

# ***SGISfarm***

## **Template Library**

### 4 YEAR HARVEST DATA AVERAGE FOR CORN

#### **DESCRIPTION**

This template creates a four year corn yield average based on yield volume. By default it looks for data from 2019-2012, but this can be modified to look at other years.

#### **REQUIRED SGISFARM DATA**

The following data must be imported into the SGISfarm database for the selected field before the template will successfully create the desired application map.

| Variable Name    | Definition             | Source                      |
|------------------|------------------------|-----------------------------|
| YieldData_Year_1 | Yield measured in Bu/a | User-imported harvest event |
| YieldData_Year_2 | Yield measured in Bu/a | User-imported harvest event |
| YieldData_Year_3 | Yield measured in Bu/a | User-imported harvest event |
| YieldData_Year_4 | Yield measured in Bu/a | User-imported harvest event |

#### **USER DEFINED CONSTANTS**

The following constants must be given a value by the user at runtime. Values or these constants may be obtained from one of the references at the end of this document or from other references or consultants available to the user.

| Constant Name | Definition | Units | Range | Default Value |
|---------------|------------|-------|-------|---------------|
| NA            |            |       |       |               |
|               |            |       |       |               |
|               |            |       |       |               |

## CROP INPUT PRODUCT

The template uses the following crop input product. It is important to ensure the product application units matches the application machine selected to apply the map. Alternative products may be selected by the user but the application units must be the same as the original product.

| Product Name | Application Units | Chemical Analysis |         |
|--------------|-------------------|-------------------|---------|
|              |                   | Element           | Percent |
|              |                   |                   |         |
|              |                   |                   |         |
|              |                   |                   |         |

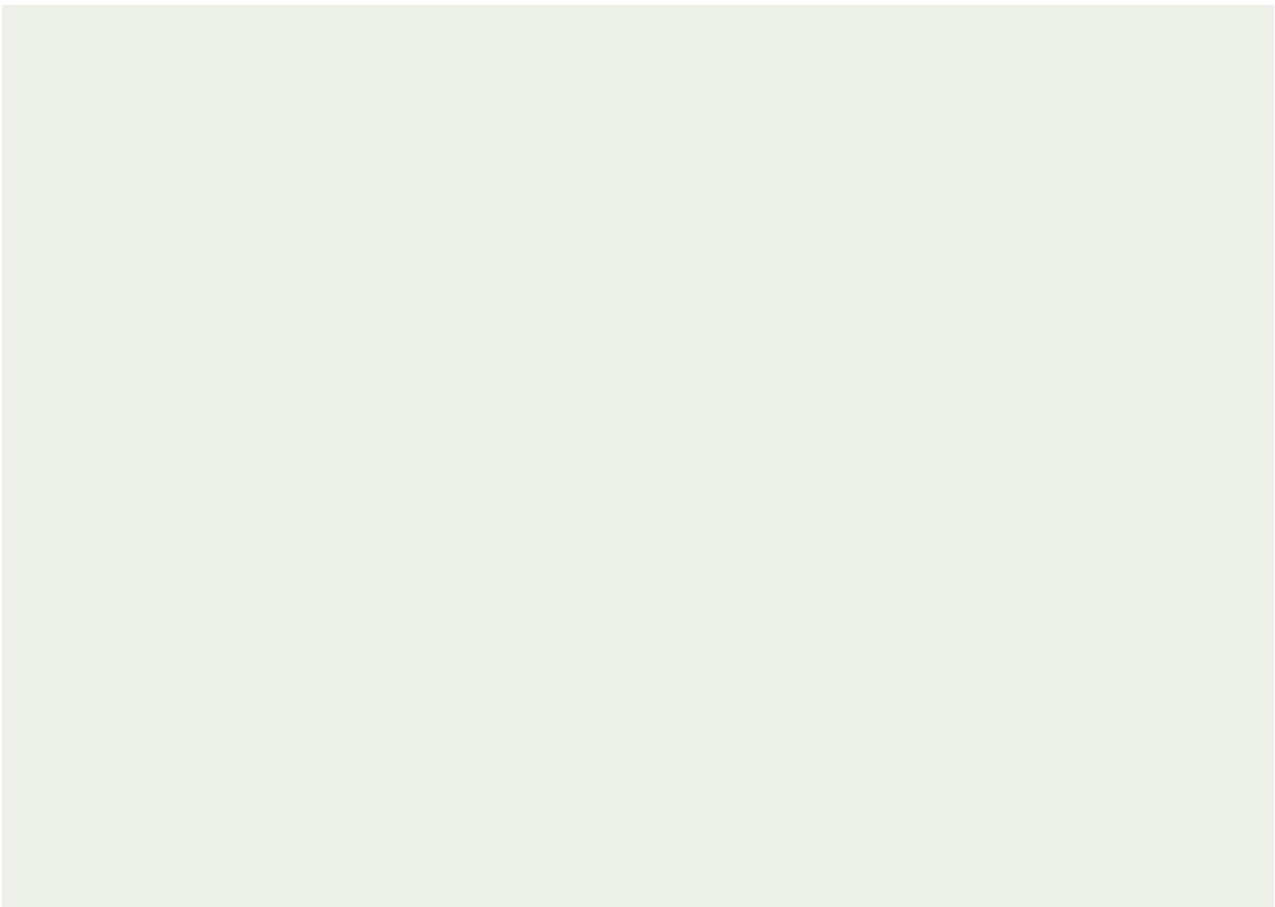
## REFERENCES

The following references can be valuable to learn more about the crop and regional suitability of this template as well as finding acceptable values for some of the user defined constants.

| Author | Url or Reference Title |
|--------|------------------------|
|        |                        |
|        |                        |
|        |                        |

## ADVANCED SETTINGS

SGISfarm templates also contain many advanced settings used in the creation of variable rate crop input maps. For the convenience of the user these settings have already been set and it is recommended they not be changed. More information on these settings can be found in the SGISfarm training manual.



## DATA MODELING

Before data can be used to create a variable rate map it must first be fit a standard grid. The settings below define how each data source is modeled or conformed to this standard grid.

### Polygon Data Variables

| Variable Name    | Gridding Method | Aggregate Method | Corner Operation |
|------------------|-----------------|------------------|------------------|
| YieldData_Year_1 | 4-Corner Point  | First            | Maximum          |
| YieldData_Year_2 | 4-Corner Point  | First            | Maximum          |
| YieldData_Year_3 | 4-Corner Point  | First            | Maximum          |

### Point Data Variables

| Variable Name | Gridding Method | Search Radius | Max. Data Points | Exponent |
|---------------|-----------------|---------------|------------------|----------|
|               |                 |               |                  |          |
|               |                 |               |                  |          |
|               |                 |               |                  |          |

## DATA SELECTION SETTINGS

The data selection settings determine exactly what data in SGISfarm is used in the recommendation template. Data may be specified by date range or by specifying which data events to use. The settings defined in this template should be changed only with great care.

| Variable Name    | Relative Start | Duration | Event Selection                 |
|------------------|----------------|----------|---------------------------------|
| YieldData_Year_1 | 2009           | 1 year   | 2009 by default, can be changed |
| YieldData_Year_2 | 2010           | 1 year   | 2010 by default, can be changed |
| YieldData_Year_3 | 2011           | 1 year   | 2011 by default, can be changed |
| YieldData_Year_4 | 2012           | 1 year   | 2012 by default, can be changed |