## Data Tab - Data Viewer - Soil

The Data Tab provides functions for working with field data.  To activate the options, select the **Data Tab**.
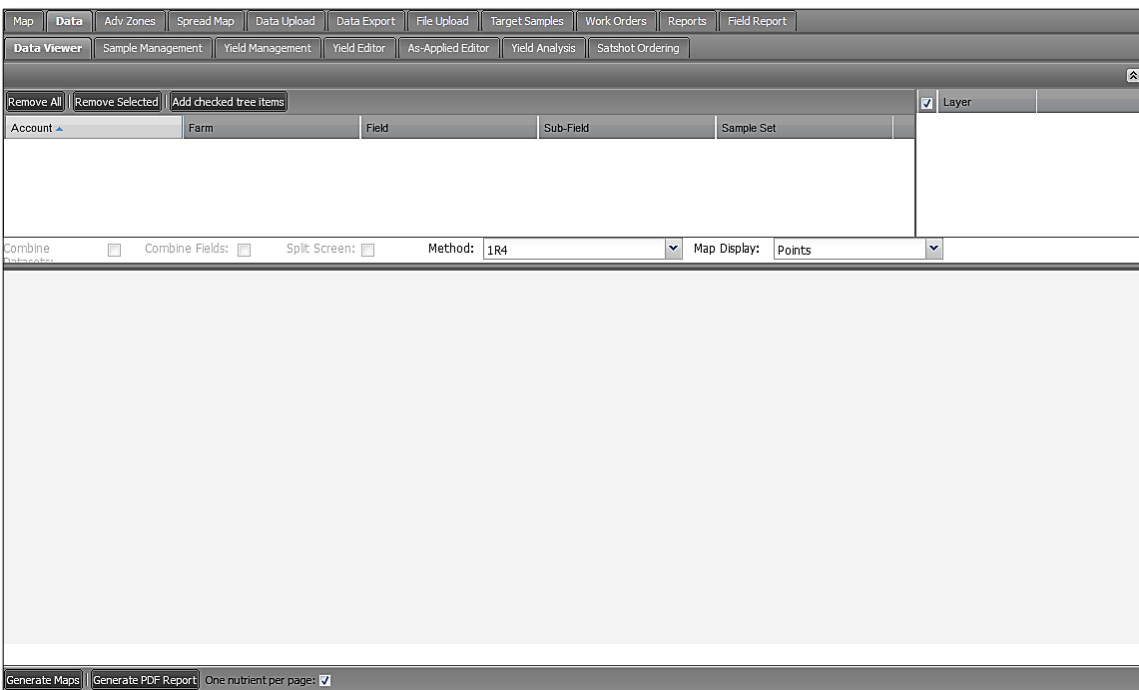


The following functions / tabs will be displayed.



1. **Data Viewer**:  This option allows you view / print soil analysis; yield data; satellite imagery, Veris, As-Applied, etc.

   **A.** Click on the **Data Viewer** tab.  The following page/options will be displayed.
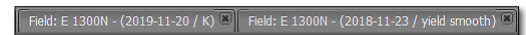


2. **Soil Analysis.**

   **A.** From the I.F.A.R.M. customer listing window, left click and hold a **Soil Analysis** file, and drag over to the **Account Window**.  You can drag over individual or multiple files.  Release to load the data.
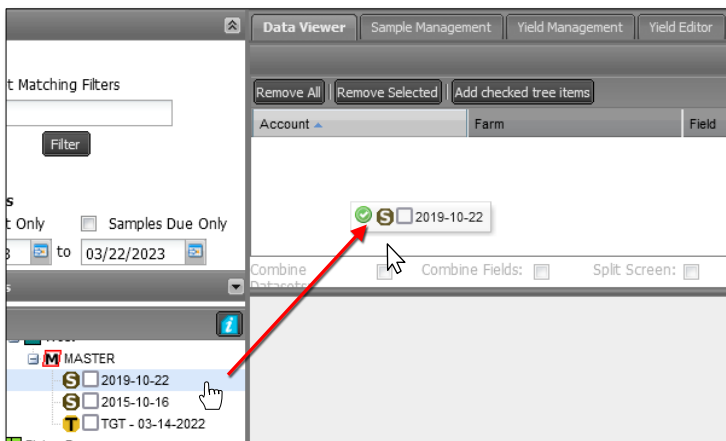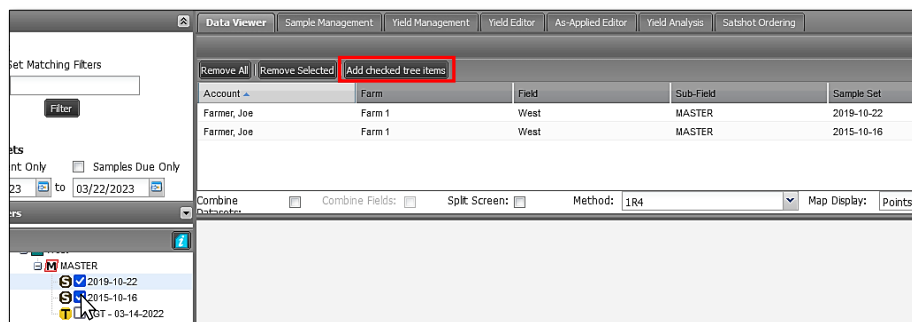


*Note:* Both soil and yield files can be brought in at the same time. They will show as different tabs in the display screen.
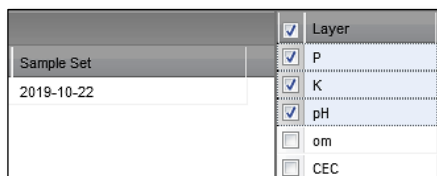
*Data Viewer - Soil continued…*

- Users can also click on the sample file selection box, and click **Add checked tree items** (below). The checked items will remain active until you uncheck them.



**B.** Under the **Layer** window, select the nutrient map boxes you want to display. Whatever nutrients were tested will be visible. To select <u>all</u> nutrients, click in the uppermost **Layer** box.



*Note:* If different types of datasets are added (soil & yield) the Layer box will show the additional layer boxes will display in the layer option (right).
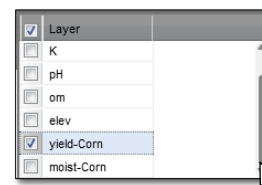


**C.** This page offers three viewing options:
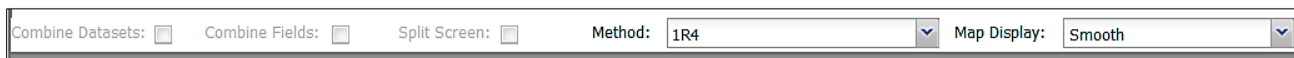


- **Combine Data Sets**:  Yield Only. Use this if you wish to show average yield for the same field from results of multiple harvest years (i.e. results from 2015 & 2019).

- **Combine Fields**:  Use this option if you want to display multiple fields on the Map. This works best if two field boundaries are next to one another and you wish them to be treated as one combined field. If fields are too far apart, they will not display properly.

- **Split Screen**:  This allows the user to view results side-by-side. This is limited to the same kind of dataset (i.e. soil or yield). Selecting Split Screen will open two windows, where users can view two separate datasets from different years.

- **Map Display**:  This option is for yield data only. Disregard for soil or other data layers.

**D.** Another option to consider is the soil map **Method**:
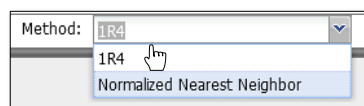


- **1R4**:  This is I.F.A.R.M.'s default gridding method which can map out nearly any type of data set. 1R4 is a variation of (IDW - Inverse Distance Weighting), a process of assigning values to unknown points by using values from usually scattered set of known points.

- **Normalized Nearest Neighbor:**  A different interpolation method which estimates values of points at positions between listed or given values. The nearest neighbor method simply selects the value of the <u>nearest</u> point, ignores the values of other neighboring points, and calculates a value for the unlisted point from that nearest point. It renders a different variation of application map.
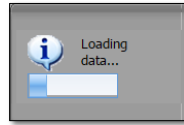
*Data Viewer - Soil continued…*

### 3. Displaying Maps.

**A.** To display the results, select the **Generate Maps** button.

| Generate Maps | Generate PDF Report |

- A **Loading data** indicator will appear.

**B.** The results will appear as colored maps:

- **Histogram**: Displaying color chart with corresponding values (available in **lb/acre** or **PPM**).

- **Field Data**: Total Area (in acres) with assigned color scale to render analysis variations. The test averages will automatically populate at the sample point location.

- **Viewing Scale:** Enlarge or reduce the map image. Can achieve this via your mouse scroll as well.



***Note:*** If you select more than one product nutrient, each individual map will be available via a corresponding tab. Click on other nutrient tabs to display the results.

Critical levels displayed. No need to Generate Report unless required.
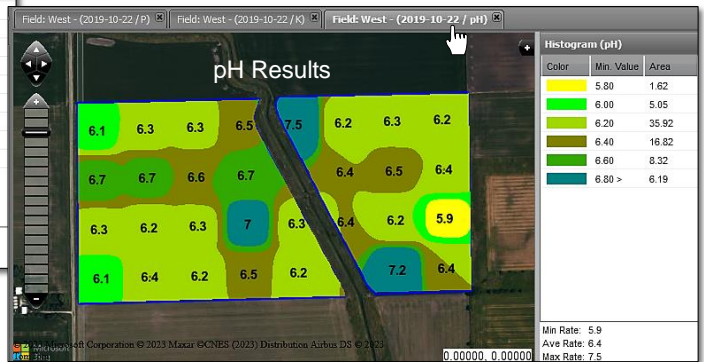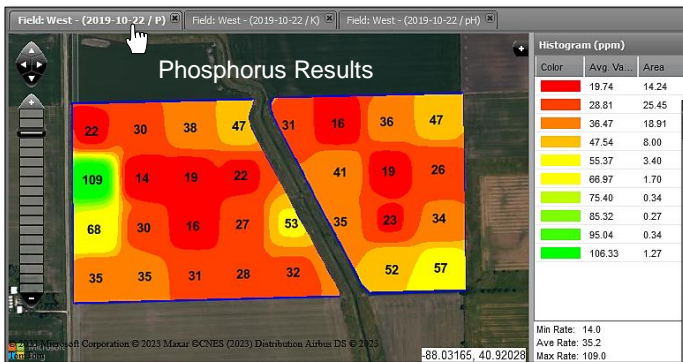
*Data Viewer - Soil continued…*

**C. Base Layer Option**: By clicking on the black + box in the map window, users can view other mapping options.



- **Bing Hybrid**: Displays the Bing satellite viewing map.
- **Bing Road**: Displays the Bing Road viewing map.
- **No Background**: Removes imagery in the background and shows the field in white space.
- **Boundary:** Hides the boundary of the field.
- **Soil Averages:** By default, the soil averages will activate. Clicking off this box will hide the averages.
- **Field Attributes:** If field attributes were applied to the field (via the map tab), they will be visible on the map.

**D. Color Scales:** The colors of the maps are determined by set **color scales** in I.F.A.R.M. If a user wishes to change their color scale, contact I.F.A.R.M., Inc. and request colors / value breaks as desired.

**E.** If **Normalized Nearest Neighbor** is selected, you will see a change in how the map is rendered (right).
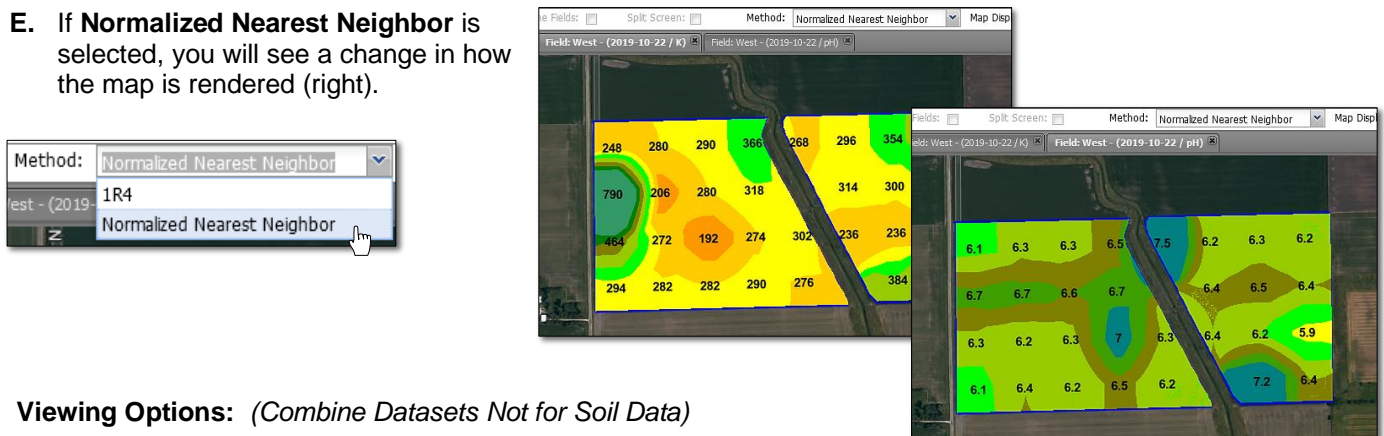


**4. Viewing Options:** *(Combine Datasets Not for Soil Data)*

**A. Combine Fields:**
- Users can pull in multiple soil files of fields that are in close proximity to one another.
- This works best if fields border one another.
- If there is too much area between fields, an error may appear stating the field exceeds the 2,000-acre limit.
- Pull in multiple years of soil data, click on the **Combine Fields** button, select the nutrient layer options and **Generate Maps**. The resulting map will show the multiple fields together; sharing a color scale.
- See next page.

*Data Viewer - Soil continued…*



**B. Split Screen:**

- Users can pull in two (2) datasets from the <u>same</u> field and view the different results via two separate screens.

- Once the datasets are pulled in, select the nutrients, click on the **Split Screen** button, and **Generate Maps**.

- Note two screens appear, and different maps will be displayed with the **oldest dataset on the left side**.

*Note:* Datasets need to be from the same field. The Split Screen option will grey out if not. Also, this option is for <u>viewing only</u>, you will not be able to print out a PDF report from this option. Turn off the Split Screen to print out the multiple reports.

*Data Viewer - Soil continued…*

## 5. Generating Reports.

**A.** If you want to convert the maps into a PDF file, select the **Generate PDF Report** button. An indicator will appear showing the report is generating, then a notification the report has been sent to the File Manager.
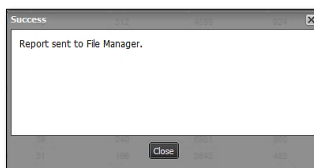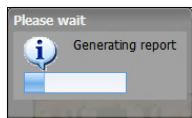
- The numbers of layers on the screen will be generated as part of the PDF file.

**B.** After a short period of time, another indicator will appear indicating the report is finished and can be opened. Click on **View PDF** to open the PDF. Users can also close it and open it in the File Manager at another time.
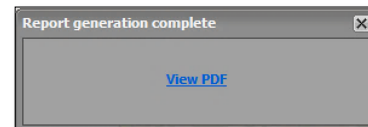


**C.** If the One Nutrient per Page is turned off, the reports will display with multiple layers on a single page. The maximum number of layers per page is four (right).

**D.** Users can print the report or save it to their computer.