Bayer® Crop Water Use Maps

Built on the Microsoft Azure Data Manager for Agriculture, this Bayer AgPowered Service enables maps and supporting data that provide a view of water used or lost by a crop over the course of 24hrs.

What are Bayer Crop Water Use Maps?

Crop Water Use Maps are a transformation of NDVI (Normalized Difference Vegetation Index) imagery using estimated crop evapotranspiration, which is the amount of water lost from topsoil (evaporation) and from plants (transpiration).

It consists of a map with a single value per pixel computed for a given day/scene. Supporting data that feeds the Crop Water Use Maps is also available for tracking water usage through metrics as well as visuals.

Field Overview — Smart Boundary — Crop Water

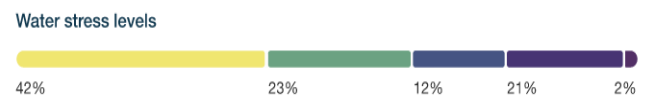*Example of Crop Water Use Map Visual*

What's Included?

- Maps and metadata that present results for the amount of water used or lost by the crop for a given region based on user identified goegraphic points.

Water stress levels

42%   23%   12%   21%   2%

Example of Crop Water Use Supporting Data Used in Graph From*

Benefits:

- Quickly identfiy areas where there has potentially been too much or too little water utilized.

- Strategically plan for irrigation with added benefits of reduced time and cost.

- Further support a more sustainable footprint.

Use Case Thought Starters:

- *Leverage to help determine overall plant health or irrigation need, timing and quantitiy.*
- *There is often a good correlation to end of season yield.*

*Does not represent the actual AgPowered Service. For illustrative purposes only.

Crops currently supported include alfalfa, barley, buckwheat, canola, chickpea, corn, cotton, edible bean, flax, lentil, millet, oat, pasture, pea, peanuts, potatoes, sorghum, soybean, sugar beets, sunflower, wheat (spring, winter, and durum).