



# **Bayer® Growing Degree Day Calculation**

Built on the Microsoft Azure Data Manager for Agriculture, this Bayer AgPowered Service enables organizations to leverage an agronomic algorithm to calculate growing degree days for a set of crops in a geographic area. This serves as the critical input for models trying to identify maturity of crops and key timing of variables affecting these crops.growth, health and yield.

## What is Bayer Growing Degree Day Calculation?

Through an API connection gain access to Growing Degree Day (GDD) data and algorithm that is typically utilized to estimate the growth and development of plants, plant diseases, and insects during the growing season.

Generate a single accumulated GDD value from a given start date, typically the planting date, through an end date up to one day before present. The algorithm will also use the following inputs: specified latitude, longitude, and crop type

## What's Included?

- Current data set provides access to the past 2 years' worth of historical GDD data.
- Supported crops include Corn, Soybean, Wheat, Canola, Cotton, & Sugar beets (contact us for interest in adding a specific crop).

# # Crop Growth Stage 10 GDD: 460 PD: 02.14.2023

Example of Wheat Growth Tracking\*



Example of Soybean Growth Tracking\*

### Benefits:

- Simply track crop growth stages and identify timing for things like harvest.
- Utilize to anticipate the potential for crop limiting factors.
- Estimate possible stress on plants and the impact that can have.

# **Use Case Thought Starters:**

- Track crop growth stages to identify harvest timing.
- Anticipate weed pressure and/or life stages of pets enabling more strategic use of crop inputs.
- Manage heat stress.

<sup>\*</sup>Does not represent the actual AgPowered Service. For illustrative purposes only.