

20/20 SeedSense™ Field Operations Viewer Operating Instructions

The 20/20 SeedSense Field Operations Viewer is provided by Precision Planting in partnership with MapShots. The Field Operations Viewer gives you the ability to perform basic mapping functions with the field mapping data gathered by your 20/20 SeedSense™ monitor.

System Requirements

The Field Operations Viewer will function with the Windows 2000, XP, and Vista operating systems.

Technical Support

Trained Technical Support personnel are available Monday through Friday from 8:00 AM to 5:00 PM central time. They can be reached in two ways:

1. By e-mail (2020support@precisionplanting.com)
2. By phone (309-925-5050)

Additional resources are available on our website (www.precisionplanting.com) which contains many helpful instructional tools that enable you to get the most out of your 20/20 SeedSense™ and the field operations viewer.

Installation

You will need to download and install two pieces of software: the FODM Windows Driver and the FO Viewer application.

Downloading the FODM Windows Driver

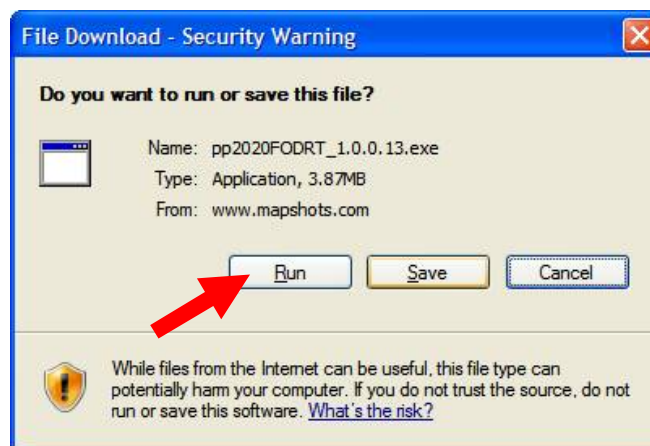
1. Using an internet browser, go to the following website:
<http://www.mapshots.com/FODM/PrecisionPlanting.asp#1>
2. Find the link to the 20/20 Field Operations Device Driver and click on the link as shown below:

FODM Windows Driver

The Precision Planting Field Operation Device Driver (FODD) supports reading logs from the 20/20 SeedS

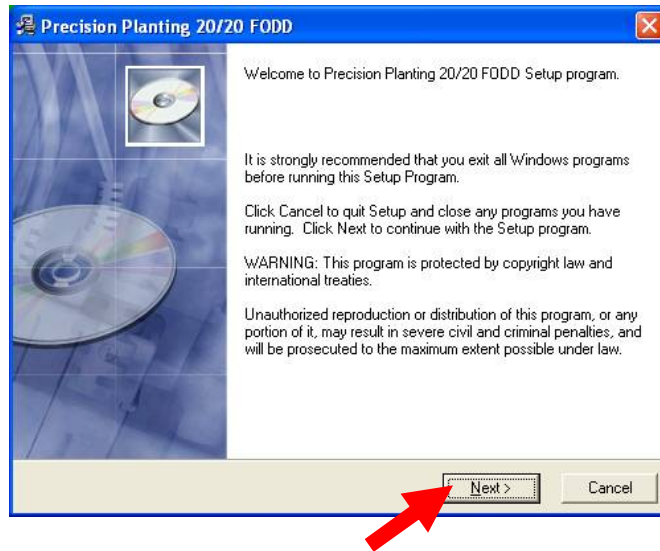
- [Precision Planting 20/20 Field Operations Device Driver](#): (3.9 mb) Version 1.0.0.13 -- May 7, 2008.

3. When you click on the link, a dialog box will pop up. Select “Run” as shown below:

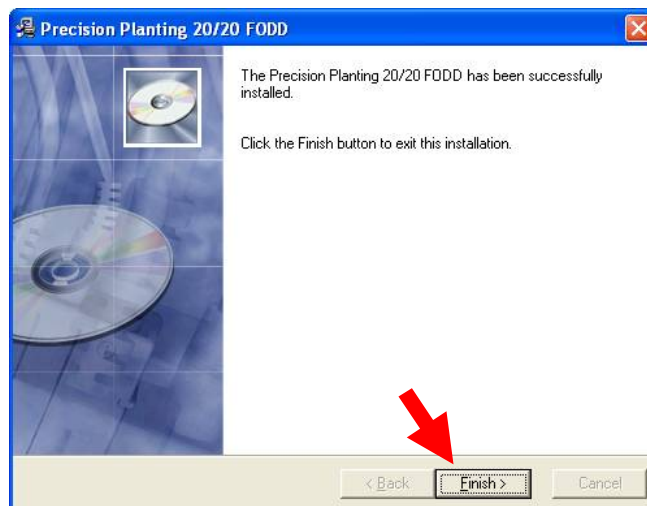


Note: You may receive an “Unknown Publisher” warning. If you do, click “Run” and the installation will continue.

4. When the Driver has been installed, the following dialog box will appear on your screen. Make sure that all other programs are closed and click “Next”.



5. When setup is complete, the following dialog box will appear on your screen. Click “Finish” to complete the installation of the FODM Windows Driver.



Downloading the Field Operations Viewer application

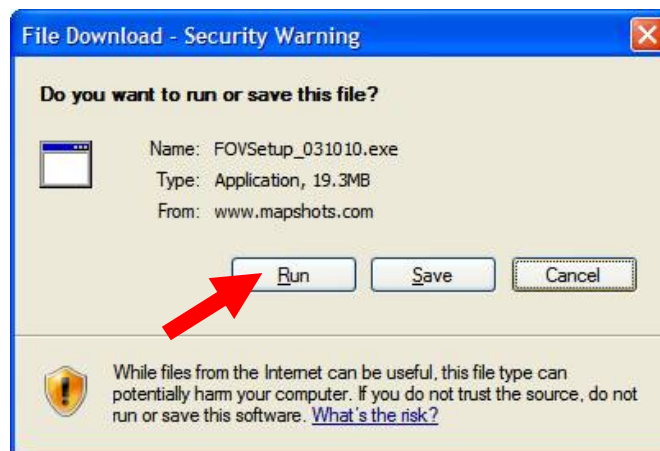
1. Using an internet browser, go to the following website:
<http://www.mapshots.com/FODM/PrecisionPlanting.asp#1>
2. Scroll down the page. Find and click on the link to the Field Operations Viewer as shown below:

Mapping Viewer

The Field Operations Viewer is a simple stand-alone application planter monitor. The data that has been read can also be ex

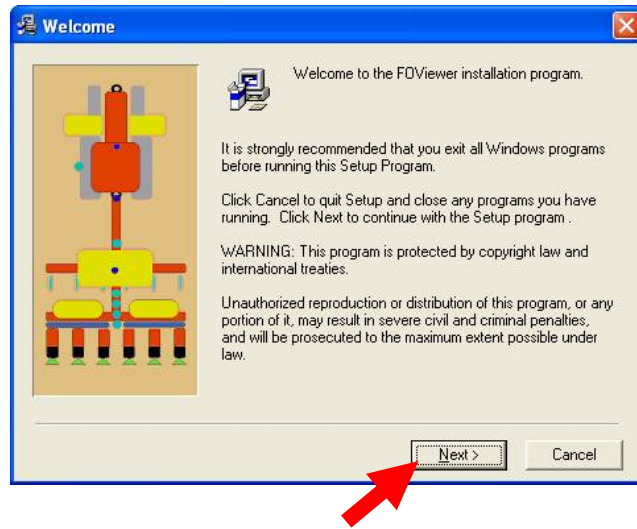
- [Field Operations Viewer](#): (16.8 mb) Version 3.10.10 -- A

3. When you click on the link, a dialog box will pop up. Select “Run” as shown below:

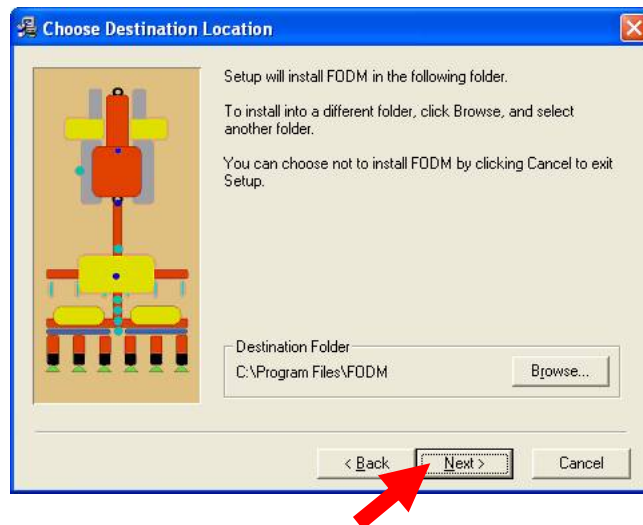


Note: You may receive an “Unknown Publisher” warning. If you do, click “Run” and the installation will continue.

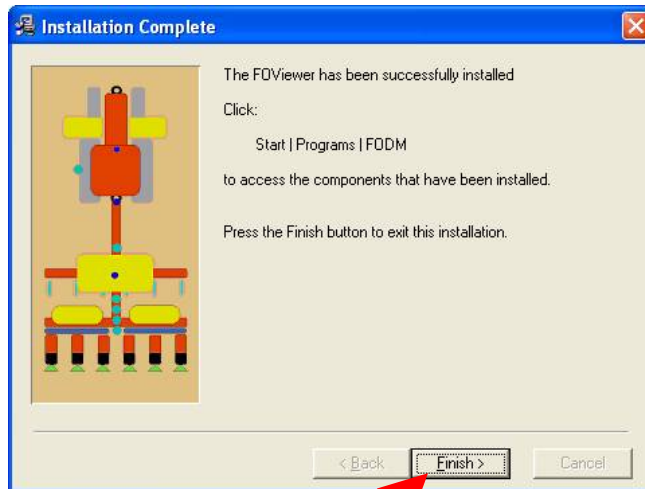
4. When the Viewer has been installed, the following dialog box will appear on your screen. Make sure that all other programs are closed and click “Next”.



5. You will next be asked to select a destination folder for the application. It is recommended that you accept the default destination and click “Next”.



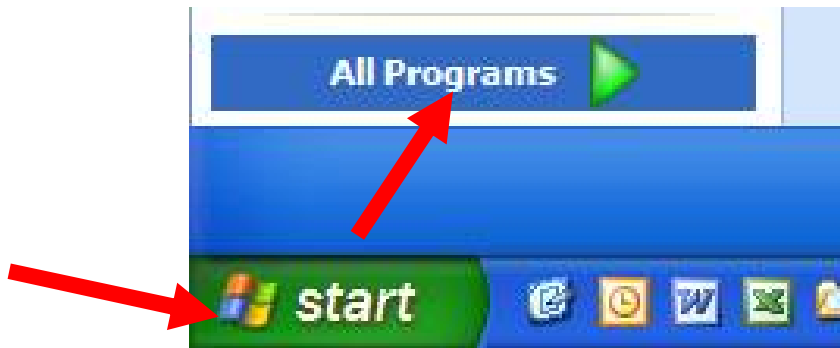
6. When setup is complete, the following dialog box will appear on your screen. Click “Finish” to complete the installation of the Field Operations Viewer.



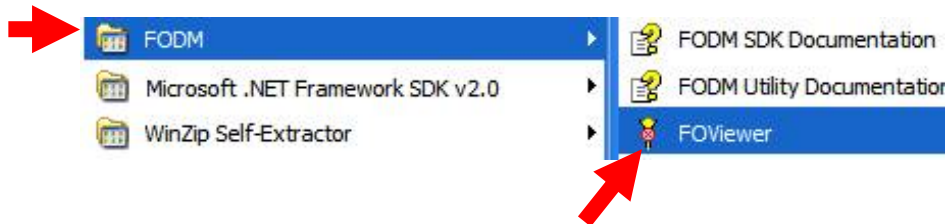
Locating the Viewer and Creating a Desk Top Icon

Locating the Viewer

1. To locate the Field Operations Viewer on your computer, click the “Start” button on your Desktop and click on “All Programs” as shown below:



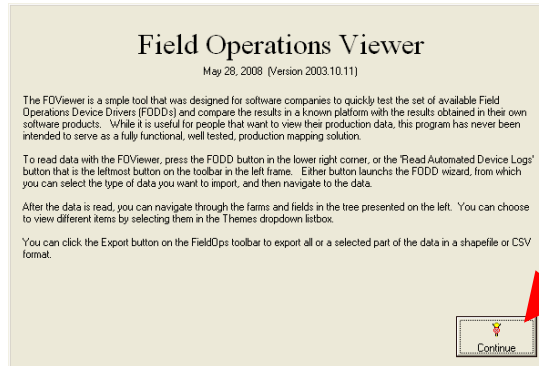
2. Next, choose “FODM” from the programs menu and then “FOViewer” as shown below:



3. Clicking on “FOViewer” as above will launch the application for your use. If you would like to access the Field Operations Viewer from a desktop icon, follow the above steps, but click on “FOViewer” with the right button on your mouse. In the menu that appears, select “Send to” and then “Desktop (create shortcut)”. This will create an FOViewer icon on your desktop. Once this is created, double-clicking the icon will launch the viewer application for your use.

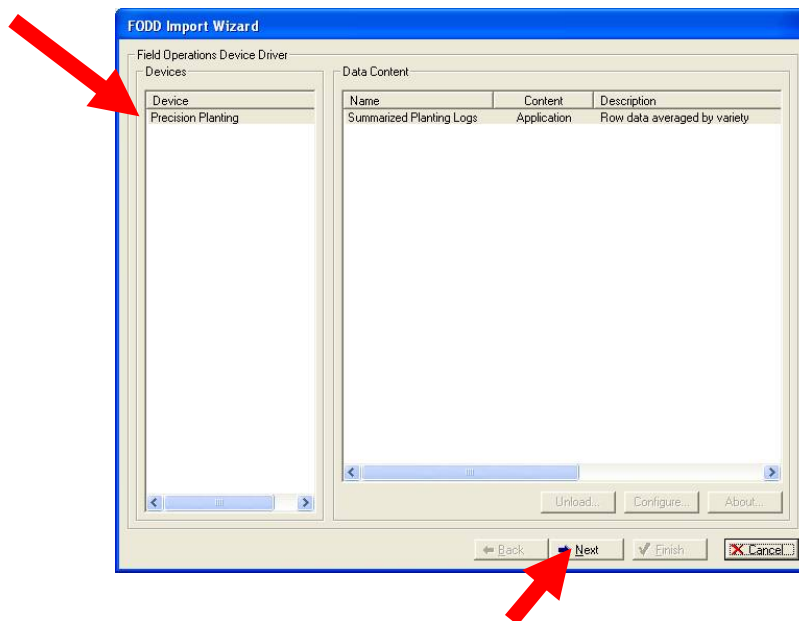
Using the Field Operations Viewer

When you launch the Field Operations Viewer (either by finding it in the programs menu or clicking the desktop icon as described on the previous page) you will see a welcome screen as shown below. Click “Continue” to enter the viewer.

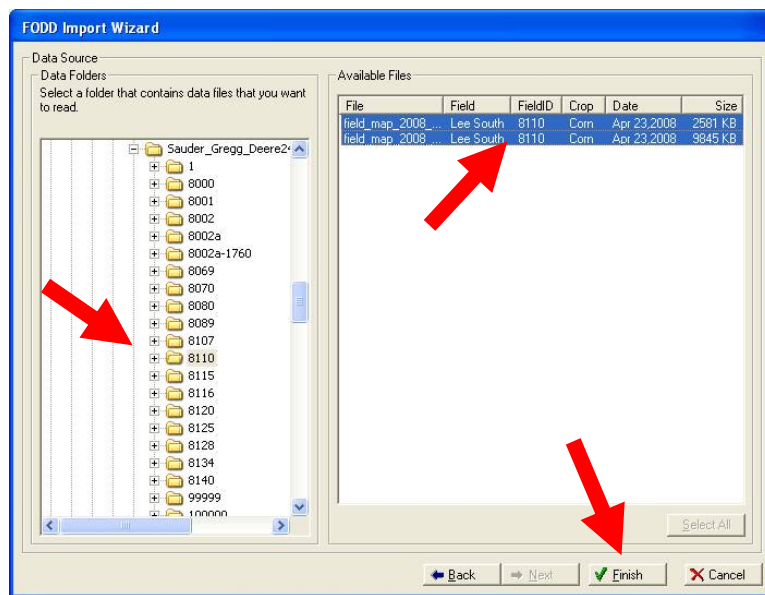


Loading a Field

1. After you click continue from the welcome screen, you will be at the FODD Import Wizard as seen below. On the left side of the screen, click on “Precision Planting” under “Device”. Then, press “Next” at the bottom of the screen.

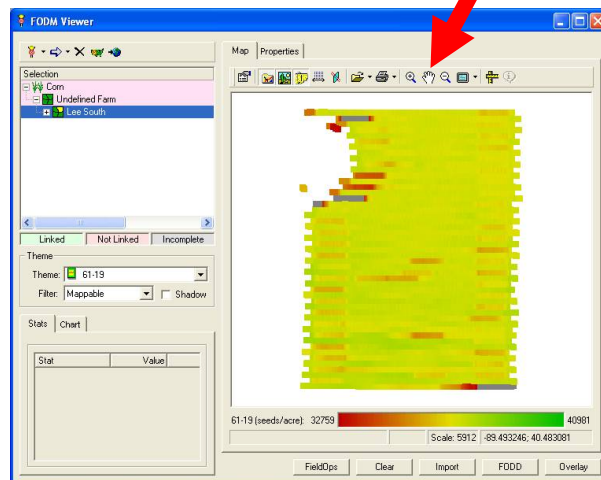


2. On the left side of the screen, under “Data Source”, browse your computer to locate the folders with your field mapping data. Click on one folder to open it. The files for that field will appear on the right side of the screen under “Available Files”. If these are the files you would like to view, click “Finish” at the bottom of the screen.



Viewing a Field Map

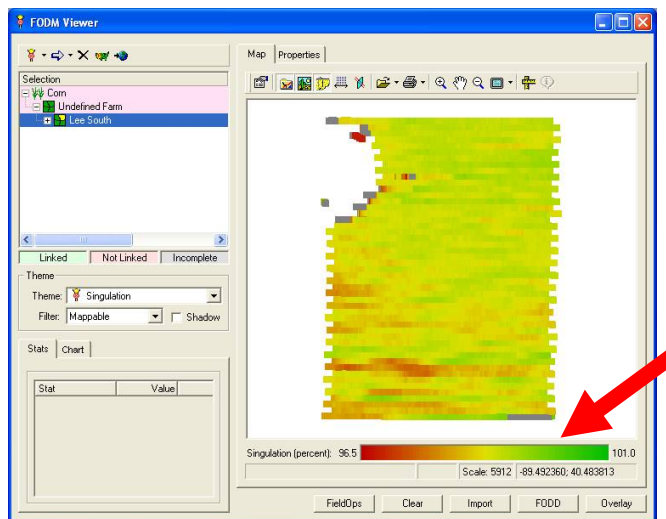
1. Once your selected field loads, you are ready to view maps of the information that the 20/20 SeedSense™ gathered during planting. If the field does not appear, see the trouble shooting guide at the end of this section.
2. To manipulate the map itself, the viewer has the capability to zoom in, zoom out, and move the map. These functions are activated by the magnifying glass and hand icons above the map.



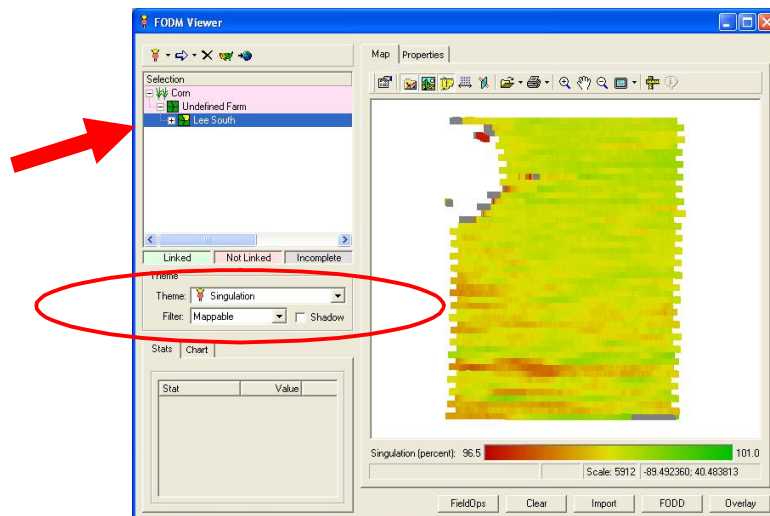
3. The magnifying glass with the plus sign inside activates the zoom feature. To zoom in on a specific part of a field, click the zoom button and use your mouse to draw a box around the part of the field you would like to view. To zoom out, click the magnifying glass with the minus sign. The hand icon allows you to move the field around the screen. Click the hand and then click on the field. While holding the mouse button down, you can move the field around the screen.

Using the Viewer

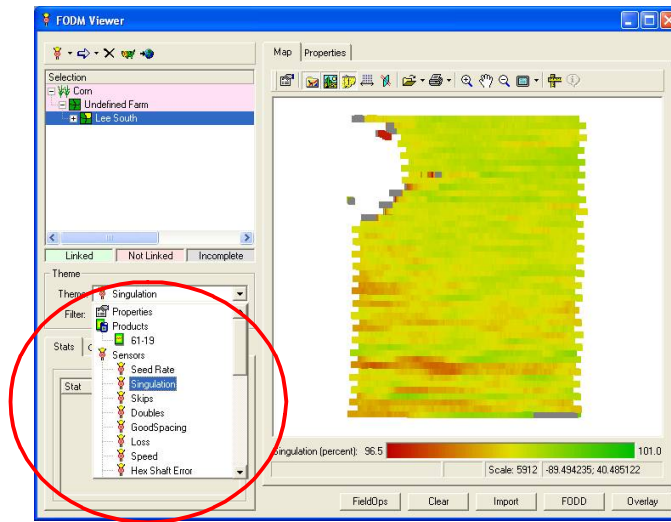
1. The map itself occupies the center and right of the viewer. Below the map, is a color-coded bar that defines the colors that you see on the map. GPS coordinates for the field are also displayed here.



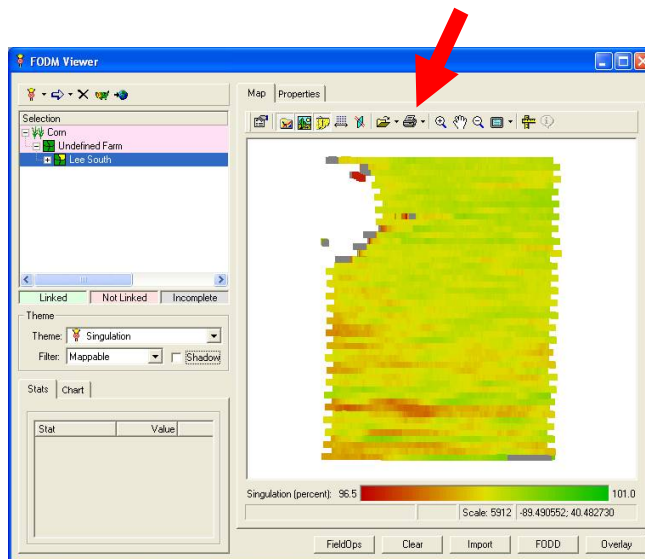
2. The upper left corner of the screen shows what field you are viewing while the center of the left side of the screen shows you what measurement is being displayed on the map (in this case, singulation).



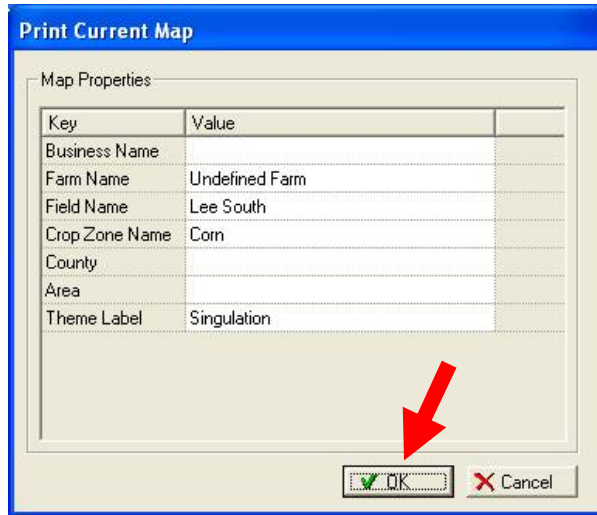
3. To change the measurement that you are mapping, click on the drop down menu for “Theme”. From this list, you may choose what the map on the screen is displaying.



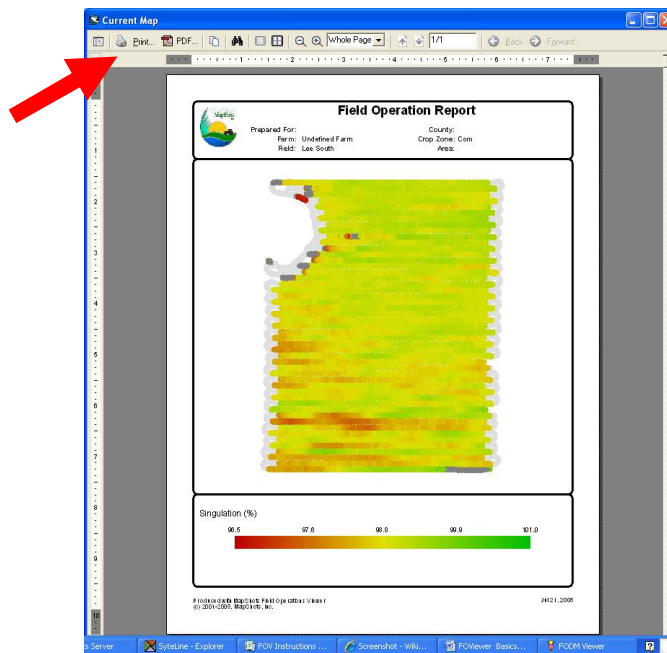
4. To print a copy of the map you are viewing, click the print icon above the map.



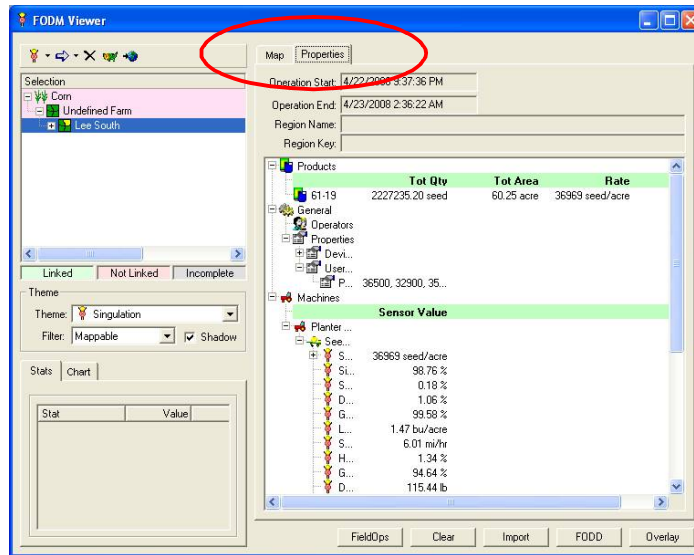
5. Once you click the print icon, the below dialog box will appear. Click “OK”



6. Once you click “OK”, the printable map will appear. Click “Print” in the top left corner of the screen.



7. To view a summary of all the data for your field, click the “Properties” tab at the top of the page.




Frequently Asked Questions (FAQ):

Q: Why are there grey colors in my map, but not in the color gradient at the bottom of the page?

A: Values that are smaller or larger than the color bar range are shown in grey. For instance, assume you are viewing Loss and the displayed range is from 0 to 5 bushels with colors of green (0 bushels) to red (5 bushels). If you have a section in one area of the field that is colored gray, it means the loss in that section of the field was greater than 5 bushels per acre.

If you are displaying more than one field, try selecting only a single fieldmap file.

You can do this by clicking the arrow  icon in the upper left to expand the field filenames. Then, select an individual field map file. The FOViewer will auto-scale the color bar to fit at least 95% of the data in that particular fieldmap file. (Two standard deviations from the mean)

Q: Why are there features that don't seem to do anything? For instance the "Linked / Not Linked / Incomplete" sections under my field names and the printer button?

A: The FOViewer is based on Mapshots' EasiSuite Farm Management software. It was initially developed to allow software developers to test their FODD software interfaces. Mapshots has agreed to make it available for use with 20/20 data as well. However, many of the features contained in the full EasiSuite package are not available in the free FOViewer.

Q: Why are the planting parameters repeated with row numbers after them? (For instance, I see Skips, and Skips--1-12, and Skips--23-24)

A: The Precision Planting FODD (Windows driver) converts your planting data into groups of rows based on your hybrid configuration in each field. In the situation mentioned, the grower had a hybrid on rows 1-12, and also on rows 13-24. You can view skips as a planter average, or as an average for rows 1-12 or rows 13-24.

Q: Why can't I print my Summary data

A: Printing is only supported for maps at this time. To access advanced features at this time, you will need to purchase a Farm Management package such as Farmworks, Mapshots EasiSuite, or any other application that supports industry-standard FODM data. (You can always get a copy of the current screen by pressing ALT-PRNTSCRN and then opening a program such as MS-Word and selecting PASTE)


Q: Why doesn't the total acres count or population in the FOViewer match the value shown on my 20/20 Display Unit while I was planting?

A: The value in the FOViewer is a summary of the entire set of data you are mapping. There are several reasons why the value may be different than what you experienced while planting:

If you have variable-rate seeding, the summary population value will be an average of the entire field. If the data you are mapping contains more than one field or sections of multiple fields, the summary population value will be an average for all fields shown. The summary values in the FOViewer use a slightly different algorithm than used in the 20/20 Display Unit, and some geographic field conditions may result in a slightly different value. We will continue to refine the algorithms as issues arise.


Q: Why do some of my field show up as tiny dots that require me to zoom to see the data, while other fields default to a full size map?

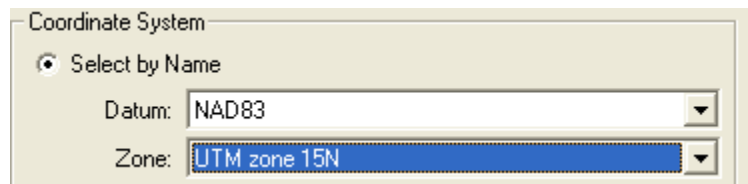
A: FOViewer automatically zooms to show you ALL the data on one page. If the FieldMap files you are mapping contain multiple fields, or if there are some data points that are far away from your primary field location, FOViewer will zoom out far enough to allow all the data points to be displayed.

Instead of selecting the entire field, click the arrow  icon in the upper left to expand the field file-names. Then, select an individual field map file.

Q: Why can't I see my maps?

A: If you see a blank white page when selecting fields to map, you may be trying to view data that is beyond the default GPS location setting in the FOViewer. To check your GPS location setting, click on the "Edit

Map Preferences" icon  in the top middle of the screen. Select the "Projection" tab. You should see coordinate system data that is similar to:



Select the Zone based on the location of your fields. The following list show the zones for the United States.

Northern CA, Western OR, WA	UTM Zone 10N
Western ID, Western MT, NV	UTM Zone 11N
AZ, UT, Eastern ID, Central MT	UTM Zone 12N
NM, CO, Eastern WY, Western MT	UTM Zone 13N
Central TX, KS, NB, Eastern SD, ND	UTM Zone 14N
Eastern TX, Western IL, LA, AR, MO, IA, MN	UTM Zone 15N
Eastern IL, AL, KY, TN, IN, Western MI	UTM Zone 16N
FL, Western GA, SC, NC, VA, Eastern PA, WV	UTM Zone 17N
Northern East Coast (not including Maine)	UTM Zone 18N
Maine	UTM Zone 19N

Q: What do the Shadow and Mappable items do?

A: Shadow displays a "shadow" map of areas where 20/20 recorded data, but the data is not being analyzed on the current map. For instance, when viewing planting data, the shadow option will show the turn-arounds where the planter was moving, but not planting.

The filter box includes two parameters that are useful. The other parameters are not enabled in FOViewer. (See the answer to the "features that don't seem to do anything" question above)

Mappable:	Maps areas where the planter was seeding.
Not Engaged:	Maps the areas where the planter was not seeding. (Planting not engaged)
<All Others>:	Not enabled in FOViewer.