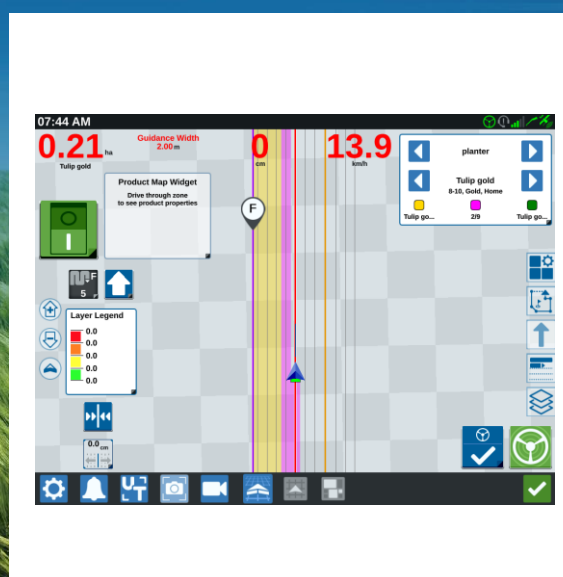
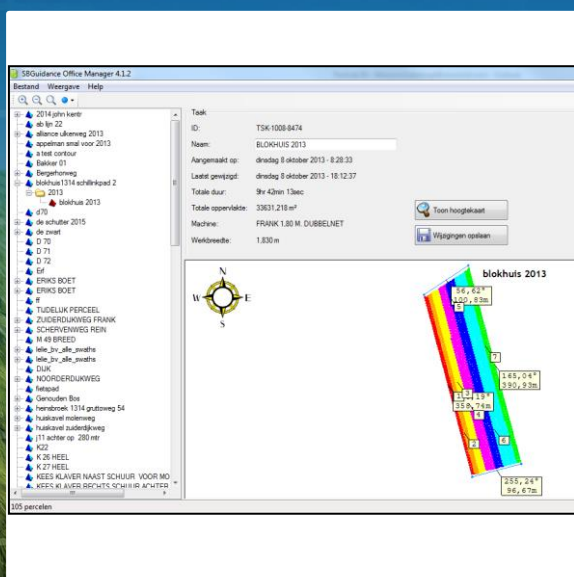




# CRX/SBGUIDANCE OFFICE MANAGER

016-8000-005EN REV. B



User Manual  
(English) (Original)





**Warning!:**

*All persons involved in the installation, commissioning, operation, maintenance and repair of this product must be provided with these instructions.*

Name of device:	
Type designation:	
Manifold serial number:	
Terminal serial number:	
Steering Controller serial number:	
DynamIQ serial number:	
Year of manufacture:	
Options:	
Installed software modules:	
1	
2	
3	
4	
5	

Your dealer:

## PREFACE

This user manual is intended for persons responsible for the operation of the CRx and/or SBGuidance software module Office Manager. This manual contains important instructions that should be followed when operating your SBGuidance software Office Manager. Therefore, this manual should have been read and understood by the responsible personnel before! commissioning and must always be present with the device.

This manual has been created with the utmost care. SBG Precision Farming does not accept any liability for errors or omissions in this document.

Any comments or questions may be sent to [service-eu@ravenind.com](mailto:service-eu@ravenind.com)

**SBG Precision Farming or any of its suppliers cannot be held liable for any physical or material damages caused during the use of the SBGuidance system.**

This user manual uses a number of terms to particularly draw your attention to a number of things.



**Hint!:**

*Provides recommendations on how certain activities can be performed much easier.*



**Please note!:**

*Indicates certain problems that the user should take note of.*



**Caution!:**

*Indicates that the machine can be damaged.*



**Warning!:**

*Indicates a risk of injury.*

## DISCLAIMER

### WARNING!

- The safety instructions contained in the manuals of the tractor or implements must be complied with at all times.
- Always switch off the tractor before installing or repairing hydraulic and electrical components of the SBGuidance system.
- It is strictly prohibited to use the SBGuidance system on public roads.
- It is strictly prohibited to leave a driving vehicle unattended when the SBGuidance system is switched on. The driver is always responsible for the direction and course of the vehicle.
- To prevent injury or fire, replace defective fuses only with fuses of the same type and amperage.
- The SBGuidance the operating system is not able to detect and avoid obstacles. If there is an obstacle in your path, you will always need to take action for it to be avoided.
- Only allow authorized/qualified persons to operate the system. Authorized/qualified persons are defined as: persons who have read and understood the manual, have been given instructions by a product specialist, and who are both physically and mentally fit and able to operate the system.
- The system contains moving parts! Make sure the immediate environment is clear of people before operating the system.
- In case of system failure or breakdown switch of the tractor and disconnect the electrical power source to avoid further damage. Contact your dealer for further instructions on how to repair your system.
- Always wear personal protective equipment when operating/adjusting/repairing the system outside of the tractor cab.
- In order to prevent power surges from occurring, always start the machine first, before initiating the SBGuidance control system.

### PAY ATTENTION!

- Only touch the touch-screen with your finger or by using a special touch-screen stylus/pen. Operating the touch-screen with sharp objects may cause permanent damage to the screen.
- Always consult your supplier as to which products are best suited first before cleaning the touch-screen with chemicals or alcohol.
- If the terminal is not used for a long period, better remove the terminal from the tractor and store in a heated environment. This will extend the life span of the electronic components.
- To prevent theft, it is better to not let the terminal and GPS-antenna unattended in the tractor on the field.

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# 1 DOWNLOADING OFFICE MANAGER

Download the Office Manager from the website:

<https://portal.ravenprecision.com>

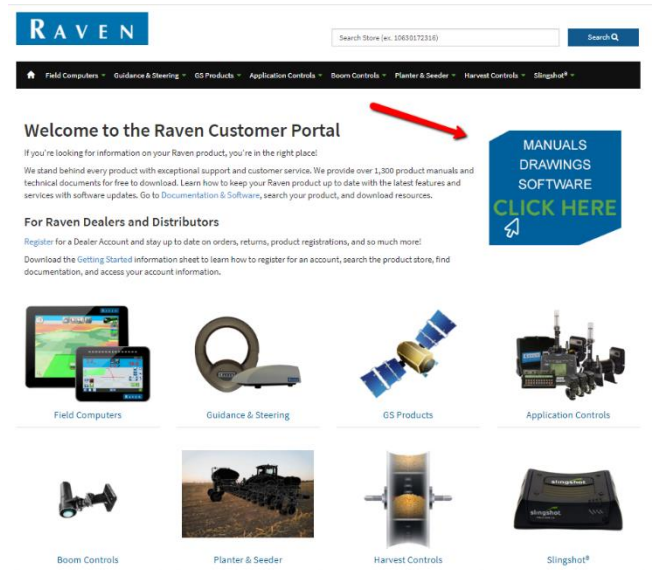


FIGURE 1 RAVEN PRECISION PORTAL

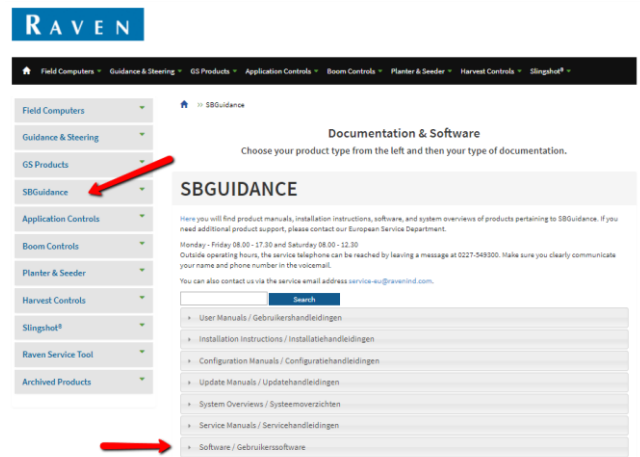


FIGURE 2 SBGUIDANCE DOCUMENTATION & SOFTWARE

## 2 IMPORTING FILES - SBGUIDANCE

Plots and crop registrations may be imported from the USB drive onto which the plots have been exported from the terminal in the vehicle (make sure the plots are exported as a .KML file and not as a .SHP file).

For importing into the Office Manager, go to File > Import. The USB drive will be read (Figure 3). Use the 'combine files' function to combine files from the USB drive with the files that have already been imported into the Office Manager.

Use the 'replace existing files' function' (Figure 4) to replace files that have already been imported into the Office Manager with the files that are on the USB drive and are to be imported. The plot and the registration are displayed as shown in Figure 5.



FIGURE 3 IMPORT DATA



See Chapter 9 for an overview of messages that may occur during importing.

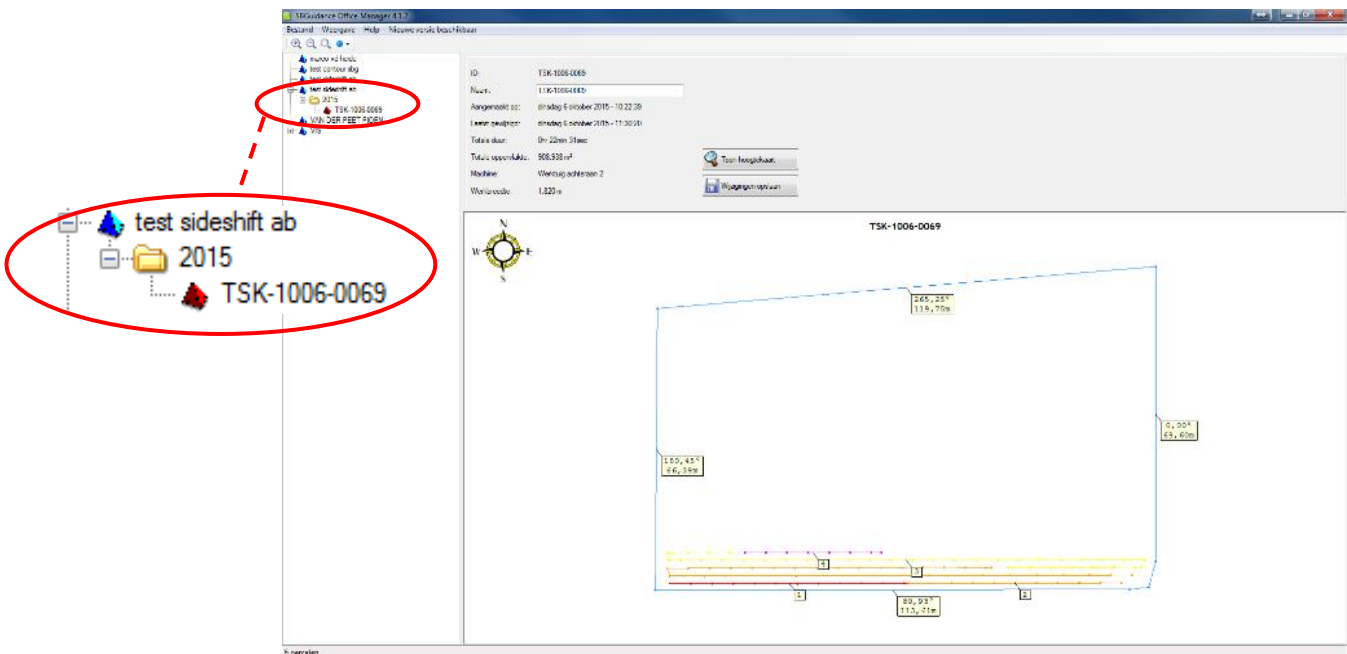


FIGURE 4 MAP VIEW

### 3 IMPORTING FILES - CRX

The office manager reads the CRx crop registration from the created job-files (.JDP). Jobs can be imported from USB drive or VTD. When importing jobs, go to File > Import, and select Raven Data for Type. Secondly choose the correct file location at Source.

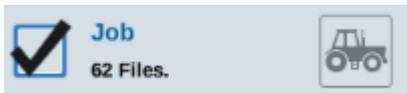


FIGURE 5 CRX JOB FILES

To to create a VTD link, go into File > Settings and press on the browse option behind Virtual Thumb Drive (VTD). Select the vtd folder of your local storage, which is connected to your terminals. Press Apply and OK to finish and VTD is available as source location.

After importing the job data, you can find the GFF structure of the imported jobs in the Raven tab.

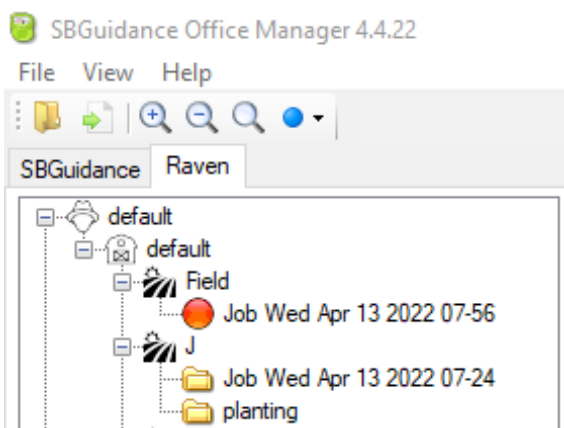


FIGURE 6

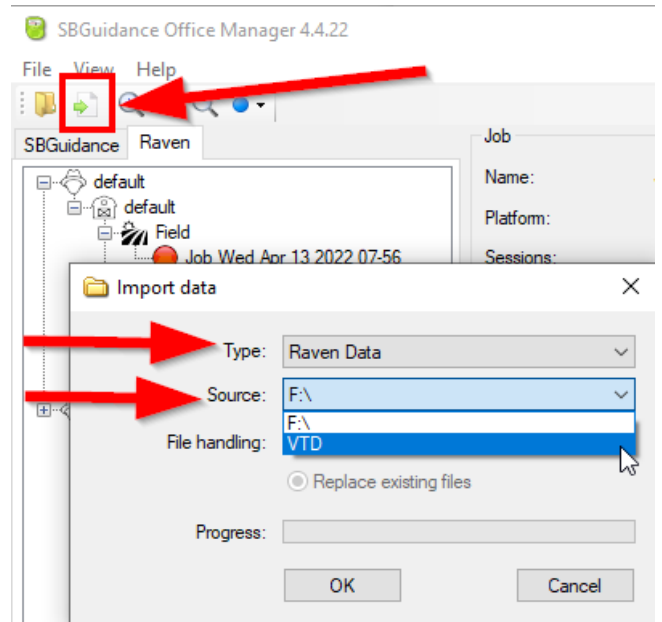


FIGURE 7

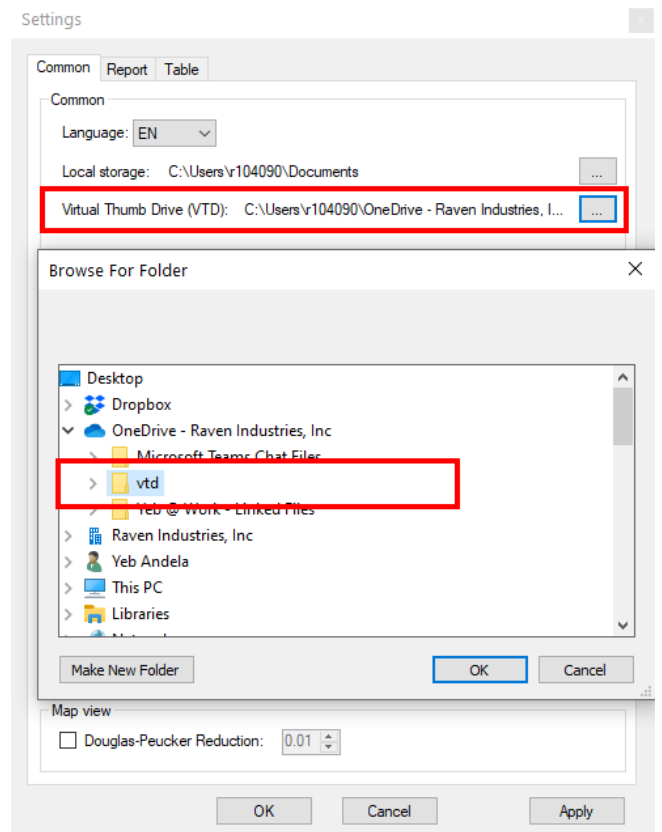


FIGURE 8



## 4 VIEW

In the View tab, different view options may be selected. Figure 9 View options shows that either the option table view (Table, F5) or the option map view (Map, F6) may be selected.

### Map (F6)

The map view has already been shown in Chapter 2.

### Table (F5)

The table view is shown in Figure 11.

### Hide reference line labels / registration labels

There are two options available: the labels (in map view) for both reference lines and registrations may be either hidden or shown.

### Show all lines

Unregistered lines are shown as well. These are lines that have been driven but have not been registered.

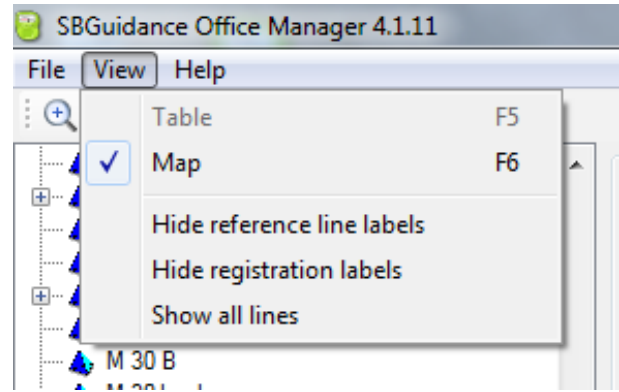


FIGURE 9 VIEW OPTIONS

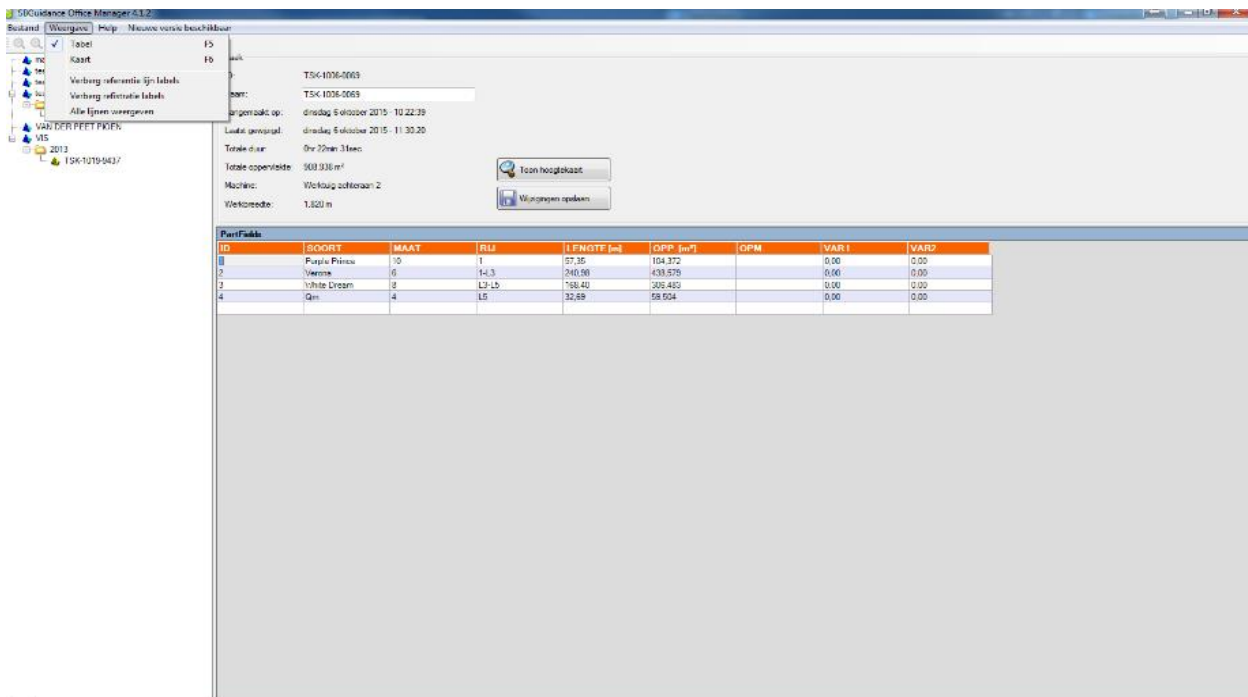


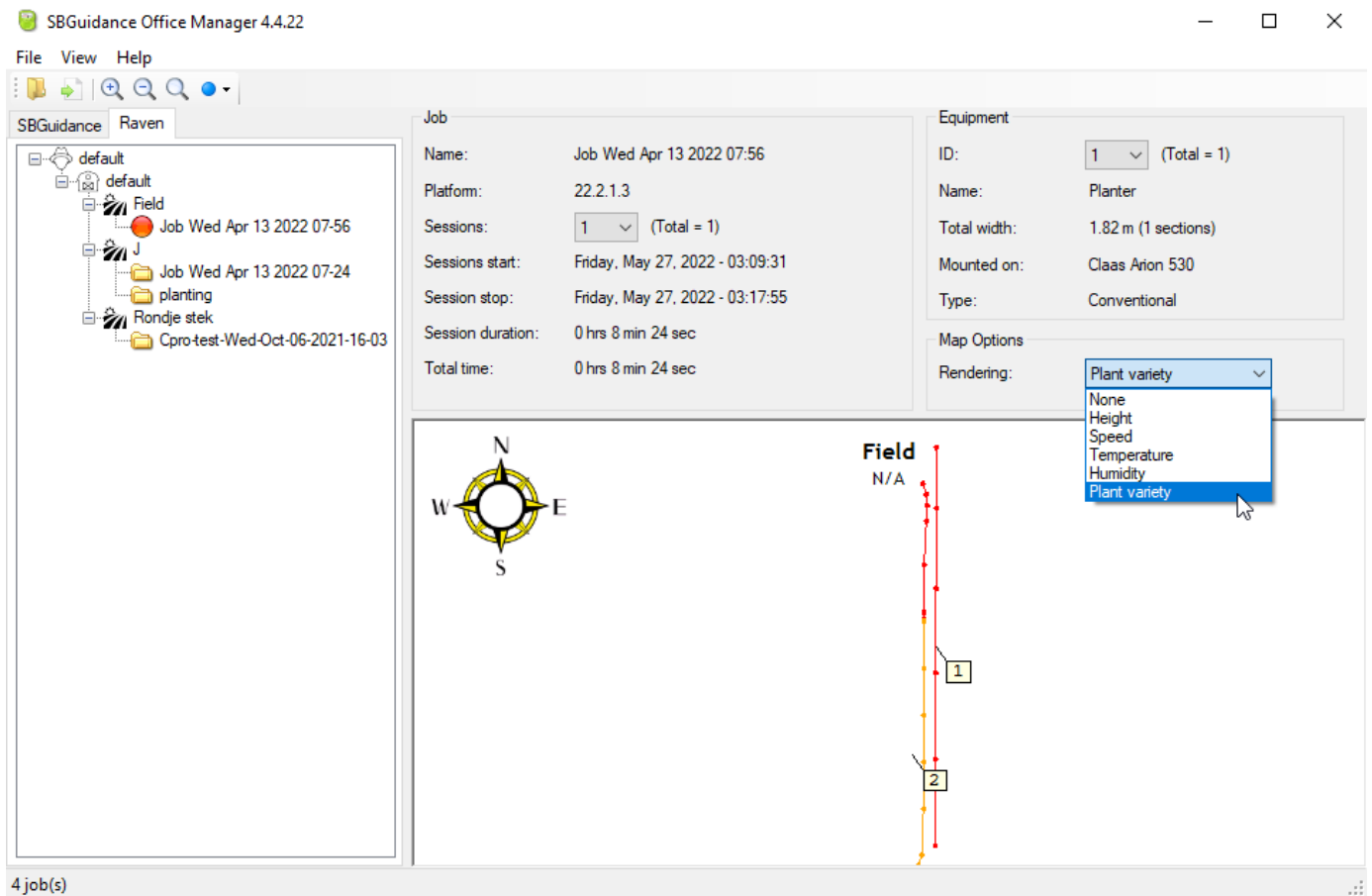
FIGURE 10 TABLE VIEW

## 5 DATA - CRX

In the map view of the Raven data, you can find the job data on top of the screen. At the lower right drop down list, you can switch between which data you want to see: Height, Speed, Temperature, Humidity or Plant variety. To clean up your registered data, go into File -> Settings -> Common



For Raven data enable 'Use machine input signal' will only show the data recorded when the Master Switch was in the on-position..



The table view will show at least the registration the table ID and the belonging properties added to the registration in the terminal. You also can add information like GFF and machine, therefore go into File-> Settings -> Table.

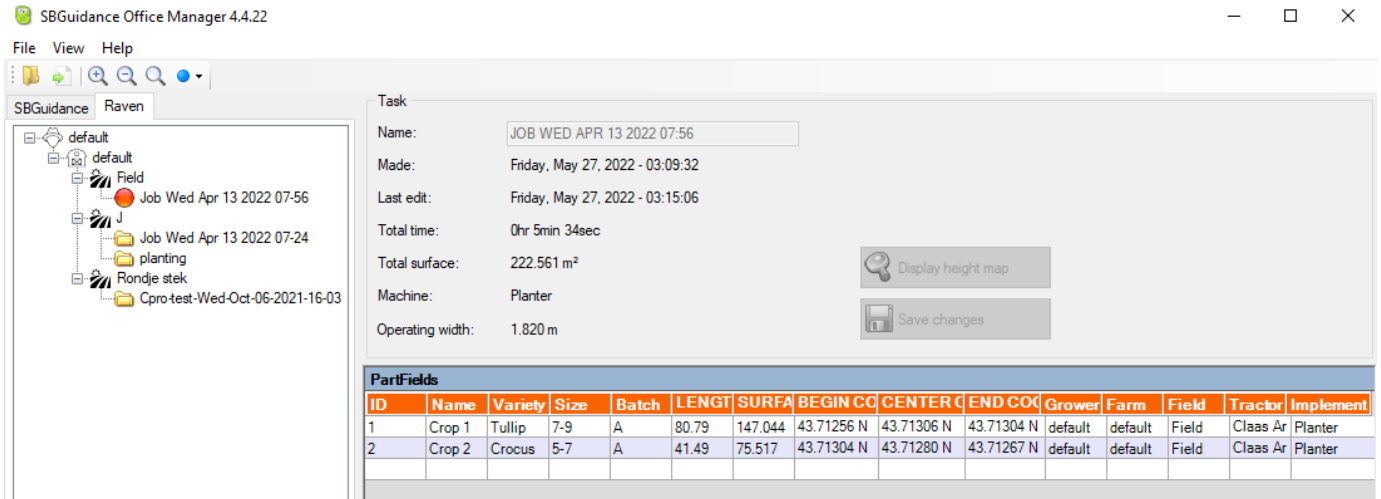


FIGURE 11

## 6 PROGRAM SETTINGS

Via File > Settings > General, various settings may be changed and switched on or off (Figure 12). Not all settings comply to the Raven data. These exceptions are marked with (\*). The following is a description of the different functions:

- Only lines parallel to the AB line

*Tick this option if you wish to exclude line segments NOT parallel to the AB line, such as those on the headland. The Margin determines the tolerance of this method. This is only possible when AB lines are used and does not work when a contour is used.*

- Only use points with switched-on automatic  
*Tick this option if you only wish to use line segments on the condition that the automatic GPS was switched on. In the case of tractor steering, this excludes all points on the headland. In the case of Side-Shift steering, where the steering has remained active on the headlands, this method is not usable.*

- Use machine input signal

*For SBGuidance, when the machine link is used to activate the registration, this option must be enabled to only get the measurements in which the planter/seeder is switched on.*

*For CRx, this option must be activated to get the measurements in which the Master Switch was active.*

- Remove distances between measurement points ignore larger than x metres

*It may happen that two successive measurements are very far from each other, for example when a registration has been started/paused incorrectly. This setting allows you to ignore these distances when calculating the total length.*

- Unit area

*The options are hectares (ha), m2, ares and Rijnlandse Roede (common in the Netherlands).*

- Standard working width

*Enter the working width used during registration of the data.*



(\* settings do not comply to the Raven data.



For Raven data enable 'Use machine input signal' will only show the data recorded when the Master Switch was in the on-position

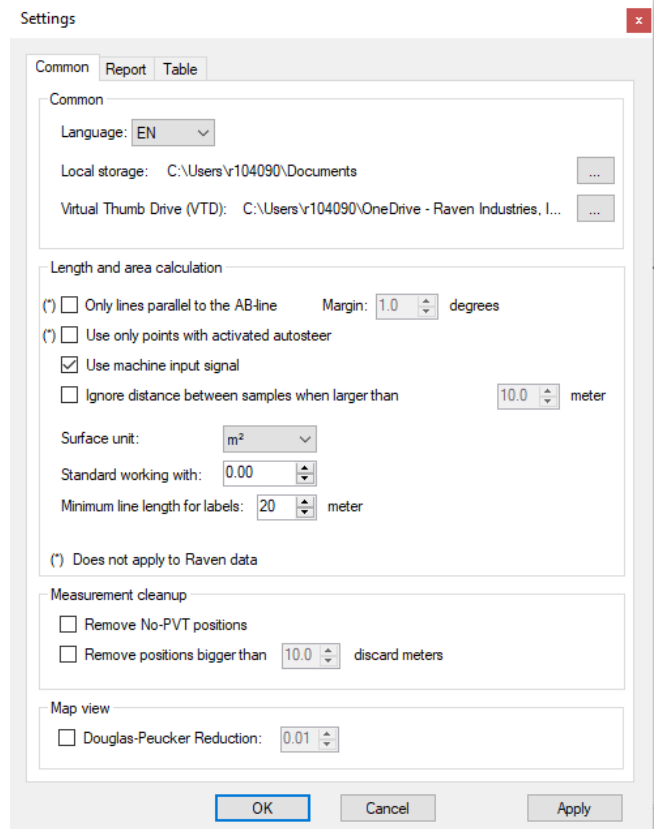


FIGURE 12

- Delete No-PVT positions

*This is a measurement where the GPS receiver was not able to calculate a position (for example under a row of trees). These measurements are removed if this option is checkmarked.*

- Remove position outliers delete larger than x metres

*When the GPS receiver falls back to a less accurate solution, e.g. from an RTK to a standalone solution, outliers of several metres may be prevented. Outliers longer than the specified Distance relative to the previous measurement are removed.*

- Douglas-Peucker Reduction

*Douglas-Peucker Reduction allows the number of points in the map view to be reduced considerably. This function removes redundant points from a line. For example, a straight line consisting of 100 points will give the same result as a straight line consisting of 2 points (Figure 13). This reduction particularly impacts the export of Crop Registration data to Google Earth.*

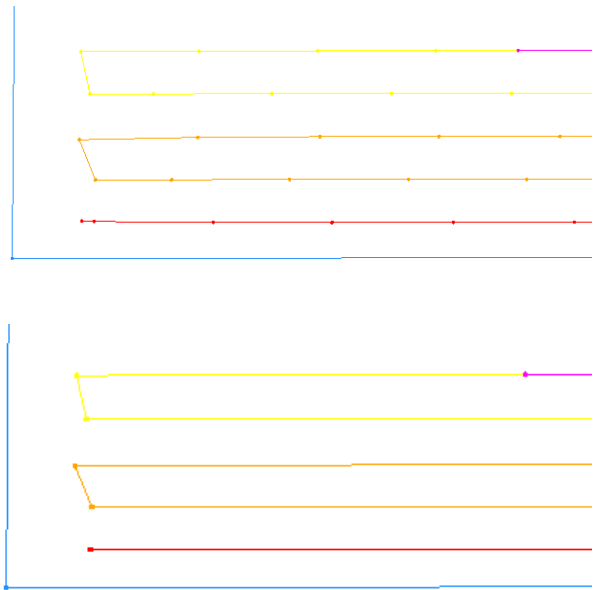


FIGURE 13 DIFFERENCE DUE TO DOUGLAS-PEUCKER REDUCTION

Via File > Settings > Report (Figure 14), a personalised report of the data can be generated. This may be done using;

- Your own logo (\*.jpg;\*.gif;\*.png;\*.bmp)
- Your own company contact details and the customer's contact details
- A personal salutation
- A footnote

Enter your personal details here, and the report may then be generated via File > Report.

Via File > Settings > Table, you can indicate which columns should be shown in the table (Figure 15).

Here, VAR1 and VAR2 are the values of the counter when a counter (Pink Counter) is connected to the planting machine and the SBG system. VAR1 is the desired number of bulbs per metre and VAR2 is the counted number of bulbs per metre. When the Pink Counter is not connected, these values are always 0.00.

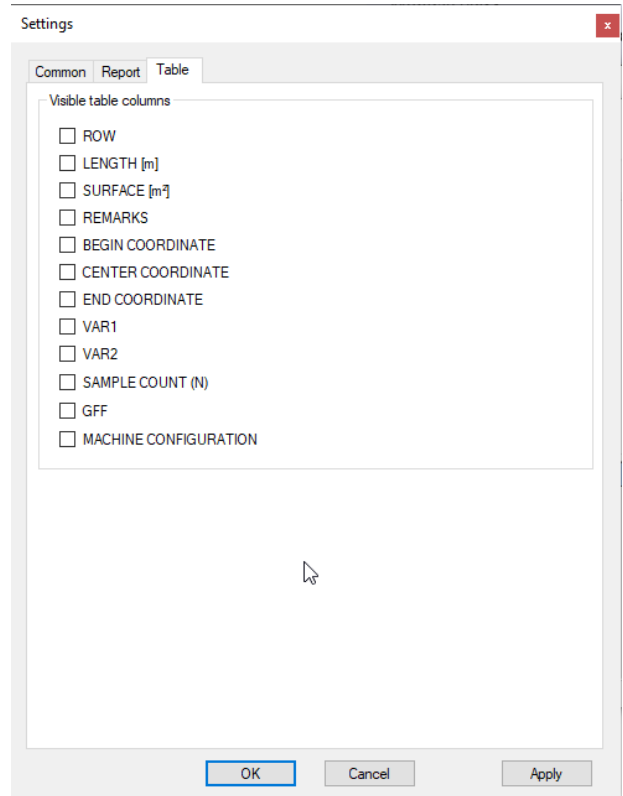


FIGURE 14 TABLE SETTINGS



FIGURE 15 PERSONALISING REPORT

## 7 EXPORTING DATA

Via File > Export, the data may be exported in various manners (Figure 16).

### Google Earth (Task data) (CRx + SBG)

- Generates a .KML file showing the plot and the registration in Google Earth of the selected field

### Google Earth (All plots) (SBG only)

- Generates a .KML file showing all plots present in the Office Manager in Google Earth.

### Excel (Task data) (CRx + SBG)

- Generates a .CSV file showing the raw data points of the registration in a table, linked to date, time, position and GPS mode.

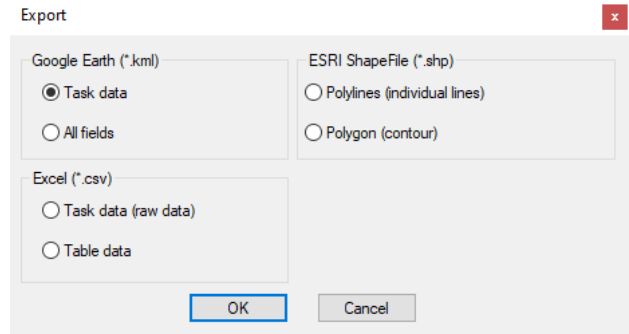


FIGURE 16 EXPORTING DATA

```
exceloutput.csv - Notepad
File Edit Format View Help
[id;Name;ProductId;Variety;Size;Batch;;;Date;Time;Latitude;Longitude;Altitude;X;Y;NrSV;GpsMode;SteeringMode;OperationMode;RowNr;Rating;Var1;Var2
0;Crop 1;0;Tullip;7-9;A;;;20220527;03:09:32.0;43.7125582;96.7128945;0.000;-2.719;-50.992;0;0;0;0;0.00;0.00;0.00
0;Crop 1;0;Tullip;7-9;A;;;20220527;03:13:06.0;43.7127302;96.7127433;0.000;9.469;-31.886;0;0;0;0;0.00;0.00;0.00
0;Crop 1;0;Tullip;7-9;A;;;20220527;03:13:11.0;43.7128476;96.7127426;0.000;9.519;-18.837;0;0;1;0;0.00;0.00;0.00
0;Crop 1;0;Tullip;7-9;A;;;20220527;03:13:16.0;43.7129649;96.7127422;0.000;9.555;-5.809;0;0;1;0;0.00;0.00;0.00
0;Crop 1;0;Tullip;7-9;A;;;20220527;03:13:21.0;43.7130796;96.7127418;0.000;9.587;6.942;0;0;1;0;0.00;0.00;0.00
0;Crop 1;0;Tullip;7-9;A;;;20220527;03:13:26.0;43.7131891;96.7127414;0.000;9.617;19.100;0;0;1;0;0.00;0.00;0.00
```

FIGURE 17 EXPORTED TASK DATA

### Excel (Table data) (CRx + SBG)

- Generates a .CSV file showing the data of the registration as can be seen in the table form the Office Manager table view.

```
export excel 2.csv - Notepad
File Edit Format View Help
id;name;variety;size;batch;length [m];surface [m²];begin coordinate;center coordinate;end coordinate;n
1;Crop 1;Tullip;'7-9;A;80.79;147.044;'43.71256 N - 96.71289 W;'43.71306 N - 96.71276 W;'43.71304 N - 96.71276 W;15
2;Crop 2;Crocus;'5-7;A;41.49;75.517;'43.71304 N - 96.71276 W;'43.71280 N - 96.71278 W;'43.71267 N - 96.71281 W;10
```

FIGURE 18 EXPORTED TABLE DATA

### ESRI ShapeFile (Polylines) (SBG only)

- Generates an .SHP file to be read into other GPS systems (when using AB line).

### ESRI ShapeFile (Polygon) (SBG only)

- Generates a .SHP file to be read into other GPS systems (when using Contour).

## 8 REMOVE PLOTS AND REGISTRATION

Plots (and registrations) may be removed to prevent the list of plots from getting very long. The files are saved to the My Documents folder on the computer.

After importing, a folder 'SBG' has been created in the Documents folder on the Local Disk (C:) containing the folders 'Fields', 'GFF', and 'Settings'. The Fields-folder contains all SBGuidance date, where the GFF-folder contains the CRx data. (see Figure 19).

The folder 'Fields' contains the plot files (.KML format) and a folder 'TaskData' (see Figure 20) containing the registration files (per year).

Here the plots may be removed so that they are no longer shown in the Office Manager.

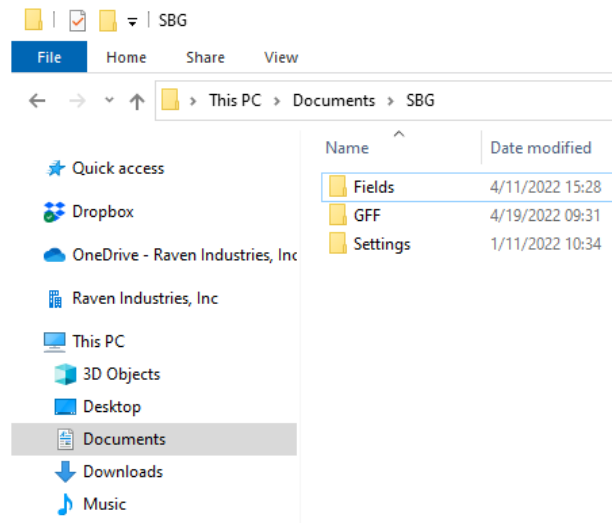


FIGURE 19 LOCATION OF FILES

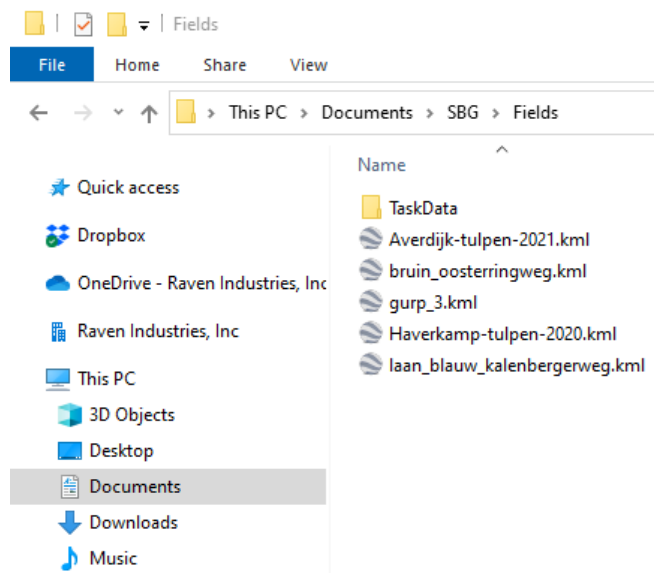


FIGURE 20 CONTENTS OF SBG DOCUMENTS



## 9 COMMON ERRORS DURING IMPORT

Possibly importing plots or the corresponding registration will not proceed according to the above steps. This chapter provides solutions to common errors during importing.

### **One or more of the crop registration files are missing (Figure 21)**

- Export the plots from the SBG terminal again.

### **The plots are not imported**

- Check if the plots on the USB drive are in the folder 'export' and the file format is .KML.

### **The plots are loaded, but the corresponding registration is not**

- Check if the folder 'TaskData' on the USB drive is in the folder 'export'.

### **When importing the crop registration, Office Manager indicates that the file containing the crop registration is possibly damaged**

- Export the plots from the SBG terminal again.

### **Not all registration is shown in the plot**

- Export the plots from the SBG terminal again.
- Check in the SBG terminal if the registration in the plot has been done correctly (load the plot and look at the registration). If the registration has gone wrong, this is the cause of it not being shown.

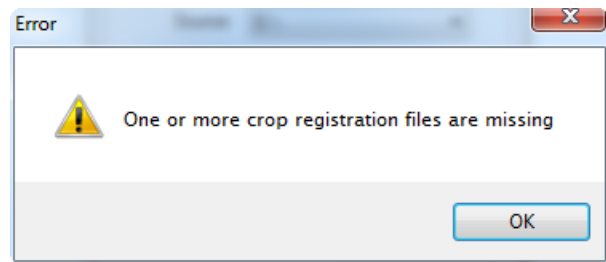


FIGURE 21 ERROR MESSAGE CROP REGISTRATION

Nieuwe Steen 5  
1625 HV Hoorn  
The Netherlands

Phone: +31 227 54 93 00  
Web: [www.raveneurope.com](http://www.raveneurope.com)  
Email: [service-eu@ravenind.com](mailto:service-eu@ravenind.com)

**R A V E N**