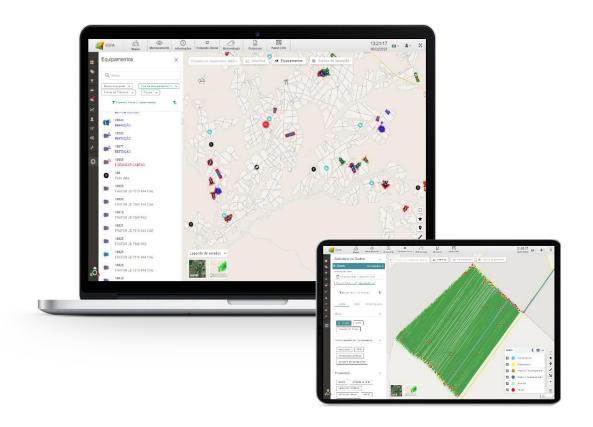


Changelog

SGPA3 Automated Process Management System



Changelog Version 2024/251 Period: 11/05/2024 to 11//11/2024 Revision 00

Date: 11/26/2024

Some applications mentioned in this report may not be available in the feature pack in your SGPA $3.0\,$



Thank you for being a SGPA 3.0 user!

We update our system in order to fix bugs, improve performance and add new features to bring a better user experience and contribute to a management with greater quality and efficiency.



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1. SGPA3

1.1 Improvements

1.1.1 Maps / Monitoring – Water Resources Management

In order to improve Water Resources Management, the "RGH" module was implemented and is available within the Maps and Monitoring modules. This new module allows viewing of two new features: the "Applied Blade" map, which shows the amount of water used for irrigation over a given period, and the "Water Balance" map, which calculates the soil water balance considering data from meteorological equipment and equipment configured with the "83 - Irrigation Monitor" type. More details about the two maps are provided below:

- The Applied Blade map provides an intuitive visualization for the client to analyze the water distribution on their farm, being able to compare this data with the irrigation planning, in order to guarantee operational quality.
- The Water Balance map presents information with the aim of assisting in irrigation planning, as it is possible to identify points of water deficit, thus being able to reallocate irrigation.

Currently, the new functionality serves Perennials Vertical. The release will occur through a commercial agreement and with a request via IT Support.



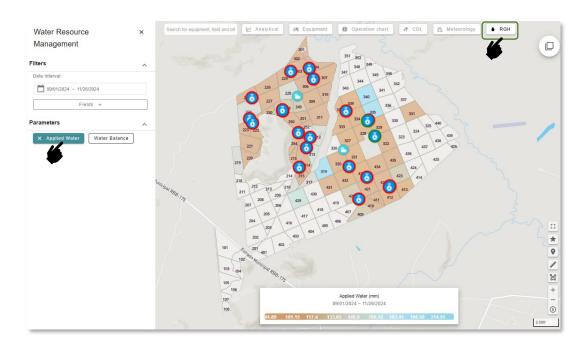


Image 01 – Module "RGH" with the map (parameter) "Applied Blade" activated

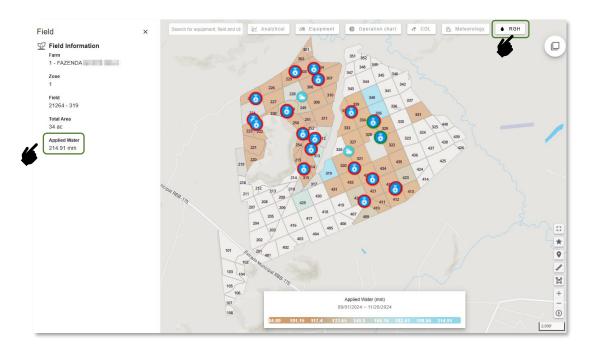


Image 02 – With the "Applied Blade" map (parameter) activated, displays the "Applied Blade" information when clicking on the field



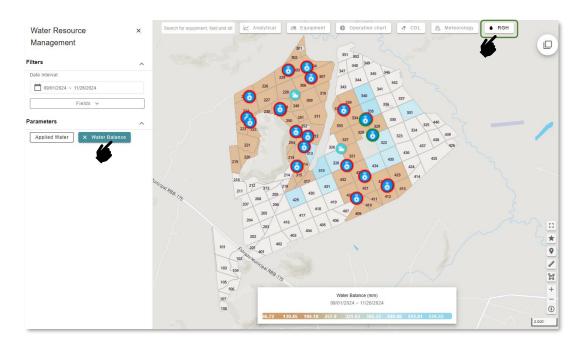


Image 03 – "RGH" module with the "Water Balance" map (parameter) activated

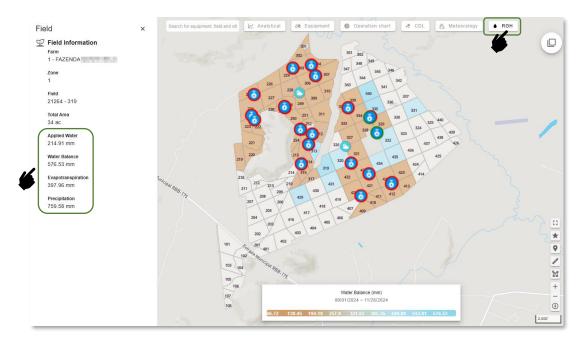


Image 04 – With the "Water Balance" map (parameter) activated, it displays the information on "Applied Blade", "Water Balance", "Evapotranspiration" and "Precipitation" when clicking on the field

Go to Top Menu > Maps and Monitoring > Top menu within the map > RGH

Available for Perennial Vertical Environments and with an active contract for the "Water Resources Management" module.



1.1.2 Maps – Fertirtigation / Irrigation

Improvements have been made to the "Fertigation/Irrigation" maps to add the new "Application Failure Area" map. This new feature aims to generate a view that contains only the areas where there was no application, allowing the customer to identify application failures and take corrective measures. The unapplied areas will be displayed highlighted in red and, when clicking on the red area of a field, details about the unapplied area of the corresponding field will be displayed. By generating the "Application Failure Area" map together with the "Stretching Id" line map, it will provide better data analysis.

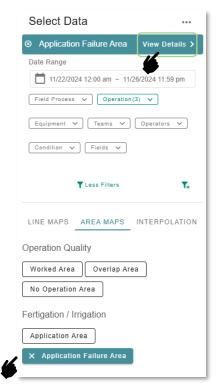


Image 05 – Shortcut to the new "Application Failure Area" map.



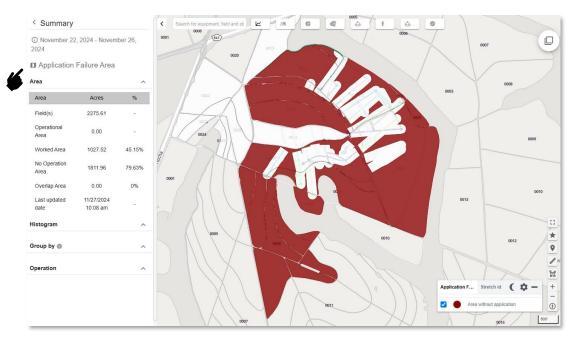


Image 06 – Summary of the "Application Failure Area" map, activated by clicking on "View Details"

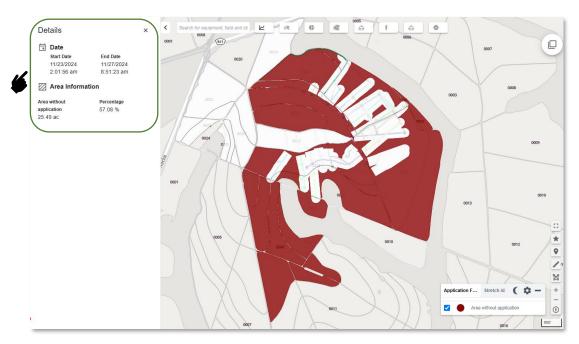


Image 07 – "Application Failure Area" map showing the side menu with Details about the non-applied area of this field, activated by clicking on the red area

Go to Top Menu > Maps > Fertigation / Irrigation > Area > Application failure area

Available for environments that have the "Sprinkler Fertigation" solution active.



1.1.3 Maps and Monitoring – Fields

Improvement made to the Map and Monitoring, for cases where the field has very irregular geometry, in order to display the field description within the corresponding geometry.

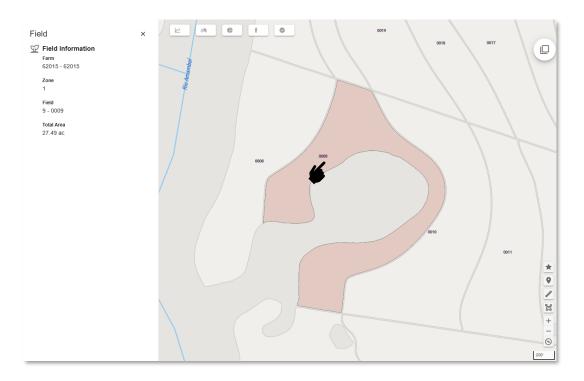


Image 09 – Field with irregular geometry showing description

Go to Top Menu > Maps / Monitoring > Fields.

1.1.4 PBI Reports – Alarms

Improvements have been implemented in the PBI "Alarms" Report for the Sugarcane, Grains and Perennials Verticals. In order to provide greater detail and clarity in data analysis, from as of this version, the information will be presented in the report with the following configurations:



- "Analyze" tab: The % Alarm Duration indicator (hh:mm:ss) has been included in the table to facilitate proportional analysis of the time each alarm was active.
- "Table" tab: The "Alarm Value" columns have been added, indicating the value recorded at the time the alarm was activated, and "Maximum Alarm Value", which shows the maximum limit allowed in the system for that type of alarm.

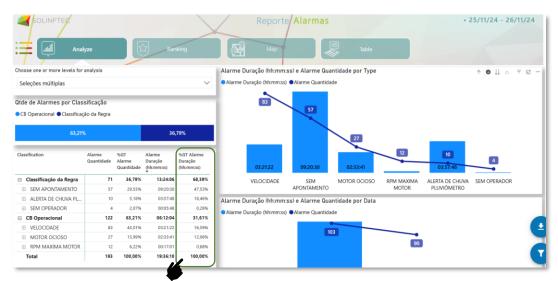


Image 10 – PBI Alarm Report showing the column "% GT of Alarm Duration (hh:mm:ss)" in the "Analyze" tab

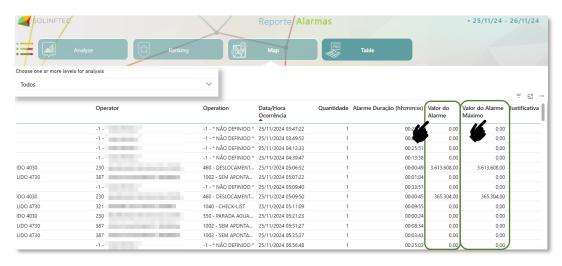


Image 11 – PBI Alarm Report showing "Alarm Value" and "Maximum Alarm Value" columns in "Table" tab

Go to Main Menu > Reports > PBI > Alarms > Analyze and Table Tabs

Available for Sugarcane, Grain and Perennial Vertical Environments.



1.1.5 PBI Reports - Productivity Monitor

Improvement made to the PBI "Productivity Monitor" report, of the Sugarcane Vertical, to add in the "Dashboard", "Agronomic" and "Operational" tabs the indicator "Average Consumption (t/l)", which consists of dividing the Production (t) by the total liters.

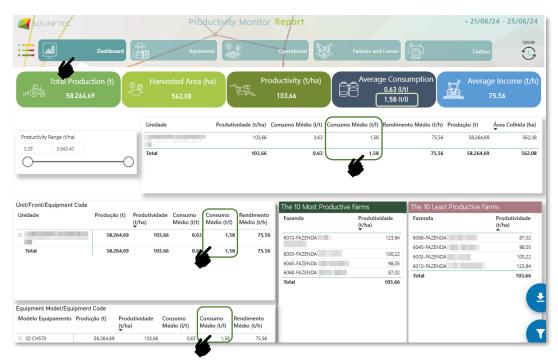


Image 12 – PBI "Productivity Monitor" report displaying the new indicator "Average

Consumption (t/l)" in the "Dashboard" tab

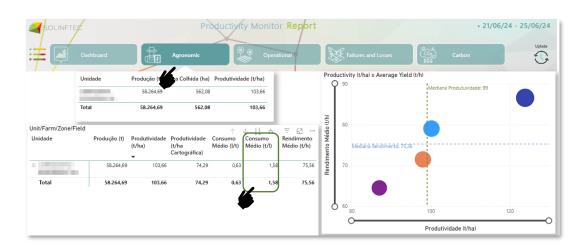


Image 13 – PBI "Productivity Monitor" report showing the new indicator "Average

Consumption (t/l)" in the "Agronomic" tab





Image 14 – PBI "Productivity Monitor" report displaying the new indicator "Average

Consumption (t/l)" in the "Operational" tab

Go to Main Menu > Reports > PBI > Productivity Monitor > Dashboard, Agronomic and Operational tabs

Available for Sugarcane Vertical Environments that have the "Yield/Productivity Monitor" solution active.

1.1.6 PBI Reports – General Diary (Cane)

Improvements have been made to the PBI "General Diary" report for the Sugarcane Vertical. As of this version, the report has new features and views to improve data analysis. The improvements are described below:

Analysis Table: Another level of analysis was included in the table, thus presenting the following level pattern: Unit, Process, Farm (new level), Equipment Model, Equipment and Operator.

Operational Area and Operational Yield Charts: Both charts have been improved and have new levels of detail, presenting the following standard levels: Date, Time, Process (new level), FZT (new level), Equipment Model, Equipment and Operator. To view the new levels, simply enable Drill Down at the top of the charts.



These improvements are designed to provide more detailed and accurate analysis, better meeting operational demands.

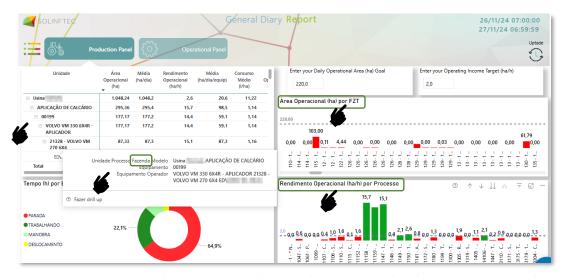


Image 15 – PBI "General Diary" report showing the new "FZT" level in the "Operational

Area (ha)" chart

- Go to Main Menu > Reports > PBI > Map Reports > General Diary
- Available for Sugarcane Vertical Environments.

1.1.7 PBI Reports - Filters

Improvement made to the PBI Report Filters, to implement treatments that consider the most recent change in the links between Unit and Equipment before the filtered period. This improvement aims to ensure that all equipment groups, equipment types and units to which the equipment belonged during the filtered period are accounted for, thus maintaining the equipment history in the report filter.

Use case example: Considering an Equipment that was changed from Unit 01 to Unit 02 on 11/11/2024, when applying the date filter for the period 11/01/2024 to 11/15/2024, the Equipment can be correctly counted as being part of Unit 01 and Unit 02 in that period.



1.1.8 Records - Station/Rain Gauge Type

Improvements have been made to the "Station/Rain Gauge Type" registry. As of this version, when selecting equipment(s) and clicking the "Assign FZT" button, a confirmation screen will be displayed, allowing the user to decide whether to keep or remove the manually edited fields. The use cases are detailed below:

- Keep manually edited fields: In this case, manually added fields remain unchanged, while the others follow the assignment rules based on the radii of the installed sensors.
- Remove manually edited field: Manually added fields are deleted, and all fields are now assigned exclusively based on sensor rules.

In addition, the screen for adding/editing meteorological equipment has been implemented so when selecting the Rain Sensor Type, the Rain Factor will be automatically linked, i.e., the field for manually selecting the Rain Factor is not displayed. In addition, the code has been added in front of the description of the Rain Sensor Type.

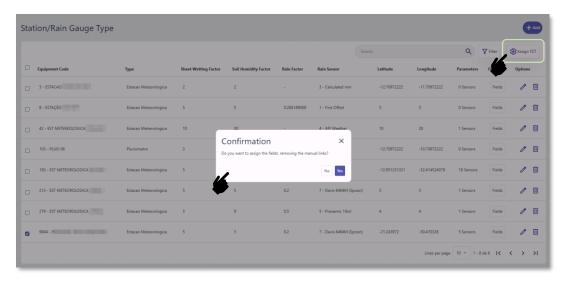


Image 16 – "Station/Rain Gauge Type" registration displaying "Confirmation" screen to choose to keep or remove manually edited fields



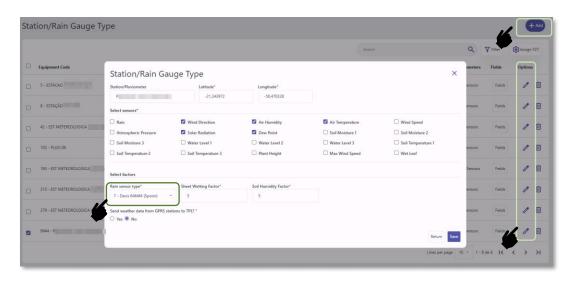


Image 17 – "Station/Rain Gauge Type" registration displaying the equipment addition/editing screen without the Rain Factor field and with the Rain Sensor Type code

- Go to Main Menu > Records > Equipment > Station Type/Rain Gauge
- Available for Environments that have the "Climate" solution active and for the "IT Support" and "Project Manager" User Groups.

1.1.9 Records – Implement Measurements

Improvement have been made to the "Implement Measurements" register, for all types of implements, in order to standardize the layout and improve the visualization of the fields.

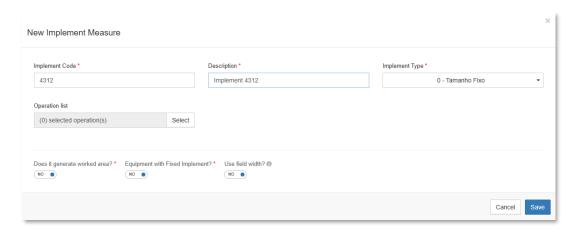


Image 18 – New layout of the registration screen for the "O – Fixed Size" Implement type



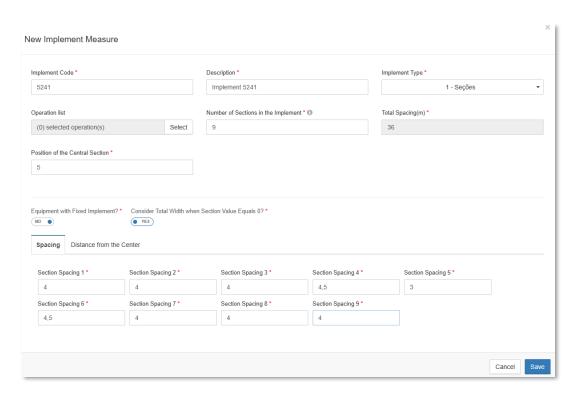


Image 19 - New layout for the registration screen for the Implement type "1 - Sections"

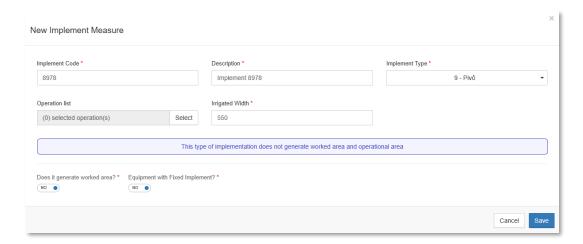


Image 20 - New layout of the registration screen for the "9 - Pivot" Implement type

Go to Main Menu > Records > Equipment > Implement Measurements



1.2 Bugs

1.2.1 Maps - Fertigation / Irrigation

Adjustment made to the "Fertigation/Irrigation" "Application area" map, in order to display in the details only the data with the initial and final date and time of the application, that is, not to count the stretching data.

Go to Top menu > Maps > Area > Fertigation / Irrigation > Application area > Details > Start date and End date

Available for environments that have the "Sprinkler Fertigation" solution active.

1.2.2 Maps - Nozzle Type

Adjustment made to display "Nozzle Type" data in the Line map details when pointing to Spraying operations.

Go to Top menu > Maps > Line > Trail > Details > Nozzle Type

1.2.3 PBI Reports – Weather Conditions

Fix made to the PBI "Weather Conditions" Report, for the Sugarcane,
Grains and Perennials Verticals, in order to ensure greater accuracy in the data on
Accumulated Rainfall, Accumulated Rainfall per Hour and Total Average Rainfall.

Go to Main Menu > Reports > PBI > Climate > Weather Conditions

Available for the Sugarcane, Grain and Perennial Vertical Environments that have the "Climate" solution active.



1.2.4 Maintenance – Board Configuration

Fix made to the Board Configuration screen, to avoid problems in the layout when the "Plate RPM Alarm" field is not filled in.

Go to Main Menu > Maintenance > Solinftec Maintenance > Board Configuration

In case of doubt or further clarification, please contact us via email suporte@solinftec.com.br or call +55 18 3622 2270.