



WEBTOOL

User-Guide

University of Groningen, IGEM Team 2025


CRIKIT

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1. Uploading the fluorescent data

1. See (4. Accepted data formats) to obtain the fluorescent plate data
2. Select the type of your fluorescent dataset file¹ using “File Type”.
3. Upload the data by pressing “Browse...” and select the file from your directory.
4. Check if the dataset is properly separated by looking at the “Dataset Preview”.
5. When the data is not properly separated, change² the “Delimiter”.
6. When the dataset is properly separated, you can continue with the analysis.

 About Datasets Plate Visualization Time analysis

Data Management

File Type:

- ☒ Delimited Files (CSV, TSV, TXT)
- ☐ Spark Control Raw Data (Excel)

Upload delimited file(s)

Browse... 02102025 final experiment all three spacer frozen pelle

Upload complete

Delimiter (auto-detect if not specified):

Auto-detect

Select Dataset:

02102025 final experiment all three spacer frozen pellets

Dataset Info:

Rows: 64
Columns: 99
Column names: Cycle Nr., Time [s], Temp. [°C], A1, A2, A3, A4, ...

Dataset Preview

Show 10 entries Search:

| | Cycle Nr. | Time [s] | Temp. [°C] | A1 | A2 | A3 | A4 | A5 | A6 | A7 | A8 | A9 | A10 | A11 | A12 | B1 | B2 |
|----|-----------|----------|------------|----|----|----|----|----|----|----|----|----|-----|-----|-----|----|----|
| 1 | 1 | 0 | 26.2 | | | | | | | | | | | | | | |
| 2 | 2 | 59.497 | 26.2 | | | | | | | | | | | | | | |
| 3 | 3 | 119.509 | 26.2 | | | | | | | | | | | | | | |
| 4 | 4 | 179.505 | 26.1 | | | | | | | | | | | | | | |
| 5 | 5 | 239.506 | 26 | | | | | | | | | | | | | | |
| 6 | 6 | 299.514 | 26 | | | | | | | | | | | | | | |
| 7 | 7 | 359.529 | 26 | | | | | | | | | | | | | | |
| 8 | 8 | 419.53 | 25.9 | | | | | | | | | | | | | | |
| 9 | 9 | 479.534 | 25.9 | | | | | | | | | | | | | | |
| 10 | 10 | 539.544 | 25.8 | | | | | | | | | | | | | | |

Showing 1 to 10 of 64 entries

Previous 1 2 3 4 5 6 7 Next

¹ Currently, only File Type CSV is supported

² Currently, it only supports separation by semicolon “;”

2. Visual 96-well plate analysis of the fluorescent data

Options

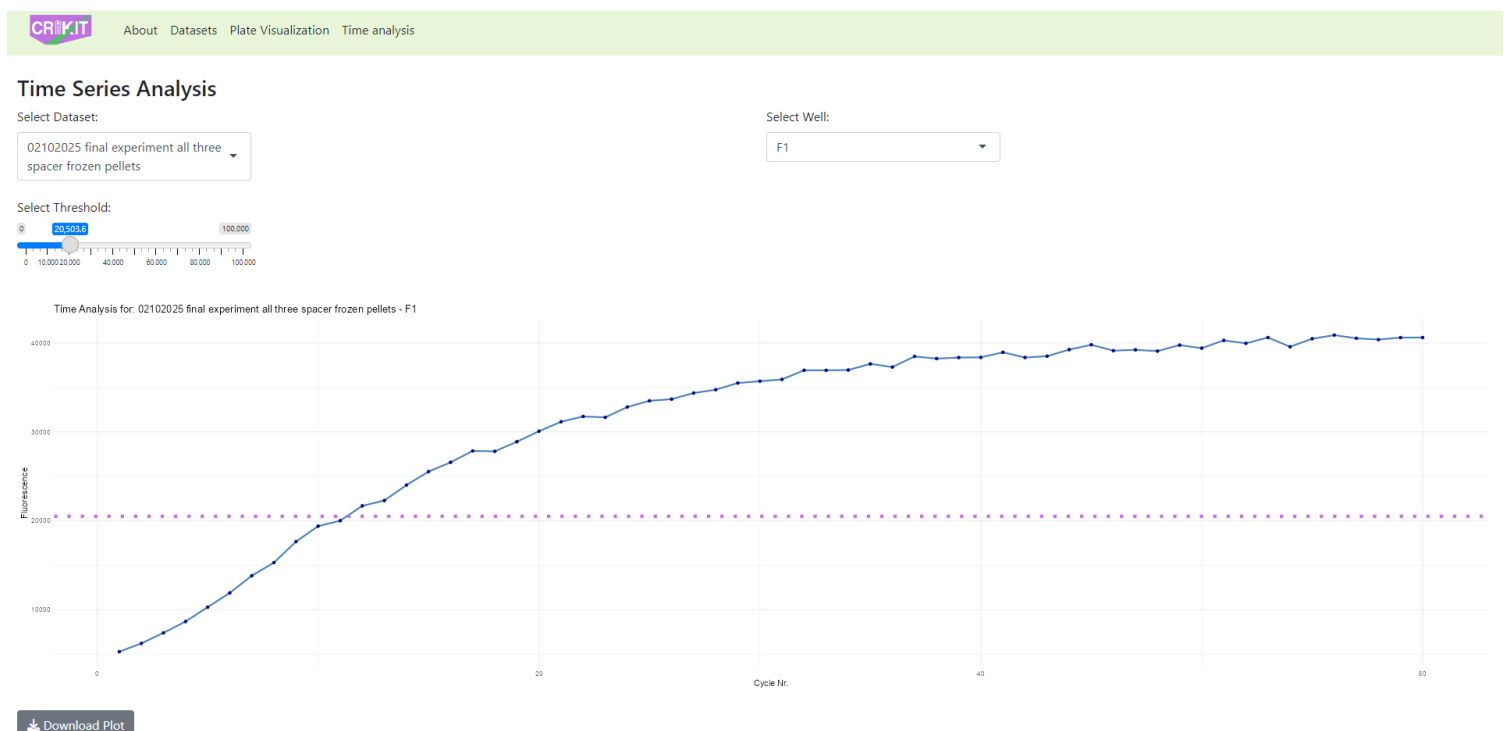
- **Select dataset**
Select the dataset you want to analyse.
- **Value Threshold**
Slider-bar to set a threshold for your data. Only when the fluorescent value of a well is at or above the threshold, it will be coloured purple. Otherwise, it stays pink.
- **Select Timepoint**
Slider-bar to filter your data for specific timepoints. In combination with the “Value *Threshold*” option, this allows for analysing which wells are at or above the threshold at specific timepoints.
- **Download Plot**
Option to download the output figure of the digital 96-well plate.



3. Visual time series analysis of the fluorescent data

Options

- **Select Dataset**
Select the dataset you want to analyse.
- **Select Threshold**
Slider-bar to set a threshold for your data. The purple dotted line will then be adjusted to this value, and this can then be used to visually analyse when the blue line (fluorescence measured in the selected well over time) surpasses the threshold.
- **Select Well**
Option to select each well you want to analyse individually. By selecting a well, the corresponding fluorescence measured over time for that well will be displayed (blue line).
- **Download Plot³**
Option to download the output figure of the time plot.



³ Currently, this option is not functional

4. Accepted data formats

The CRIKIT webtool can accept data obtained from the SparkControl (SPARK®, TECAN) (Tecan, n.d.) V2.3 software. Here, the output of this software must be in .csv (Comma delimited) format. In the situation that it only can be provided as a .xlsx file, it first has to be manually converted by the user. This can simply be done by opening the file and save it again as a .csv file.

- Microsoft Excel (*Microsoft 365*, n.d.): File > Save As > CSV (Comma Delimited) (*.csv)

5. Notes

This webtool is intended for research use only and is not intended for clinical decision-making.

6. References

Microsoft 365. (n.d.). Retrieved 6 October 2025, from <https://www.microsoft.com/en-gb/microsoft-365>

Tecan. (n.d.). *Tecan Group Home—Scaling Healthcare Innovation Globally*. Retrieved 6 October 2025, from <https://www.tecan.com>