

# Changelog

## SGPA3

### Automated Process Management System



Changelog Version 2023/212  
 Period: 10/31/2023 to 11/06/2023  
 Revision 00  
 Date: 11/21/2023

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 management with greater quality and efficiency.

## Table of Contents

1. SGPA3 .....	4
1.1 Improvements .....	4
1.1.1 Maps and Records – Nutrient Calculator .....	4
1.1.2 Maps – Meteorology.....	7
1.1.3 Maps – Fields.....	8
1.1.4 Maps – Seeds per Hectare .....	8
1.1.5 Records – Implement Measurements .....	9
1.1.6 Records – Implement Measurements .....	10
1.1.7 Records – Team .....	10
1.1.8 PBI Report – Supplies Optimization .....	11
1.2 Bugs.....	12
1.2.1 Telemetry – Availability History .....	12
1.2.2 PBI Reports – Operating Hours and Online Reports .....	12

## 1. SGPA3

### 1.1 Improvements

#### 1.1.1 Maps and Records – Nutrient Calculator

Improvements were made to the “Nutrient Calculator” to improve the way in which input export factors are used, making it possible to customize them according to the user’s needs. In this way, a new register was implemented, the “Agronomic Recommendation”, with which it will be possible to automatically calculate the recommended dose of nutrients based on the informed rules. With this new functionality, it will be possible to choose between three types of recommendation algorithms and each recommendation will be linked to the specific input selected, which allows the user to apply different rules to each input previously registered.

The three algorithms are:

- **Variability**, in which the recommendation is made considering the productivity variability after the value optimization process;
- **Uniform Rate**, where the recommendation is made based on the TCH (Tons of Sugarcane per Hectare) of the Work Order (WO) that will be processed;
- **Rate by Class**, when the recommendation is made based on productivity, that is, defining the productivity classes and the corresponding doses, which can vary from 3 to 6 classes.

Furthermore, in the **Analytical Map**, the “Inputs (N-P-K)” filter was changed to the “Recommendation” filter, thus selecting the registered recommendation instead of selecting the input. Furthermore, when selecting the **Recommendation**, OS and “Calculate dose”, information on “Average Rate”, “Total to apply” and “Total Trucks” will be available in the **Summary** (when the input used is vinasse or concentrated vinasse).

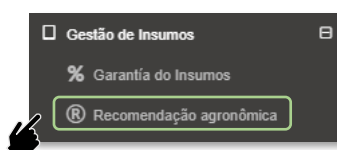


Image 01 – New registration “Agronomic Recommendation”

Nova recomendação de adubação

Insumo \*  
2 - Vinhaça concentrada (2.64-1.36-13.68)

Descrição \*  
Recomendação - VARIABILIDADE

Algoritmo \*  
☒ Variabilidade  
☐ Taxa uniforme  
☐ Taxa por classe

Check equipamento  
☒ Não ☐ Sim

Porcentagem de quebra  
0

Dose

Máxima  
Auto

Minima  
Auto

Produtividade (t/ha)

Fator exportação \*  
N 1,0 P 0,5 K 1,3

Cancelar Salvar

Image 02 – Fertilization Recommendation Registration – Variability Algorithm

Nova recomendação de adubação

Insumo \*  
2 - Vinhaça concentrada (2.64-1.36-13.68)

Descrição \*  
Recomendação - TAXA UNIFORME

Algoritmo \*  
☐ Variabilidade  
☒ Taxa uniforme  
☐ Taxa por classe

Dose

Fixa  
Auto

Produtividade (t/ha)

Fator exportação \*  
N 1 P 0,5 K 1,4

Cancelar Salvar

Image 03 – Fertilization Recommendation Registration – Uniform Rate Algorithm

**Nova recomendação de adubação**

Insunio \*  
3 - Formulado NPK (0-0-60)

Descrição \*  
Recomendação - TAXA POR CLASSE

Algoritmo \*  
☐ Variabilidade  
☐ Taxa uniforme  
☒ Taxa por classe

Check equipamento  
☒ Não

Lim. Produtividade (t/ha)	Dose (kg/ha)	Intervalo	N° Classes
0	0	0 ~ 20	3
20	10	20 ~ 50	
50	15	> 50	

Cancelar Salvar

Image 04 – Fertilization Recommendation Registration – Rate by Class Algorithm

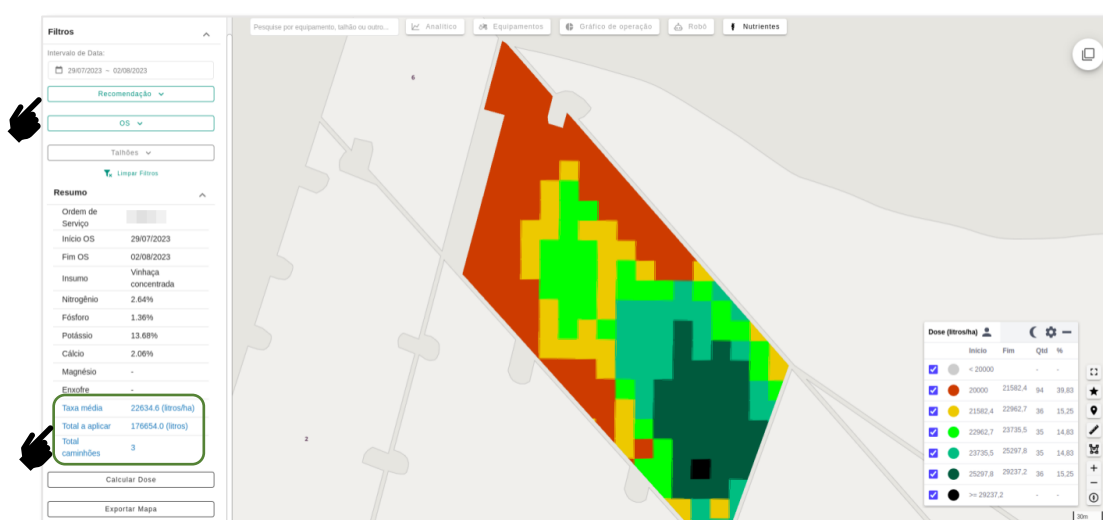


Image 05 – Nutrient Calculator with the “Recommendation” filter and in the Summary the information on “Average Rate”, “Total to be applied” and “Total Trucks.”



Go to Top Menu > Maps > Nutrients and in Main Menu > Registrations > Input Management > Agronomic Recommendation



Available for Sugarcane vertical environments that have the “Yield Monitor” solution.

## 1.1.2 Maps – Meteorology

Improvements made to “Weather Maps” in order to not display data on the map when selecting zoom **above 10km** and it has been included the informative icon “i” to inform about the new data display condition. Furthermore, it was implemented to display values with one decimal place on the **Map** and in the **Legend** of the “Weather Maps”.

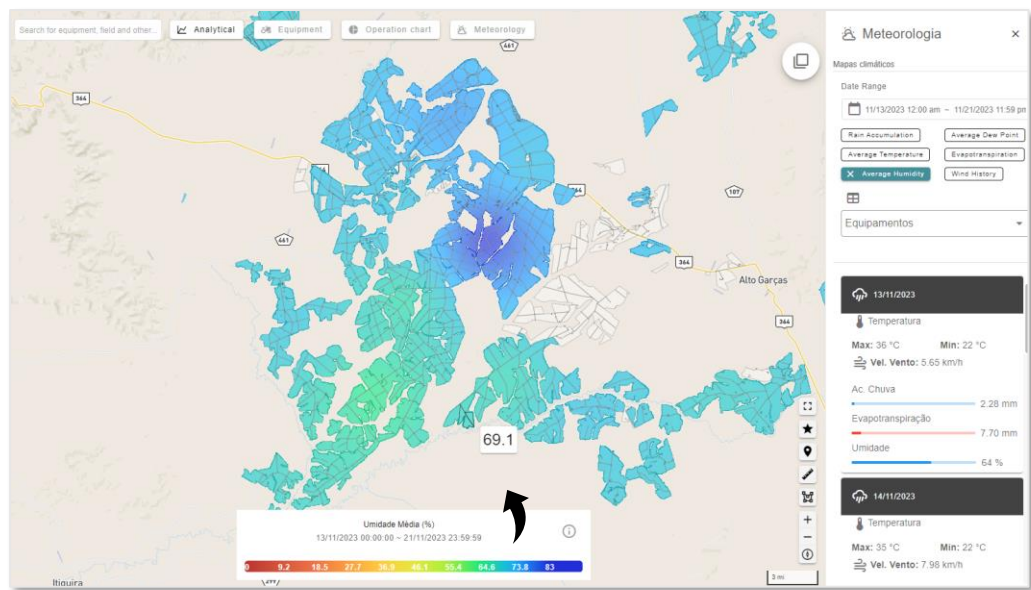


Image 06 – Weather Map Legend “Average Humidity” displaying values to one decimal place and displaying data on the map at 10 km zoom

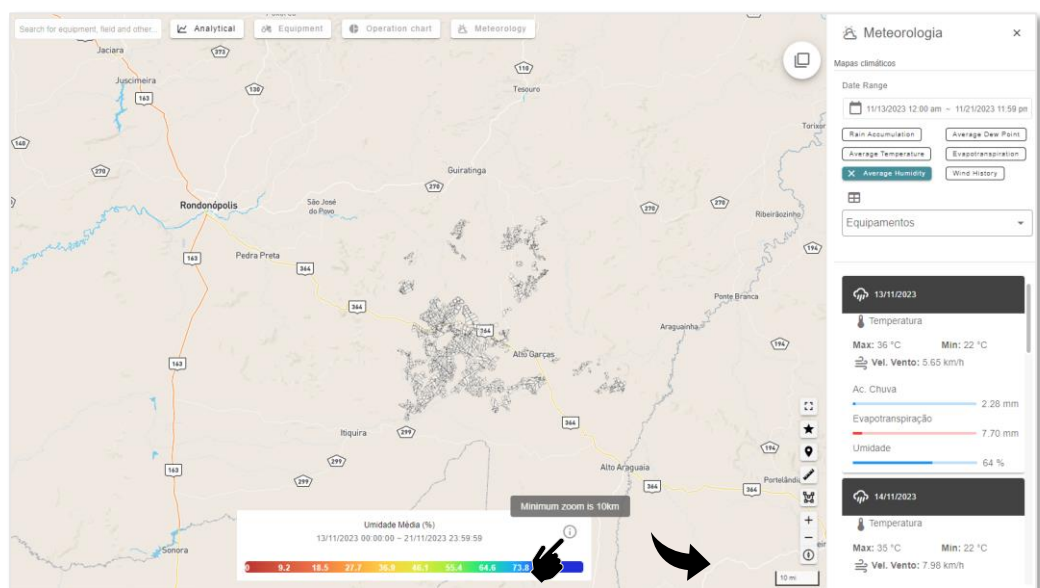


Image 07 – Not displaying weather data on Weather Maps at 20 km zoom

Go to Top Menu > Maps > Meteorology > Weather Maps

Available for Environments that have the “Climate” solution active.

### 1.1.3 Maps – Fields

Improvement made to the “Analytical Map” so, when hovering the mouse over the fields, all polygons that belong to the same field will be highlighted in white.

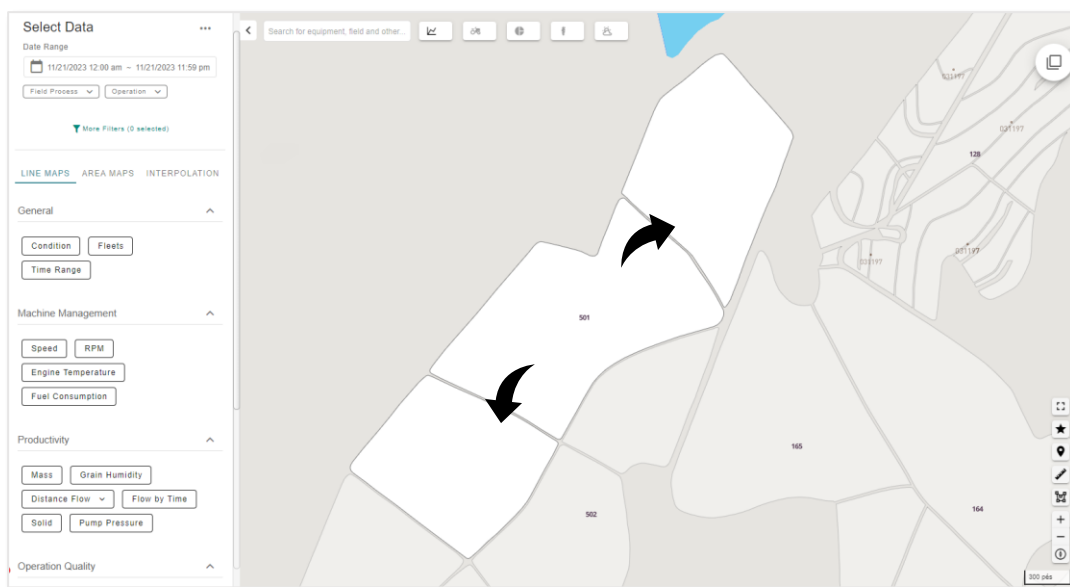


Image 08 – Polygons highlighted in white that belong to the same field

Go to Top Menu > Maps > Fields.

### 1.1.4 Maps – Seeds per Hectare

Improvement made to update equipment models for processing Planting Rate (seeds/ha). The Models “67 – Stara/Topper 5500 Planter”, “45 – Horsch SW 36” and “71 – ISOBUS Planting – Generic” have been added, so planting data for Equipment with these models can be viewed on the Interpolation Map “Seeds per Hectare”.

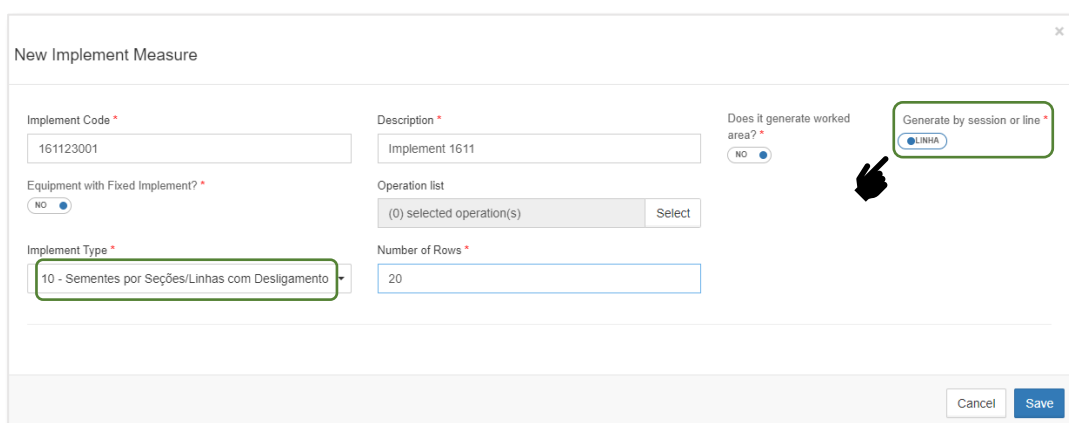
Go to Top Menu > Maps > Interpolation > Seeds per Hectare

Available for Environments that have the “Seeds per Hectare” map active.



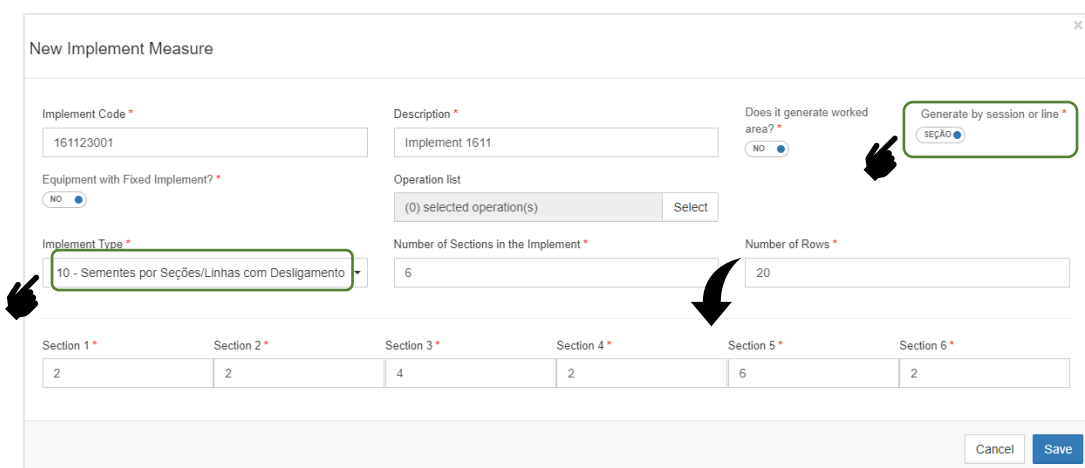
### 1.1.5 Records – Implement Measurements

Improvement made in the “Implement Measurements” Register to add the new Implement Type “10 - Seeds per Sections/Lines with Shutdown” to serve the sections of the “Planter” equipment types. When selecting “Generate by Lines” the user must enter the **number of Lines** and when selecting “Generate by Section”, the user must enter the **number of sections** in the Implement, the **total number of Lines** and the **number of Lines in each of the Sections**.



The screenshot shows the 'New Implement Measure' form. The 'Implement Code' is 161123001 and the 'Description' is 'Implement 1611'. The 'Equipment with Fixed Implement?' is set to 'NO'. The 'Implement Type' is '10 - Sementes por Seções/Linhas com Desligamento'. The 'Number of Rows' is 20. The 'Does it generate worked area?' is set to 'NO'. The 'Generate by session or line' dropdown is set to 'LINHA'. A hand icon points to the 'LINHA' option.

Image 09 – Implement Type 10 selected for Generate by Line option



The screenshot shows the 'New Implement Measure' form. The 'Implement Code' is 161123001 and the 'Description' is 'Implement 1611'. The 'Equipment with Fixed Implement?' is set to 'NO'. The 'Implement Type' is '10 - Sementes por Seções/Linhas com Desligamento'. The 'Number of Sections in the Implement' is 6. The 'Number of Rows' is 20. The 'Does it generate worked area?' is set to 'NO'. The 'Generate by session or line' dropdown is set to 'SEÇÃO'. A hand icon points to the 'SEÇÃO' option. Below the form, there is a table with 6 columns: Section 1, Section 2, Section 3, Section 4, Section 5, and Section 6. The values in the table are: Section 1: 2, Section 2: 2, Section 3: 4, Section 4: 2, Section 5: 6, and Section 6: 2.

Section 1 *	Section 2 *	Section 3 *	Section 4 *	Section 5 *	Section 6 *
2	2	4	2	6	2

Image 10 – Implement Type 10 selected for Generate by Section option



Go to Main Menu > Registrations > Equipment > Implement Measurements > Implement Type > 10 - Seeds per Sections/Lines with Shutdown

## 1.1.6 Records – Implement Measurements

Improvement made to the “Implement Measurements” Register, in “Implement Type 9 – Pivot”, to add a message informing that this type of implement does not generate Worked Area and Operational Area”.

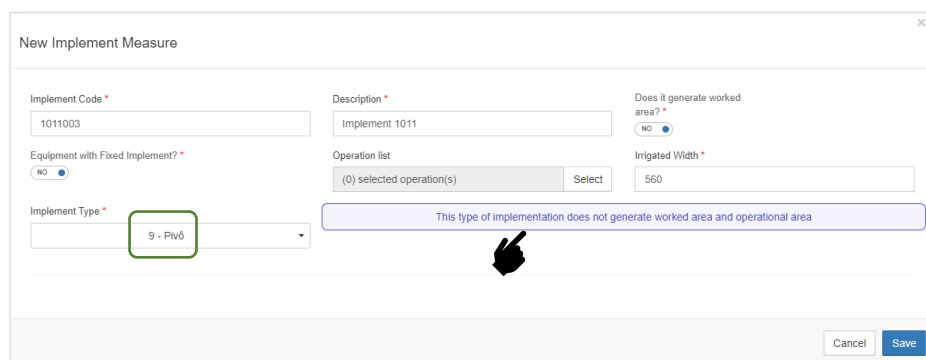


Image 11 – Message informing that the Implement Type “9 – Pivot” does not generate Worked Area and Operational Area



Go to Main Menu > Records > Equipment > Implement Measurements > Implement Type > 9 – Pivot

## 1.1.7 Records – Team

Improvement made to the “Team” registration to add the Search field.

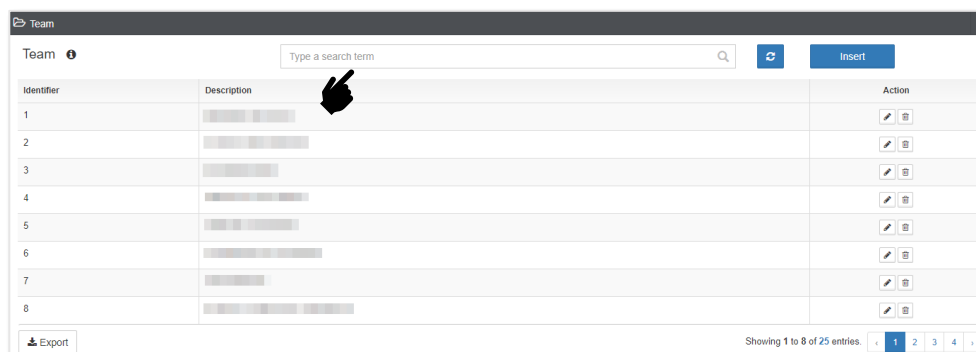


Image 12 – New Search field on the Team registration screen



Go to Main Menu > Records > Team



Applied as a hotfix on 11/09/2023.

### 1.1.8 PBI Report – Supplies Optimization

Improvements implemented in Sugarcane Vertical “Supplies Optimization” PBI Report:

- The title "No Processing" has been included in the pie chart, differentiating the values in gray.
- Changed the bar graph for the item "Operation Without Optimization Processing" to gray.
- Included the "Optimized Trips" totalizer (Respected/Not Respected).
- Changed the title of the totalizer "Optimization Total" to "Total Trips".
- Changed the colors of the "Quantity by Date and Decision" graph to follow the colors of the graphs above (gray: operation without processing; orange: not respected; blue: respected and yellow: not defined).

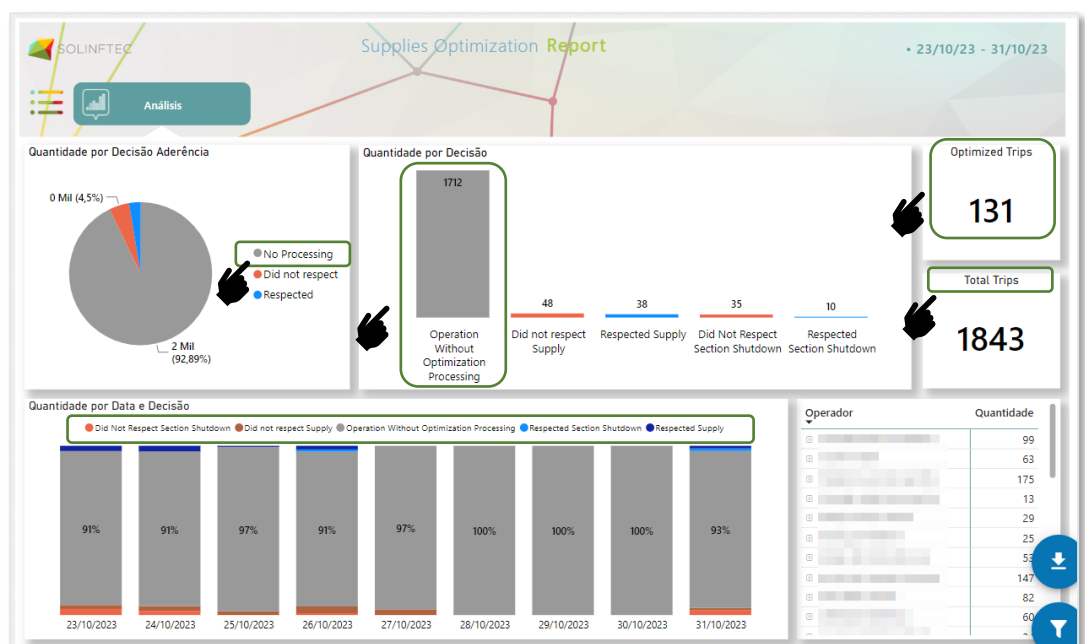


Image 13 – Improvements in the PBI Report “Supplies Optimization”



Go to Main Menu > Reports > PBI > Supplies Optimization



Available for Environments in the Sugarcane vertical that have the extra report “Supplies Optimization”.

## 1.2 Bugs

### 1.2.1 Telemetry – Availability History

Adjustment made in the “Telemetry” module when changing the “Front” of the Equipment on the **On-board Computer**, the data **will not** be displayed at zero in the “Availability History” graph.



Go to Top Menu > Telemetry > Equipment > Availability History

### 1.2.2 PBI Reports – Operating Hours and Online Reports

Adjustment made to the PBI Reports “Sugarcane Cutting, Loading and Transport”, “Operational Variables Report”, “Online Sugarcane Cutting, Loading and Transport” and “Operational Variables Online”, to display data in the “Equipment” filter coherently with the data selected in the “Equipment Group” filter.



Go to Main Menu > Reports > PBI > Operational Hours > Sugarcane Cutting, Loading and Transport and Operational Variables Report > Filters and in PBI > Online Reports > Online Sugarcane Cutting, Loading and Transport and Online Operational Variables > Filters



Available for the Sugarcane Vertical Environments.

*In case of doubt or further clarification, please contact us via email [suporte@solinftec.com.br](mailto:suporte@solinftec.com.br) or call +55 18 3622 2270*