A Tapestry of Data
Imagery Applications Above and Below the Soil

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Leverage our current and future capabilities to generate the most complete data platform that produces easy-to-use agricultural decision making tools.

Near term benefit is data driven decisions and long term sustainable agriculture through modelling, management and monitoring.
Trimble Agriculture

Connected Farm

- Rainfall
- GDD
- Crop
- Date

- Remote Imagery
- Global Positioning

- Field Sensors
- Smart Sprayers
- Precision Irrigation
- Smart Harvester
- Smart Drainage
- Smart Planters

- eNDVI
- Full Farm Management
- Logistics Tracking
- Mobile Office
- VR

- Water
- Soil
**IMAGERY**

**TRIMBLE UX5**
- Collect images for crop scouting, detecting crop height, mapping, leveling, & drainage
- Covers 2.2 km² (540 ac) with a resolution of 5 cm (2 in) in a 50 minute flight at a speed of 80 km/h (50 mph)

**OUTPUT MAPS**
- PurePixel processing results in precise calibrated vegetation index maps
- Natural color and color infrared reference maps

**PUREPIXEL PROCESSING SERVICE**
- Exclusive technology removes image interferences such as shadows, soil & cover crops
- Result is to produce an accurate vegetative index that is based off the target crop
SOIL

SIS FIELD COLLECTION
- Service providers collect surface and sub-surface data that results in a complete chemical & physical soil profile once processed
  - Surfer system collects EC & topography data
  - Diver system allows for targeted soil probing
  - Diver system also performs targeted soil coring for characterizing chemical properties

OUTPUT MAPS
- 3-D data models of cropland with over 65 different discrete data elements available
- Maps available in many formats such as PDF or SHP

SIS PROCESSING SERVICE
- Processing of data from surfer, diver, & soil lab
- Trimble processing center will apply propriety correlation and geo-processing algorithms to convert field, lab, and sensor data to customer deliverable soil information products
Imagery + Soil + Water

*More precise than field resolution*

**Evapotranspiration**
(water out)

**Precipitation**
(water in)

**Soil Properties**

_Irrigation scheduling_

The ability to predict exactly when, where and how much water a crop will require
Connected Farm Dashboard

- Soil
- Imagery
- Weather
- Irrigation Control
- Rain gauges
- Rain intensity
- Remote Assistant
- Commodities
- Office Sync
- Software & Devices
- Fleet
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- Smart Harvesters
- Logistics Tracking
- VR
- Mobile Office
- Mobile Applications
- Smart Drainage
- Soil
- Smart Planters
Summary

Trimble’s Connected Farm eco system is leveraging our current and future capabilities to generate the most complete data platform that produces near term benefits of data driven decisions and long term sustainable agriculture through modelling, management and monitoring.