Modern Water and Energy Saving Technologies Adoption in Central Asia

The Valley Story

Valley® is the global leader in center pivot and linear irrigation equipment and technology.

Approximately 25 million acres (10 million hectares) worldwide.

Valley equipment conserves water, saves time, reduces costs and increases yields.

Valmont Industries, Inc.

Valmont by the Numbers

4.3 Billion (USD) In net sales

6 Continents on which we operate

2 Segments in which we do business

31 Distinct Valmont brands

21 Countries with Valmont facilities

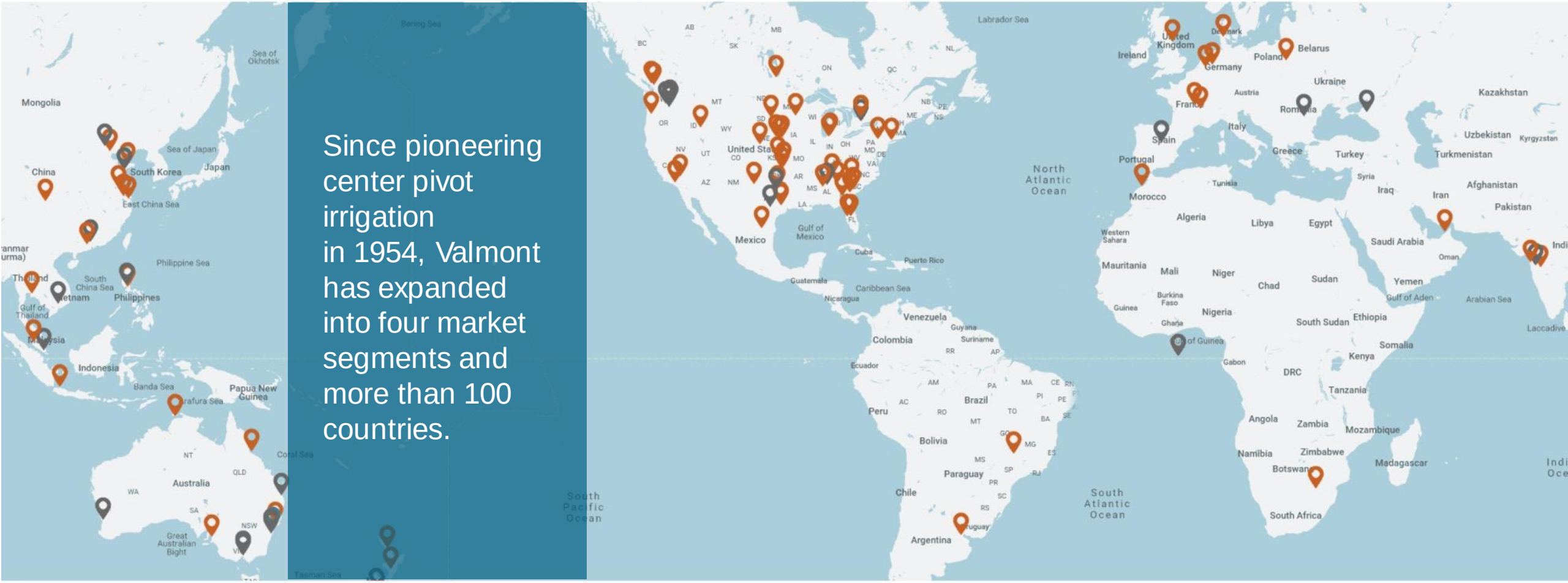
84 Manufacturing facilities worldwide

100+ Countries in which we do business

11.000+ Global employees

Global Reach

Production Sales



Changing the face of the world

In June 1976, *Scientific American* magazine called center pivot irrigation systems **"perhaps the most significant mechanical innovation in agriculture since the replacement of draft animals by the tractor."**

The Challenge

Only 2.5% of the worldwide water supply is fresh. Of that, only 30% is available to humans. Agriculture is the largest user of fresh water, with demand increasing to feed a global population predicted to be 9.6 billion by 2050.

The Solution: Valley Precision Irrigation

Durable options for a wide range of crops, in a variety of field sizes and shapes, on nearly any terrain

- Center Pivots/Linears
- Corners, Benders & DropSpan™
- Industry-Best Valley Gearbox
- X-Tec High-Speed Motor

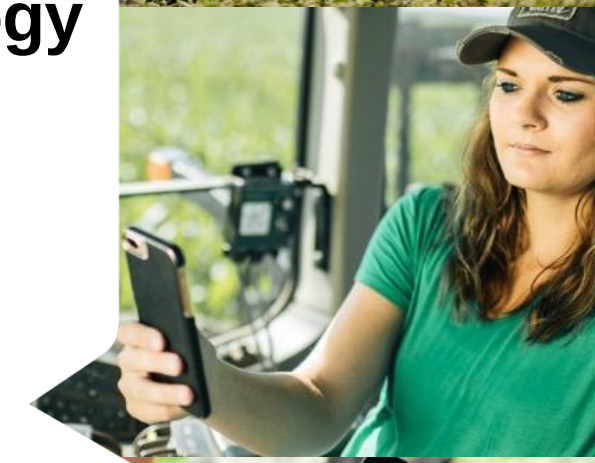
The Challenge

There's never enough time in the day to get everything done. Fields and equipment may be miles apart, and growers may use different brands to irrigate.

The Solution: Valley Remote Management Technology

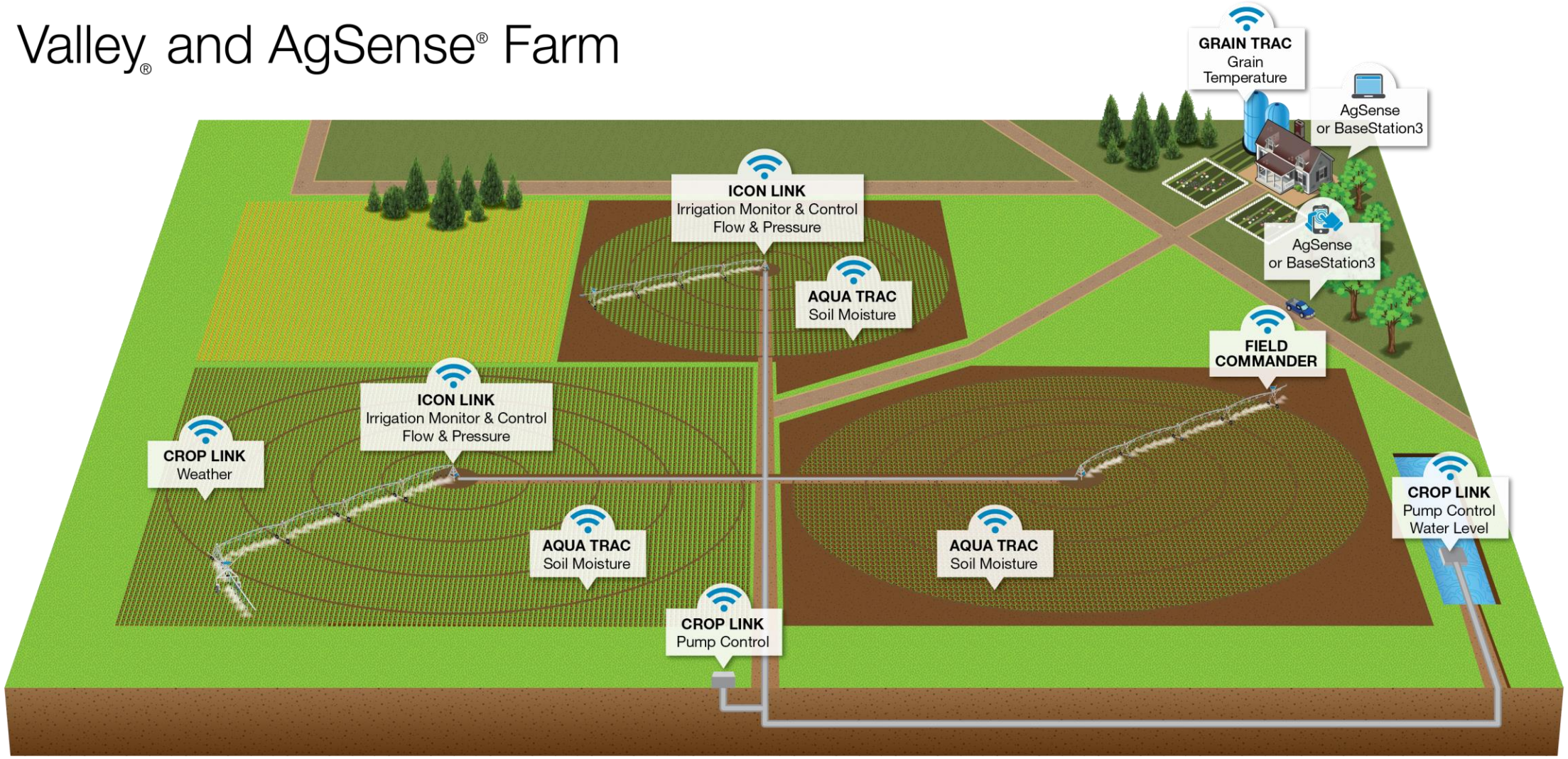
Smart farm management solutions let growers take control of their irrigation – anytime, anywhere – to make their lives easier and use their time more efficiently.

- Valley 365
  - Monitor & Control with industry-leading AgSense tech
  - Forecast & Plan with Valley Scheduling
  - Optimize & Apply with Valley VRI
- BaseStation3
  - Irrigation Exchange



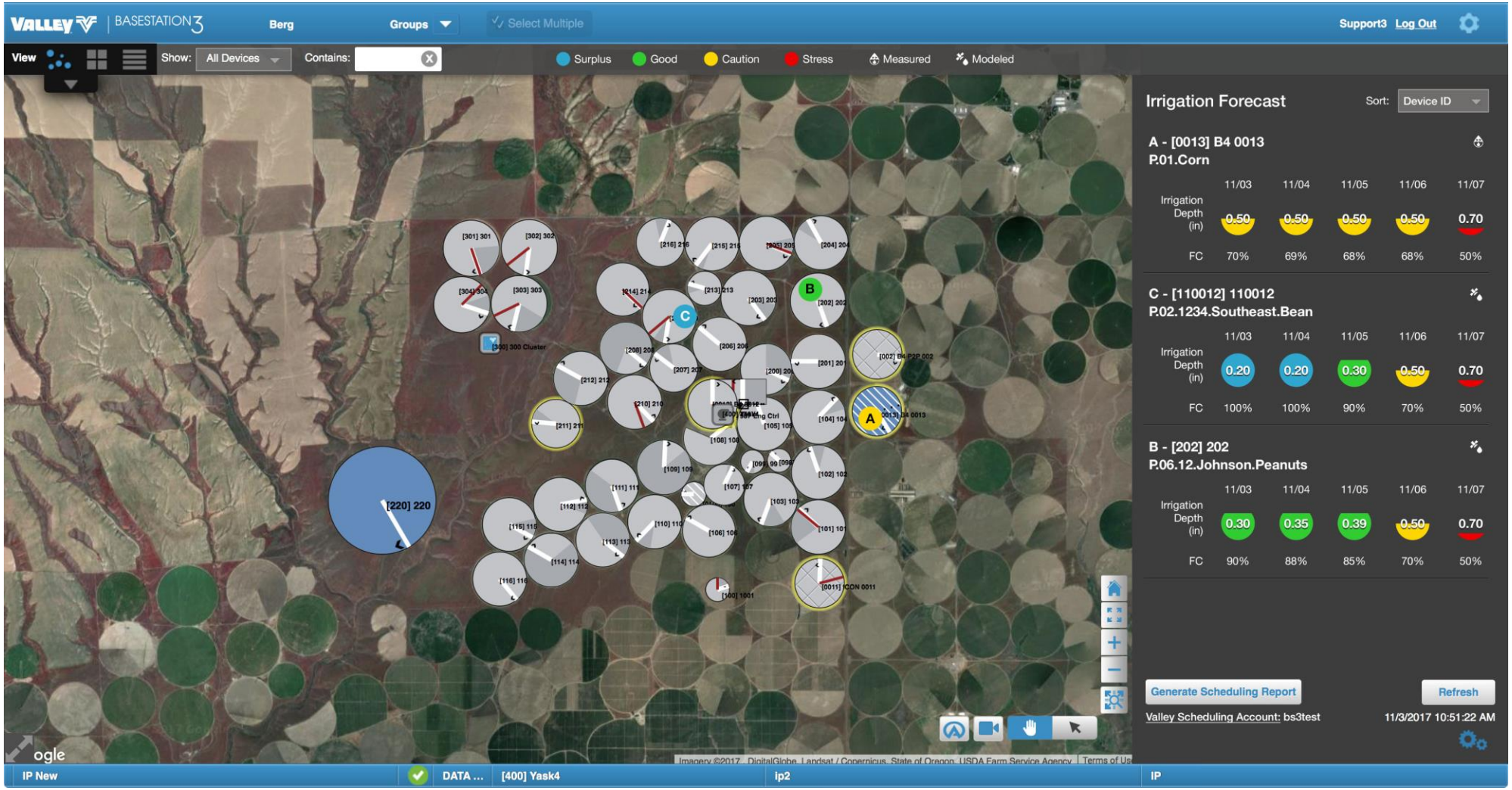
Remote Control Technologies on Farm

Valley® and AgSense® Farm

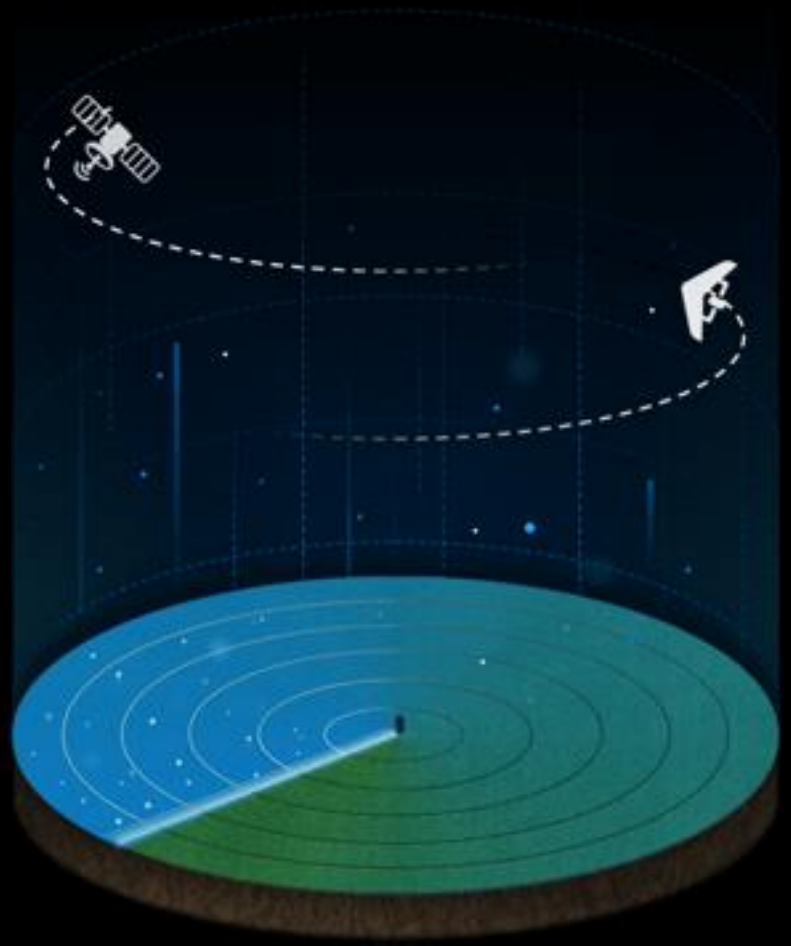


On Farm Example

Irrigation Scheduling and Forecasting



"3 A's" of DATA SCIENCE



Acquisition
Crops are constantly monitored with an array of sensors, from satellite imagery to drones and soil probes. Any existing data source is integrated into the data layering to optimize plant health.

Analysis
The data collected is analyzed in the Prospera Cloud by powerful Artificial Intelligence (AI) engines, Computer Vision (CV) and Machine Learning (ML) algorithms.

Action
Post analysis, recommendations are sent to the field prompting the grower to take action. The instructions can also be sent directly to the pivot for robotic operation with grower notification to commence operation for true autonomous crop management as technology progresses.

Irrigated Land 1989 - 2023