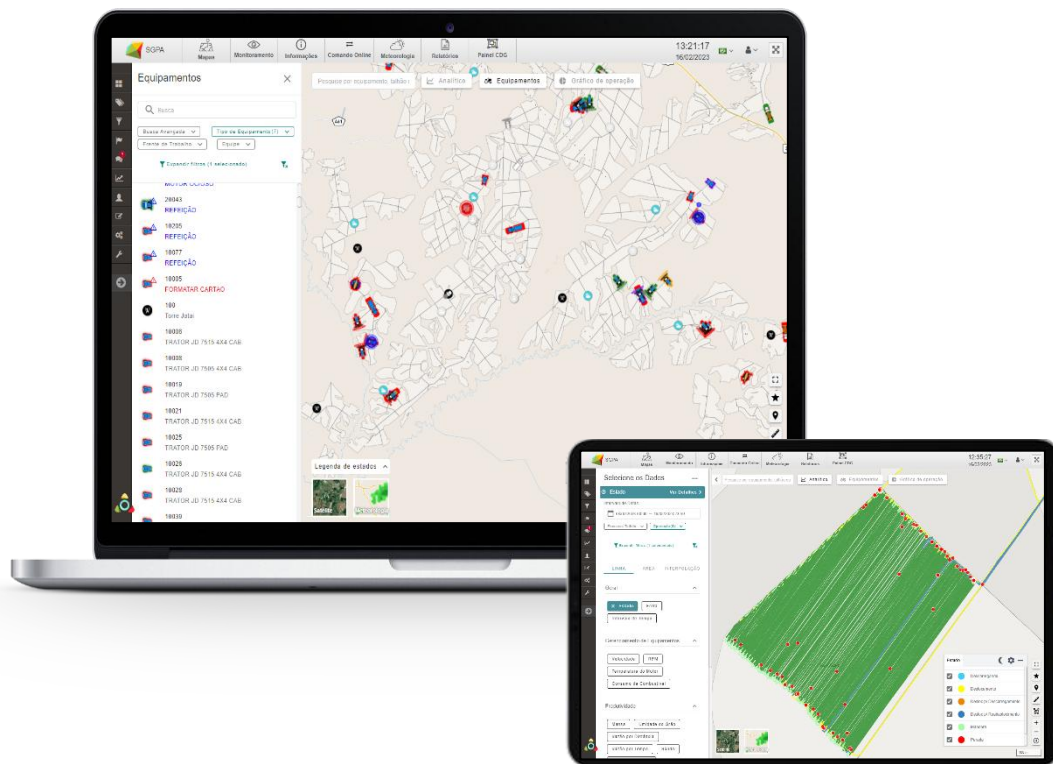


Changelog

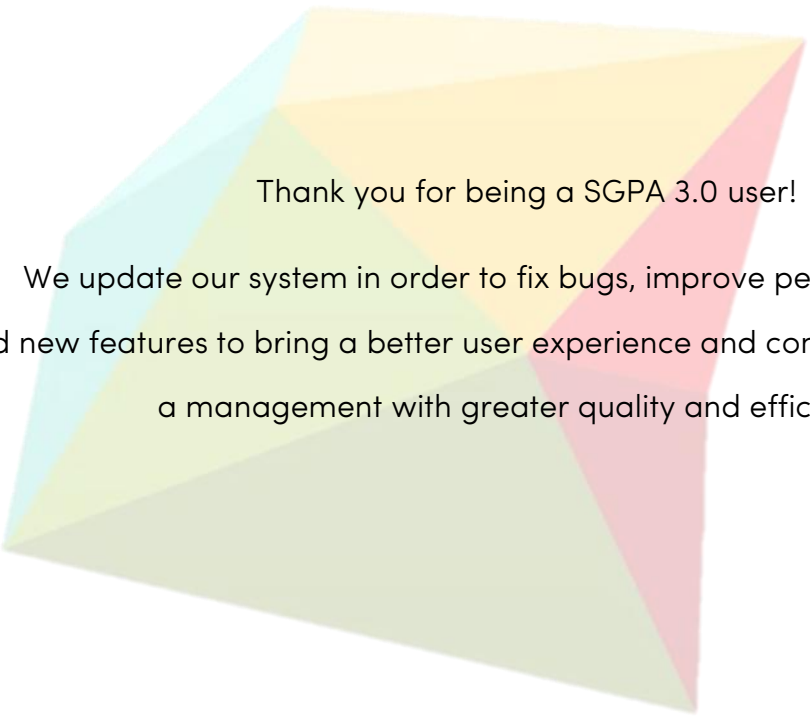
SGPA3

Automated Process Management System



Changelog Version 2025/255
Period: 02/18/2025 to 02/24/2025
Revision 00
Data: 03/11/2025

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 Monitoring – Layout

Aiming to improve usability, as of this version, Online Monitoring will receive some updates to the layout, features and layout of information regarding active and visible equipment on the map.

Below are the main objectives and details of each update:

New metrics dashboard

Give greater visibility to some metrics such as how many devices are online, how many are in Effective and how many alarms are occurring, regardless of the filter below.

Filters

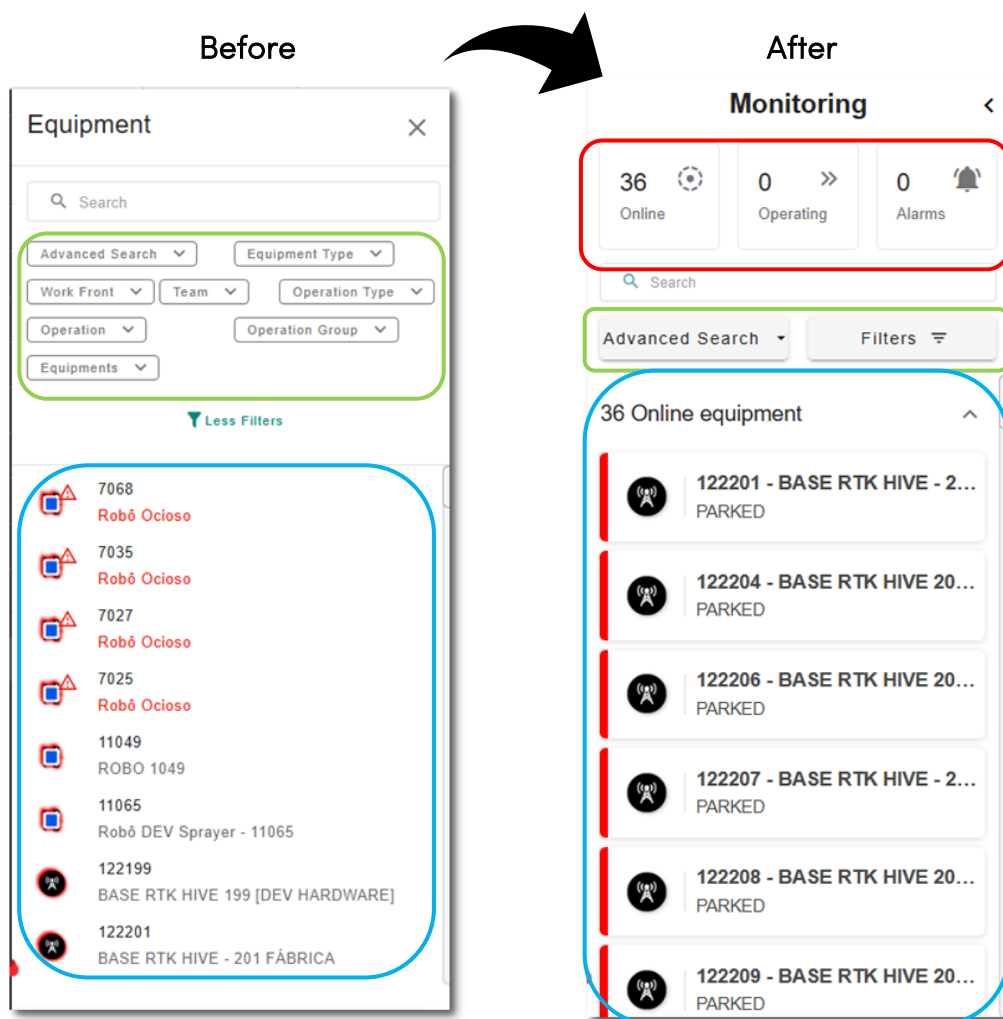
Equipment filters and favorites have been repositioned in a centralized interface, optimizing organization and access to these functionalities. This change aims to make the user's experience more fluid and intuitive, as it avoids the dispersion of resources and brings together all filter options and favorites in a single place. On the next page, more details will be presented on how to navigate this new structure, highlighting the benefits in terms of productivity, ease of use, and standardized maintenance.

Equipment List

In the new organization, each equipment appears on its own card, facilitating identification and ensuring a cleaner disposition of information. The color on the left edge of the card has been implemented to clearly indicate the status of the equipment (e.g., stopped, working, unloading, etc.), helping the user to quickly recognize the operating condition.

In addition, the devices are grouped as "online" or "offline", which can be collapsed or expanded. This makes the list leaner and favors the customization of the visualization according to the needs of each moment. The icon of each equipment has been enlarged to gain more prominence and reinforce the visual association, simplifying the identification of the type of machinery.

Finally, alerts are now less polluted, presenting only the relevant information in the context in which it is needed. In this way, the user suffers less data overload and can quickly focus on any problems or important updates, making the user experience more agile and intuitive.



Figures 01 and 02 – Equipment Menu (Before & After)

Changes to Filters and Favorites

- **Unified Dashboard:** Filters and "Equipment" favorites have been consolidated into a single interface, reducing clicks and simplifying adjustments.
- **Built-in Bookmarks:** Saving a filter is now equivalent to creating a bookmark, keeping everything in the same panel and making it easier to manage.
- **Visual Organization:** The hierarchy of information has been reformulated to reduce overhead and facilitate the identification of options, making the interface more objective.

The unification of features and the new layout make the configuration of filters and favorites more agile and intuitive, contributing to a more efficient user experience.

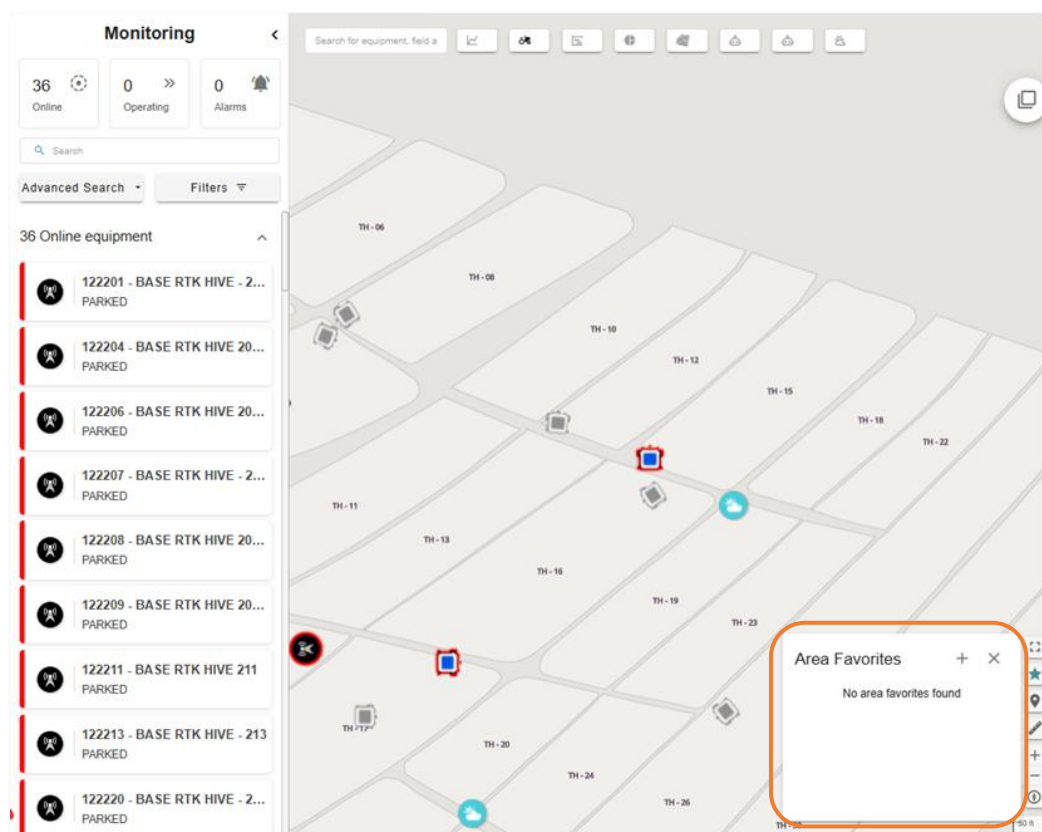


Figure 03 – Area Favorites Filter

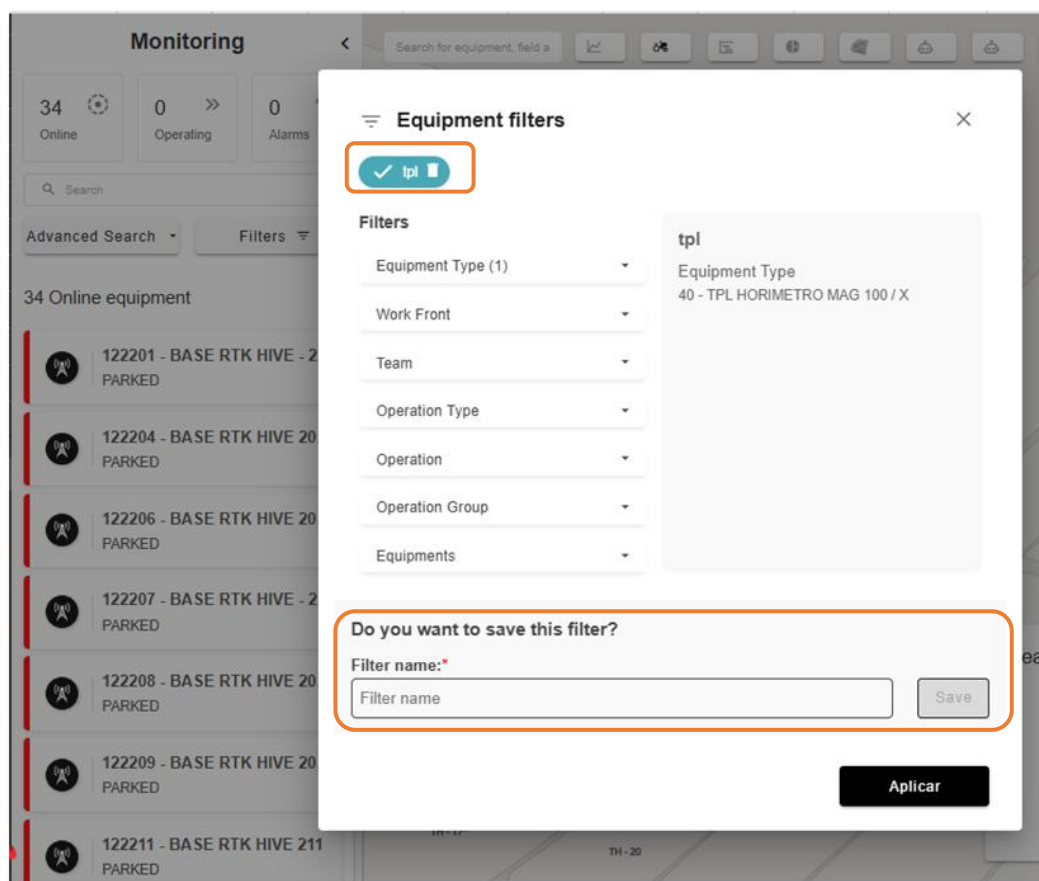


Figure 04 – Equipment Filter & Equipment Favorites

● Title and details

In the previous design, the name and general information of the equipment appeared without much prominence. Now, the title has been repositioned and gained greater visibility, facilitating the immediate identification of the equipment and giving more organization to the interface.

● Zoom

The Zoom function, previously dispersed, was standardized as an icon that follows the most used pattern to locate something on the map. Thus, for both general equipment and robots, this action remains accessible in the same place, ensuring visual and usage consistency.

Analysis modules

Options such as "Trail" or "Command" were scattered in different sections.

Now, each type of equipment brings together its specific functions:

- **Robot:** "Tools" tab for robot actions.
- **General Equipment:** "Analysis Modules" section. This unification

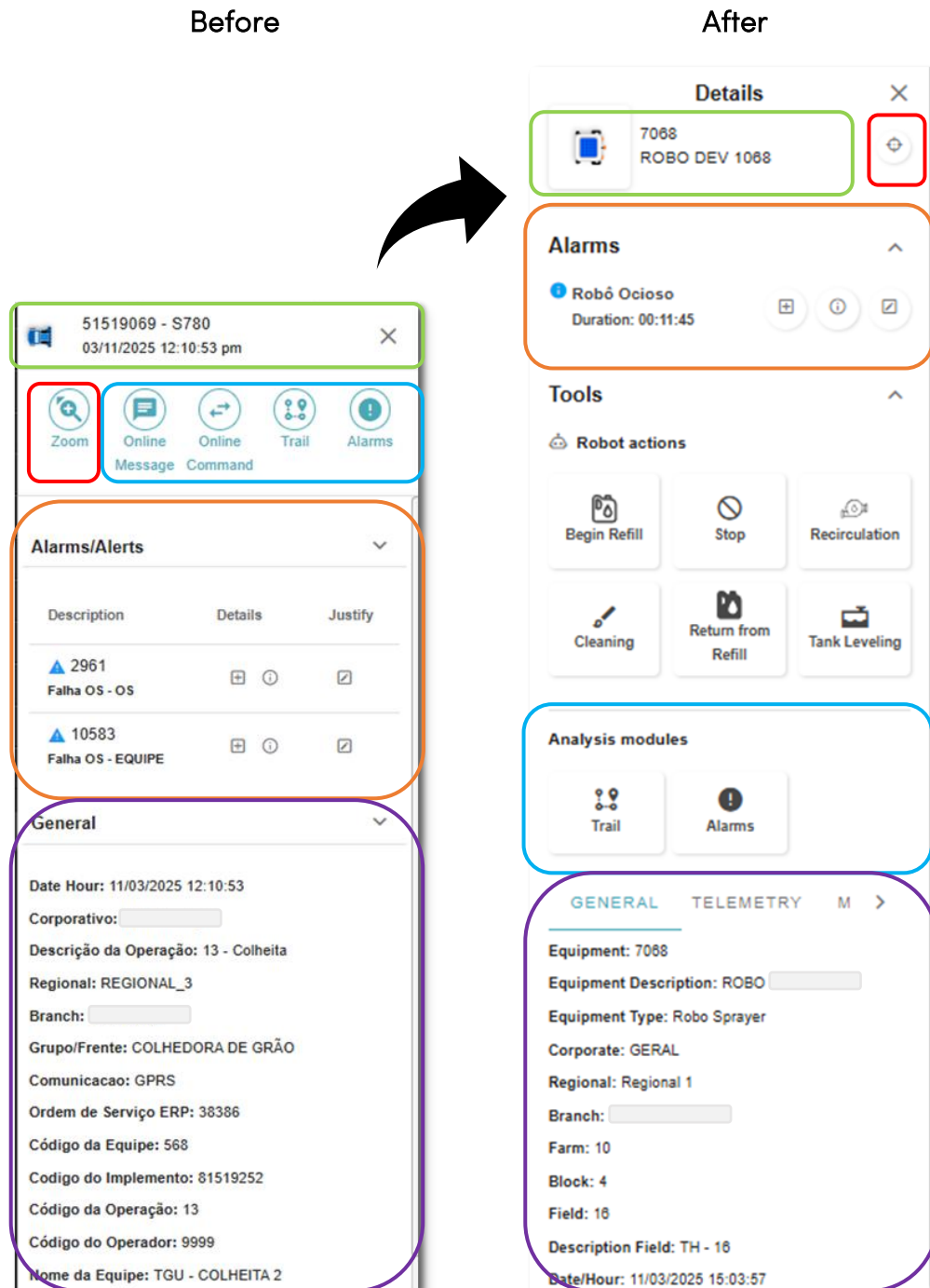
centralizes analysis resources and facilitates access.

Alarms and Alerts

Alarm and alert management has been redesigned for a clearer interface. Instead of long lists, each alert appears in a dedicated tile, displaying description and duration in a lean way. This reduces visual pollution and makes the identification of priority occurrences more immediate.

Information data

For general equipment, tabs that contained duplicate or scattered information (e.g., "General" and "Operational") were merged into General, while data such as "Signals" and "Buscan" moved to Metrics, keeping "Heritage" separate. This reorganization groups related topics, making navigation more objective.



Figures 05 and 06 – Equipment Menu (Details)

1.1.1.1 Solix Robot Equipment

- **Telemetry:** Real-time data from the robot, such as GPS position and operation status, was included. Now it has a new button (the "flag") that allows you

to switch the view mode, offering different layouts (list or cards) according to the user's preference.

- **Tools:** Gathers commands specific to the robot, such as "Cleaning", "Recirculation" and "Stream".

- **Metrics and Equity:** They follow the same organization pattern used for general equipment, facilitating access to operational or maintenance information.

In summary, these improvements make the interface more consistent, organized and easier to navigate, helping the user to quickly locate the necessary resources for each type of equipment.

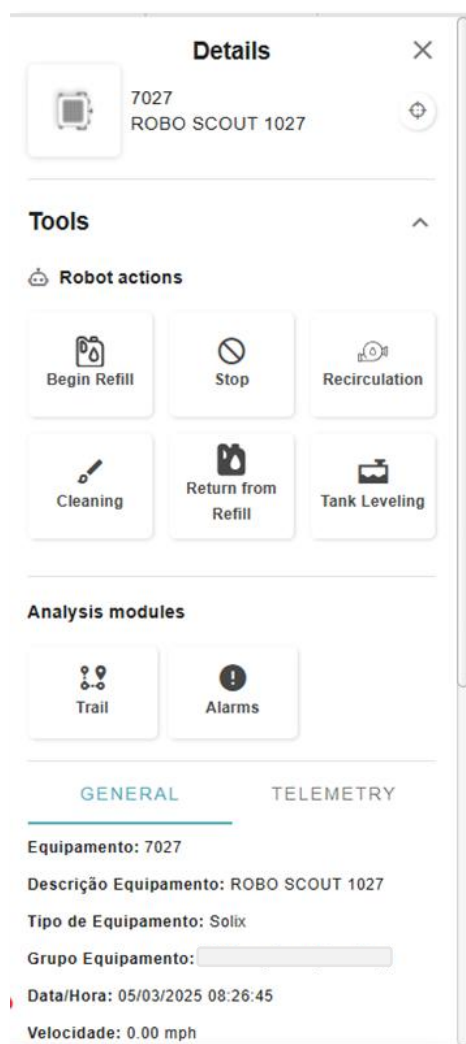
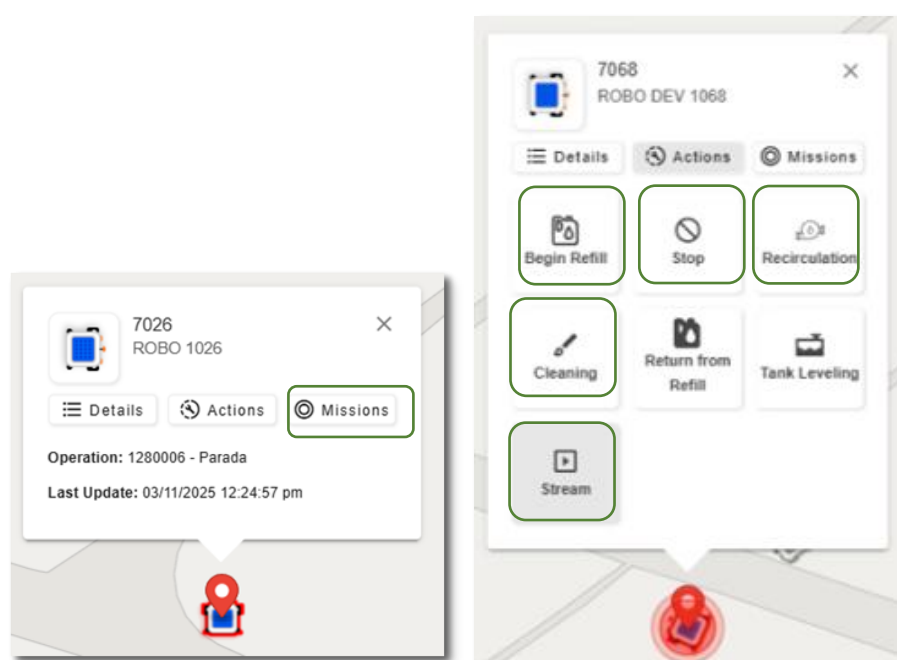


Figure 07 – Equipment Menu (Solix® Details)

- **Exclusive to Solix Robot**

When you click on the robot's icon on the map or select it from the search or equipment list, a pop-up appears that concentrates all Solix's features in one place. Through it, the operator can perform actions such as Start Replenishment, Stop, Recirculation and Cleaning, as well as access the Stream for real-time viewing.

The pop-up also has a shortcut to the technical details of the equipment and offers a direct shortcut to the Mission Panel, already filtered to the selected Solix. In this way, navigation between actions and information is simplified, reducing the need to switch between different screens and providing a more agile and integrated experience.



Figures 08 and 09 – Floating pop-up customized for Solix® Robot equipment type

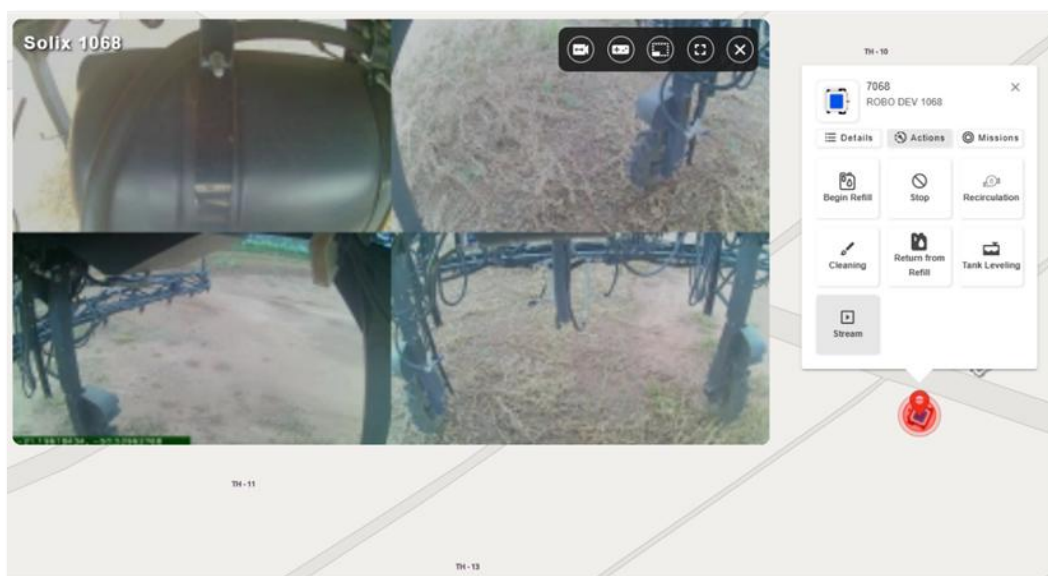


Figure 10 – picture-in-picture Stream Solix® Robot



Go to SGPA3 > Monitoring. Online monitoring with the updated interface, layout and features is only available on the SGPA3 platform. Only equipment type 101 – Solix will receive the updates on the SGP® platform.



Available for all Environments that have the Solix Ag Robotics® module.

1.1.2 PBI Map and Report – Ideal Flow

To improve the presentation of Flow data, from this version onwards the visualization of "Ideal Flow" data will be available in the Maps "Distance Flow", "Flow by Time" and "Flow by Plant", and in the PBI Report "Flow and Calibration", from Vertical Perennials. The indicated flow rate is used to indicate the ideal spray value. This value is defined by the farm management and entered by the operator in the application, where on the screen it will display guidance on the application of the appropriate flow. By sending this data to the SGPA3, it is possible to compare the values pointed out with the pulverized ones, facilitating the evaluation of the accuracy and coherence of the applications.

In addition, the "Flow and Calibration" Report will have the following updates:

- Changes to the table structure, which now features:
 - ➔ Equipment, Operation and Operator Levels.
 - ➔ The new information of "Applied Operational Area (ha)", considering the area where there was flow consumption (l/min) in the effective state.
- New cards with the following indicators:
 - ➔ Average Ideal Flow.
 - ➔ Standard deviation of the Ideal Flow.
 - ➔ Coefficient of Variation.



Figure 11 – Indicate "Ideal Flow" displaying in the Map Trail Details "Distance Flow"

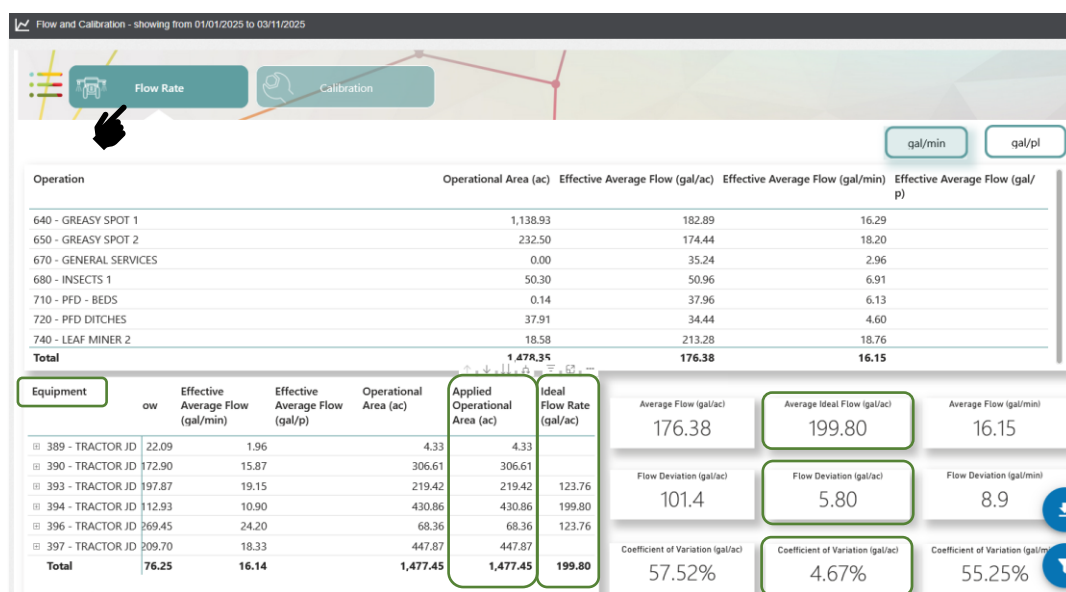


Figure 12 – PBI Report "Flow and Calibration" showing the new level "Equipment" and the column "Applied Operating Area (ha) in the table and on the cards the information of the "Average of the Ideal Flow", "Standard Deviation of the Ideal Flow" and the "Coefficient of Variation"



Go to Top Menu > Maps > Distance Flow, Flow by Time and Flow by Plant and in Main Menu > Reports > PBI > Flow and Calibration



In Vertical Perennials it will be available to customers who have the extra functionalities "Flow Map by Plant" and "PBI Flow and Calibration Report".

1.1.3 PBI Reports –Climate Conditions

Implemented a new tab "Rainfall Distribution" in the PBI Report "Climate Conditions", of the Sugarcane, Grains and Perennials Verticals. This tab will present information for the last 12 months (regardless of the period filtered in the report), displaying the frequency of the daily rainfall volume for each interval every 10 mm, as well as the monthly volume. It is possible to filter the values by Farm, Zone, Field and Equipment, as well as select the months you want to view. The chart has a "?", icon that on hover displays information about the values presented.

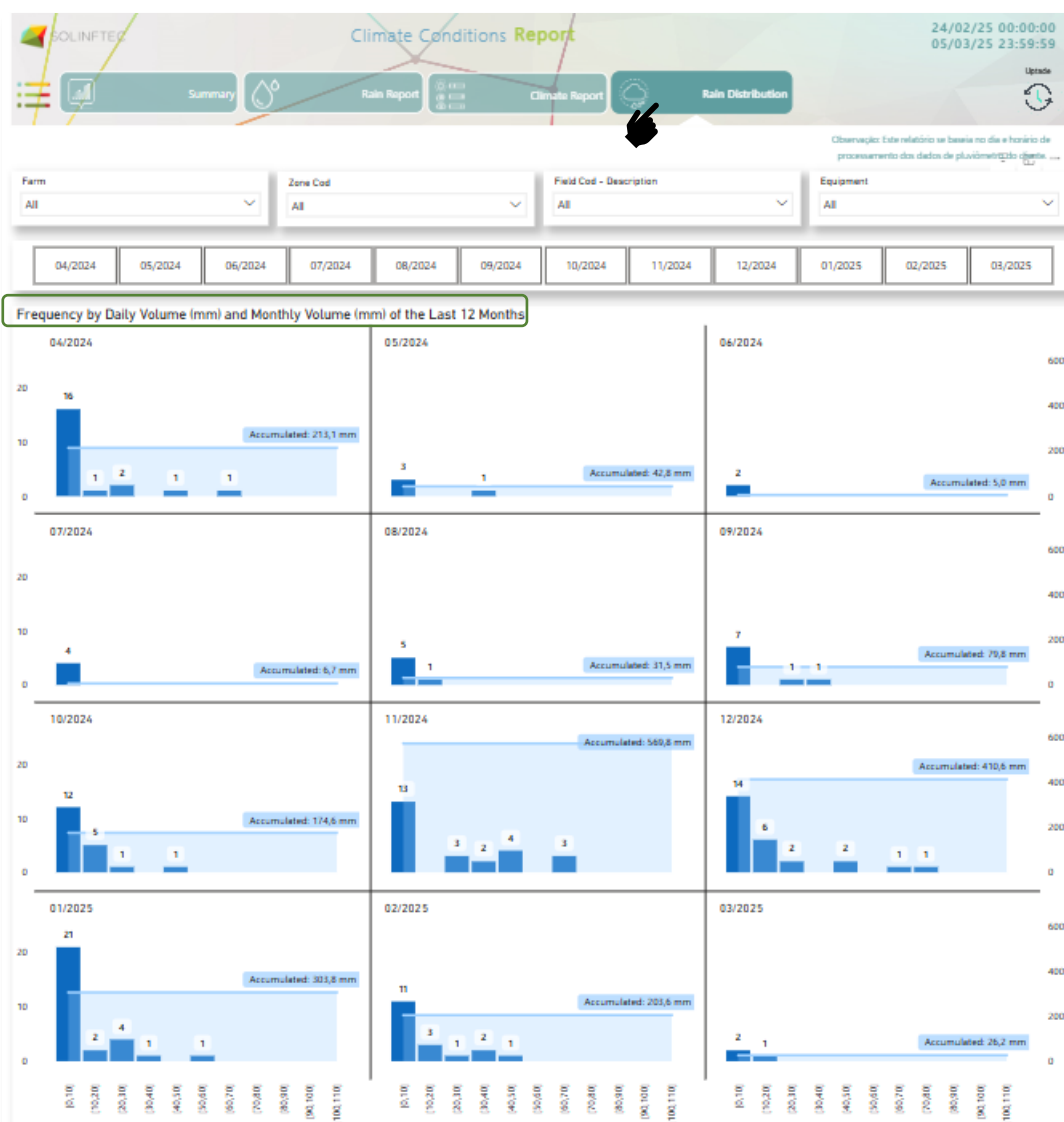


Figure 13 – "Rainfall Distribution" tab displaying the data of the Frequency by daily rainfall volume and by monthly volume of the last 12 months

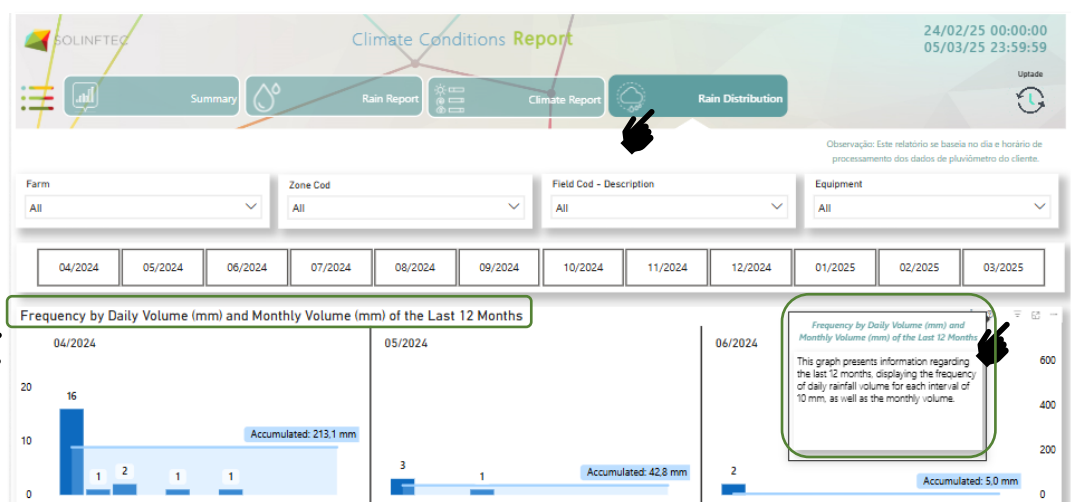


Figure 14 – "Rainfall Distribution" tab displaying information about the values presented when hovering the mouse over the "?"



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

Distribution Tab

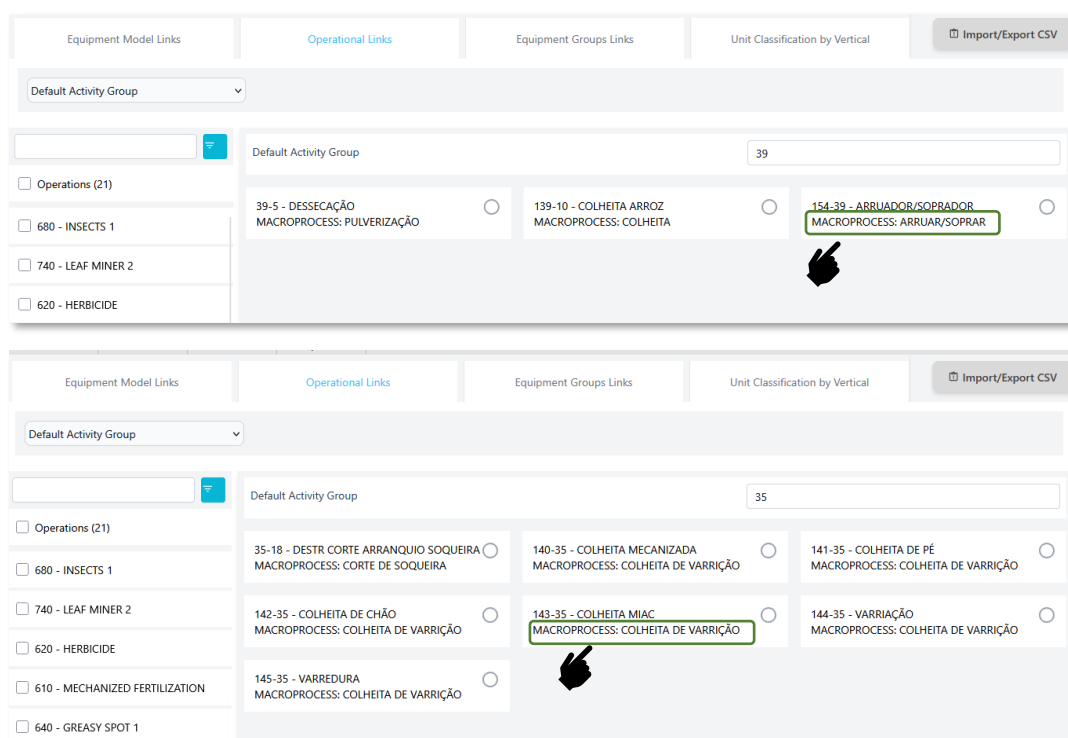


Available for Environments that have the "Climate" solution active.

1.1.4 Records and PBI Report – Benchmark

Improvement made in the "Benchmark" Record and in the PBI Report "TPL Benchmark" to include new Macroprocess options. The new options are:

- Arwar/Chapra
- Sweeping Harvest
- Herbicide
- Mowing
- Brush



The image displays two screenshots of the PBI system interface, specifically the 'Operational Links' tab. Both screenshots show a 'Default Activity Group' dropdown menu and a list of activities with their corresponding macroprocesses.

Top Screenshot: The 'Default Activity Group' is set to '39'. The list of activities includes:

- 39-5 - DESSECAÇÃO (MACROPROCESS: PULVERIZAÇÃO)
- 139-10 - COLHEITA ARROZ (MACROPROCESS: COLHEITA)
- 154-39 - ARRUADOR/SOPRADOR (MACROPROCESS: ARRUAR/SOPRAR) - This activity is highlighted with a green box and a hand icon.

Bottom Screenshot: The 'Default Activity Group' is set to '35'. The list of activities includes:

- 35-18 - DESTR. CORTE ARRANQUIO SOQUEIRA (MACROPROCESS: CORTE DE SOQUEIRA)
- 140-35 - COLHEITA MECANIZADA (MACROPROCESS: COLHEITA DE VARRIÇÃO)
- 141-35 - COLHEITA DE PÉ (MACROPROCESS: COLHEITA DE VARRIÇÃO)
- 142-35 - COLHEITA DE CHÃO (MACROPROCESS: COLHEITA DE VARRIÇÃO)
- 143-35 - COLHEITA MIAC (MACROPROCESS: COLHEITA DE VARRIÇÃO) - This activity is highlighted with a green box and a hand icon.
- 144-35 - VARRIAÇÃO (MACROPROCESS: COLHEITA DE VARRIÇÃO)
- 145-35 - VARREDURA (MACROPROCESS: COLHEITA DE VARRIÇÃO)

Equipment Model Links | **Operational Links** | Equipment Groups Links | Unit Classification by Vertical | [Import/Export CSV](#)

Default Activity Group

Default Activity Group: 38

☐ Operations (21)
☐ 680 - INSECTS 1
☐ 740 - LEAF MINER 2

38-20 - DESLOCAMENTO
 MACROPROCESS: DESLOCAMENTO

153-38 - HERBICIDA
 MACROPROCESS: HERBICIDA

Equipment Model Links | **Operational Links** | Equipment Groups Links | Unit Classification by Vertical | [Import/Export CSV](#)

Default Activity Group

Default Activity Group: 36

☐ Operations (21)
☐ 680 - INSECTS 1
☐ 740 - LEAF MINER 2
☐ 620 - HERBICIDE
☐ 610 - MECHANIZED FERTILIZATION

36-19 - CULTIVAÇÃO
 MACROPROCESS: CULTIVO

146-36 - ROÇADA LATERAL
 MACROPROCESS: ROÇADA

147-36 - ROÇADA TODA BECA
 MACROPROCESS: ROÇADA

148-36 - ROÇAR
 MACROPROCESS: ROÇADA

149-36 - ROÇADEIRA
 MACROPROCESS: ROÇADA

150-36 - ROÇAGEM
 MACROPROCESS: ROÇADA

Equipment Model Links | **Operational Links** | Equipment Groups Links | Unit Classification by Vertical | [Import/Export CSV](#)

Default Activity Group

Default Activity Group: 37

☐ Operations (21)
☐ 680 - INSECTS 1
☐ 740 - LEAF MINER 2

37-14 - DESENLEIRAMENTO PALHA
 MACROPROCESS: PALHA

151-37 - TRIFLEX
 MACROPROCESS: TRINCHA

152-37 - TRINCHA
 MACROPROCESS: TRINCHA

Figures 15, 16, 17, 18 and 19 – Displaying new Macroprocess options in the "Benchmark" Register

Filters:

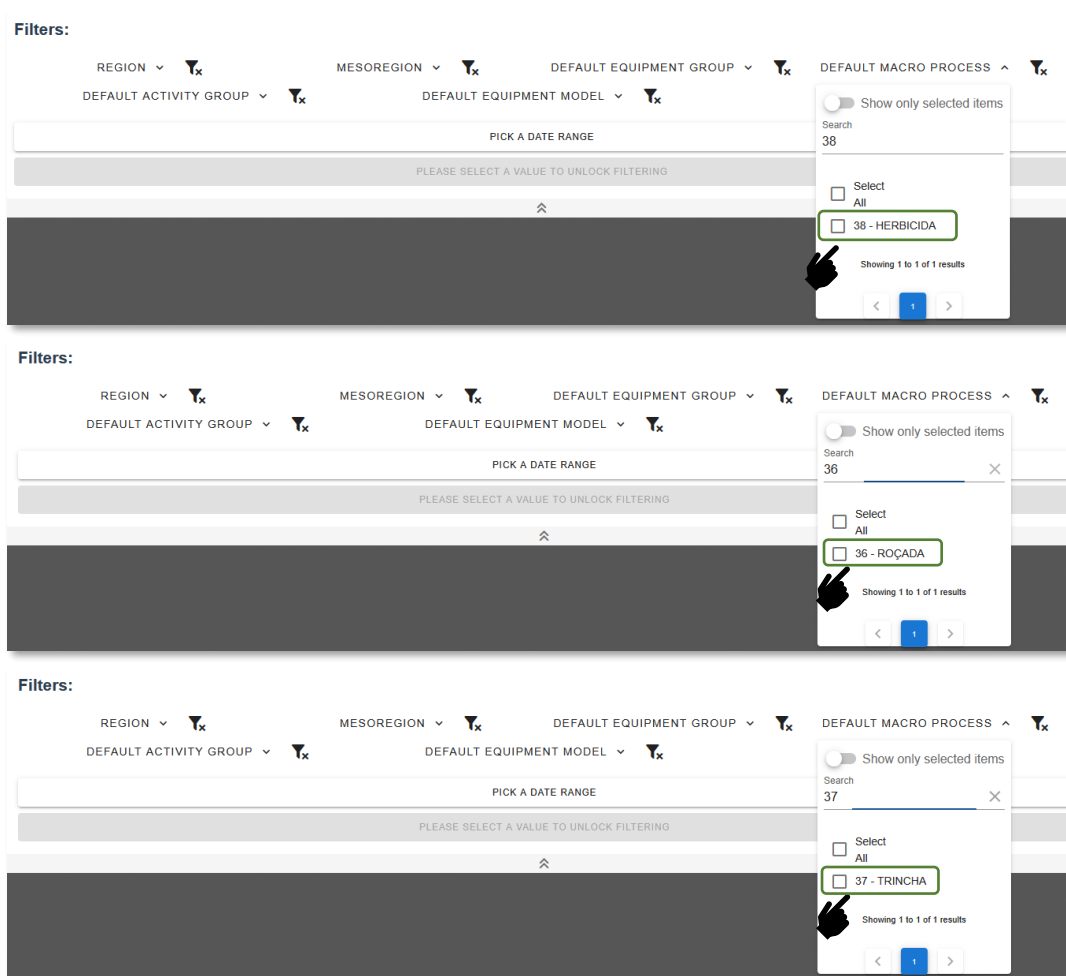
REGION ▼
 MESOREGION ▼
 DEFAULT EQUIPMENT GROUP ▼
 DEFAULT ACTIVITY GROUP ▼
 DEFAULT EQUIPMENT MODEL ▼
 PICK A DATE RANGE
 PLEASE SELECT A VALUE TO UNLOCK FILTERING

Show only selected items
 Search: 39
☐ Select All
☒ 39 - ARRUIAR/SOPRAR
 Showing 1 to 1 of 1 results

Filters:

REGION ▼
 MESOREGION ▼
 DEFAULT EQUIPMENT GROUP ▼
 DEFAULT ACTIVITY GROUP ▼
 DEFAULT EQUIPMENT MODEL ▼
 PICK A DATE RANGE
 PLEASE SELECT A VALUE TO UNLOCK FILTERING

Show only selected items
 Search: 35
☐ Select All
☒ 35 - COLHEITA DE VARRIÇÃO
 Showing 1 to 1 of 1 results



Figures 20, 21, 22, 23, and 24 – Displaying new options in the "Default Macro Process" filter of the PBI "TPL Benchmark" Reports



Go to Main menu > Records > Benchmark > Operation Links > Macro-process > and in > Main Menu > Reports > PBI > Benchmark Menu > TPL Benchmark > Standard Macroprocess Filter



Available for the Sugarcane, Grains and Perennial Vertical Environments that have the "Benchmark" solution active. The "Benchmark" Registration is available only for the User Groups "Project Manager", "IT Support" and "IT Development".

1.1.5 PBI Reports – Harvest Planning

Implemented the new PBI Report "Harvest Planning" for the Sugarcane Vertical. The report has the "Crop Planned" tab, with information about the harvest, processes, start and end dates of operations, evolution of the area worked with

planned value, % of achievement of the goal and percentage of completion per field.

In the "Process Monitoring" tab, it is possible to follow the planning of the processes through a timeline.

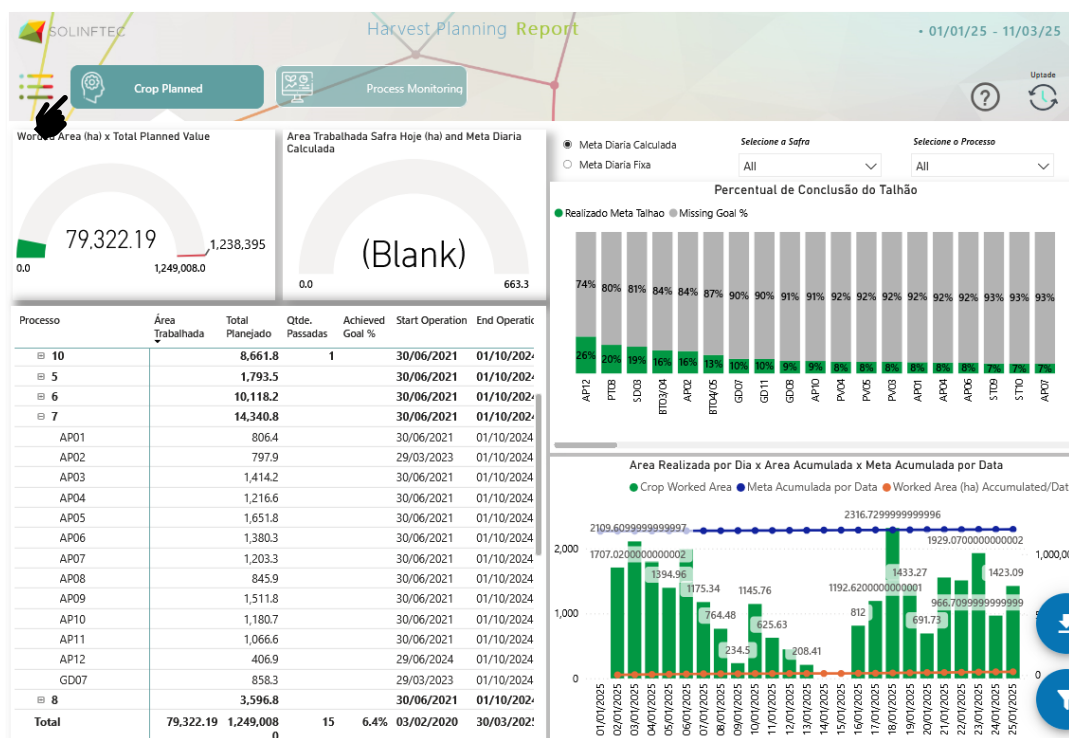


Figure 25 – "Crop Planned" tab in the new PBI Report "Harvest Planning" of the Sugarcane Vertical

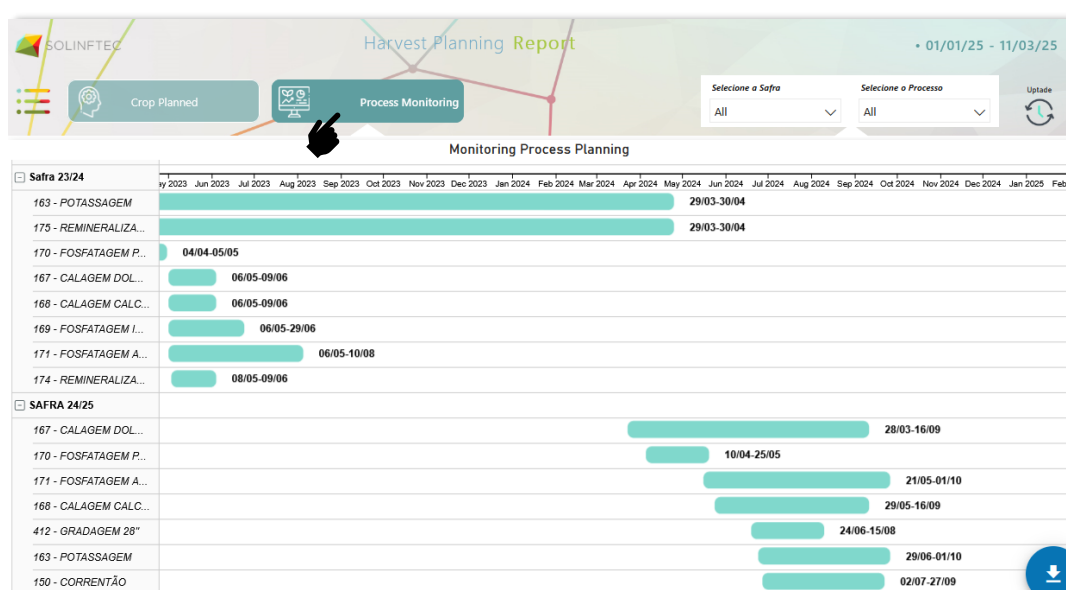


Figure 26 – "Process Monitoring" tab in the new PBI Report "Harvest Planning" of the Sugarcane Vertical

Go to Main Menu > Reports > PBI > Harvest Planning

Available upon commercial agreement and request with opening of a ticket via IT Support.

1.1.6 PBI Reports – Online Operational Variables (Sugarcane)

Improvement made to the "Speed" tab. Average (km/h)" of the PBI Report "Online Operational Variables", from the Sugarcane Vertical. In this version, the way of defining the goal has been changed, where previously the goal was just one typed line, now it is a range formed by two typed lines, in which the center that is inside the goal range is green and the outside is red.

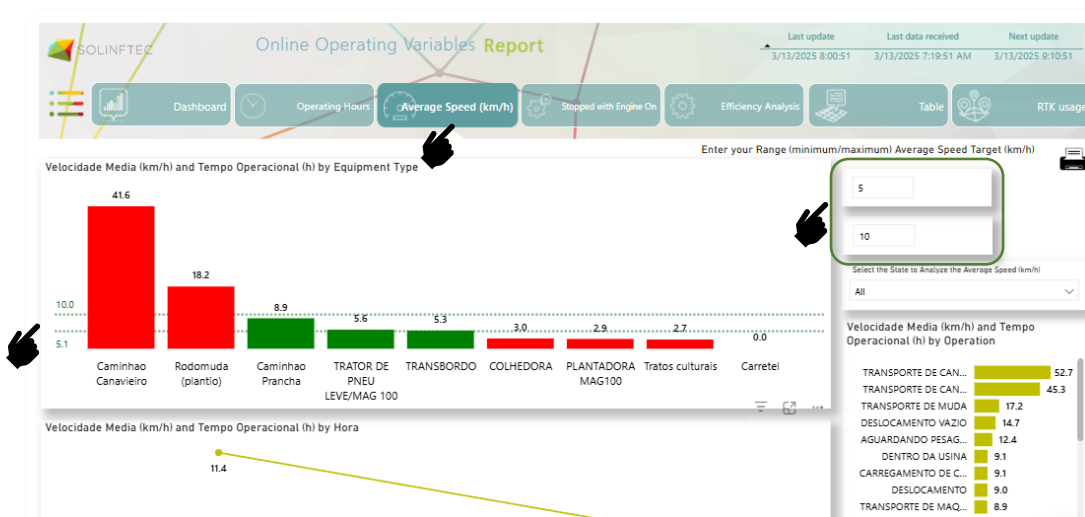


Figure 27 – Target definition option displaying with a two-line range and displaying from the graph in green what is within what was defined in the range and in red what is outside

Go to Main Menu > Reports > PBI > Online Reports > Online Operational Variables > Tab. Average Speed (km/h)

1.1.7 PBI Reports – Trampling

Improvements made in the PBI Report "Trampling", by the Sugarcane Vertical. This report is divided into two tabs, the "Trampling", which presents indicators of operational quality in the sugarcane harvest, focusing on the impact of the trampling of the transshipment tractor, and the "Availability" tab, which displays the time in which the solution was effectively available for use. The following are the updates for this release:

1. Changing Chart Colors

To make it easier to see the quality of the trampling, the colors were adjusted according to the following legend:

- No Trampling = Green
- Low Trampling = Yellow
- Medium Trampling = Orange
- High Trampling = Red

2. Operator Table Adjustments

- It is now possible to view the % of distance the operator has spent on each trampling lane and their total distance traveled.
- The table has been repositioned, leaving the right side and moving to the end of the report.

3. Drill Down de Data

- Added the drill down in the "Trampling" and "Availability" tabs, allowing you to drill down into each chart down to the date level.



Filters Applied in the Report and Additional Information

This report displays only the data for the following operational states:

- Working (Code E)
- Displacement (Code D)
- Maneuver (Code M)

- Shift to Unload (Code C)

If any of these states aren't displayed correctly, we recommend reviewing the records.

- The report now has an information icon (i) in the upper right corner of the screen. In it, it is possible to access the objective of the report and other relevant information.



Figure 28 – PBI "Trampling" report displaying a new color pattern in the graph legend and button (i) in the upper right corner that directs more details about the report

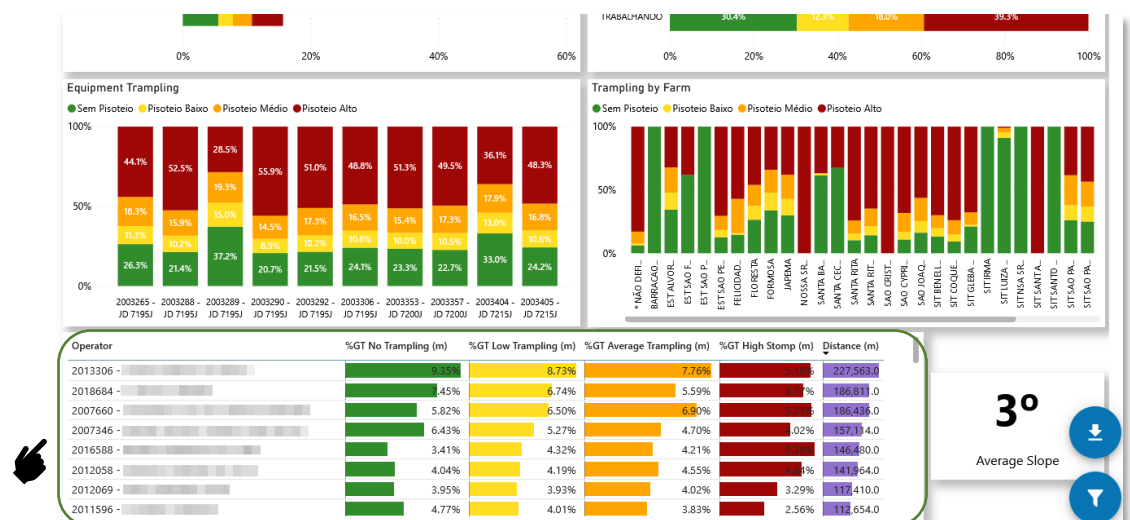


Figure 29 – PBI "Trampling" report showing the repositioned table at the end of the report.

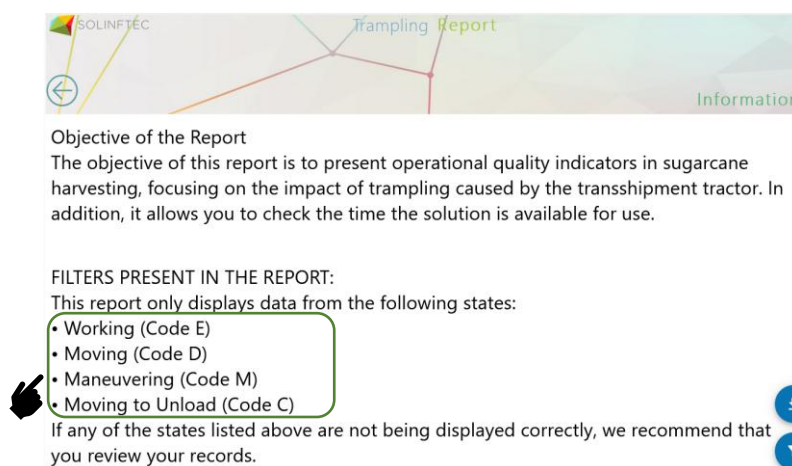


Figure 30 – Screen with details about the report, accessed by clicking on the (i) icon in the upper right corner of the PBI Report "Tramplung"



Go to Main Menu > Reports > PBI > Tramplung



Available for Vertical Sugarcane Environments that have the "Tramplung" solution active.

1.1.8 PBI Reports – CDC Cloud

Improvement made to update the rule of the records presented in the PBI Report "CDC Cloud". A filter was implemented to remove data generated in planting operations on equipment that also works in harvesting with CDC Cloud settings. This is a protection so that planting does not influence the CCT processes.



Go to Main Menu > Reports > PBI > CDC Cloud

1.2 Bugs

1.2.1 Maps – Weather

Adjustment applied to display Solar Radiation data in the "Weather Graph" of the Weather module.



Go to Top menu > Maps / Monitoring > Top menu within the map > Meteorology > Weather Graph > Solar Radiation



Available for Environments that have the "Weather" solution active. Applied on 03/06/2025.

1.2.2 Maps – Meteorology – Weather Maps

Adjusted the "Rain Accumulation" Weather Map in the Interpolation view to display the colors according to the legend.



Go to Top menu > Maps / Monitoring > Top menu within the map > Meteorology > Weather Maps > Interpolation > Rain Accumulation



Available for Environments that have the "Weather" solution active.

1.2.3 PBI Report – Online Operational Variables

Adjustments made to the PBI Report "Online Operational Variables", of the Sugarcane Vertical:

- Fixed for the State filter to allow filtering only valid states;
- Adjusted the print tab of the report (printer icon), to correctly display the information of the goals in the graph "Average Speed (km/h) and Operating Time (h)";



Go to Main Menu > Reports > PBI > Online Reports > Online Operational Variables > Tab. Average (km/h) > Status Filter and Printer icon



Available for the Environments of the Sugarcane vertical.

If you have any questions or other clarifications, please contact us via email suporte@solinftec.com.br or call +55 18 3622 2270.