geolid Service provided an excellent solution to us. We had recurring cases of refrigerators' power shutdown during transportation or fieldwork. There was no remote monitoring capability. We received claims from counterparties several times due to incorrect transportation of entomophagous batches, and we could not prove the opposite. The Geolid Service team not only found a solution but also did it in the shortest possible time – less than two weeks. We express our gratitude to the project team.

Vasily Ptitsyn, CEO, Flyseeagro