Weather Critical Agricultural Decisions

/ VAISALA AGROMET OBSERVATION SYSTEMS
Facing the Challenge

Today’s farmers face ever-greater challenges from both regulatory authorities and the international marketplace. The rising price of fertilizers and agrochemicals along with increasing environmental pressures combine to have a negative impact on profitability. Threats as diverse as uncertain crop prices, rapid population growth, compromised water resources, and unpredictable climate change – plus a growing need for traceability in food production logistics – add up to a highly complex business situation for 21st century farm managers.

Vaisala Agromet Observation Systems
Timely Decision Support for Agricultural Inputs and Operations

Source
Data Collection
Decision Support
Farm Mgmt.
Field Operations
Food Production Industry

Soil / plant / atmosphere ecosystem
Local weather conditions
Soil and crop growing factors
Evapotranspiration
Soil moisture monitoring
Weather nowcasts
Chilling hours
Disease risk indexes
Growing days
Water requirements
Crop protection
Water management
Correct and timely decisions

Crop protection
Pesticide and fertilizer spraying
Frost protection
On-the-go weather
Irrigation scheduling
Harvesting schedule

Yield
Quality
Savings
Traceability
Documentation
Green values
Timing
Validity

Vaisala Agromet Observation Systems
Timing Is Everything
In an era where one inaccurate decision can mean significant economic losses, what is needed is precise, real-time data on local weather and soil conditions. If these data streams are rationally integrated to support a range of agriculture decisions, precision farm management can be comprehensively practiced. Accurate, cost-optimized actions can routinely be taken with regard to everything from the allocation of fertilizers, irrigation and pesticides, to optimal harvest time and threats of frost.

Master Precise Allocations
Our decision support solution facilitates the optimal timing and allocation of all key agricultural inputs and operations. We call it Vaisala Agromet Observation Systems. It is a fully integrated system that increases the cost-efficiency of cultivation, minimizes costs of fertilizers, agrochemicals and labor, keeps the amount and quality of yield at a high level, and benefits the environment through decreased nutrient leaching.

Operational Capabilities Provide Significant Benefits to Agricultural Operations
Protect Yields and Ensure Quality
Vaisala Agromet Observation Systems enable the calculation disease risk indexes, growing days and chilling hours to save chemicals, improve crop quality and increase yield.

Irrigate Accurately While Sustaining the Environment
Monitoring meteorological and soil conditions allow for precise daily optimization of crop water needs – with regard to both the volume and timing of irrigation. This boosts yield and reduces water use, energy required for pumping and the environmental impact of excess runoff of fertilizers and chemicals.

Field Operations on Demand
Vaisala Agromet Observation Systems measure in situ weather conditions in parallel with optional local forecasts to deploy optimal timing and control in all field operations while also supporting the documentation and traceability of field operations and food production logistics to secure and validate quality.

Farm Management That Validates Decisions
Vaisala Agromet Observation Systems support the comprehensive management of agricultural information. Vast amounts of data can be gathered, stored, viewed, and analyzed to make more profitable and less risky farm management decisions. Correlative documentation and traceability verifies quality requirements of agricultural products for the ever more demanding needs of the food production industry.

A Commitment to Partnership
Vaisala is a global leader in environmental and industrial measurement. Building on more than 70 years of experience, we are committed to solving our customers’ challenges in ways that add value. This means that we are not just experts in measuring meteorological phenomena. Our systems help our customers make smart and timely decisions on weather critical issues in alignment with their specific operational challenges.

Lifetime Support – There When You Need Us
Vaisala is committed to maintaining the productivity and profitability of our customers’ investments. We are engaged from the beginning of your investment planning through the life cycle of the operations. We enable successful operations by ensuring your solution continuously delivers the performance you require. And by being there when you need us.