

gO Measurement-System Software Tutorial

1. Introduction

In this tutorial it is shown step by step how to analyze U-value and aw-Value measurements with the cloud-based online analysis tool. The tutorial is designed as such that it is possible to follow the steps directly at the computer, with the same measurement data, which are taken from a measurement at a camping fridge.

To access the measurement data use the following credentials:

- Online analysis tool: <http://goms.greenteg.com>
- User name: tutorial@goms.qiio.cloud
- Password: gt_Cstudy2

Since the measurement was conducted in June 2018 and there is no active device assigned to the account, no data can be seen in the live data view.

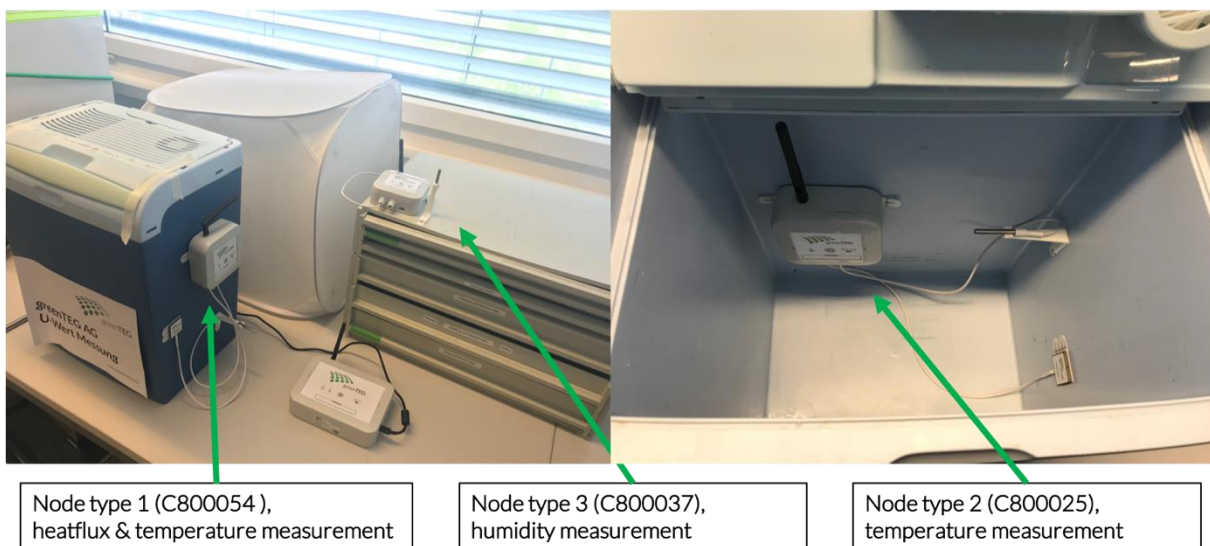


Figure 1: Setup of the measurement at the camping fridge

2. Analysis of the U-value measurement

In the following the analysis of the U-value measurement at the camping fridge is presented. The corresponding measurement nodes are:

- Outside fridge, simulates the warmer inner side a wall, node type 1 C800054
- Inside fridge, simulates the colder outer side a wall, node type 2 C800025

First go to the report wizard (2. Button upper left) and choose “U-Value Calculator” as data analysis tool. Choose the measurement period (here June 2018) and click “Load”. After that choose the base station, measurement (start of the measurement), inside node (C800054) and outside node (C800025). After clicking on “Apply” the view as in figure 2 can be seen.

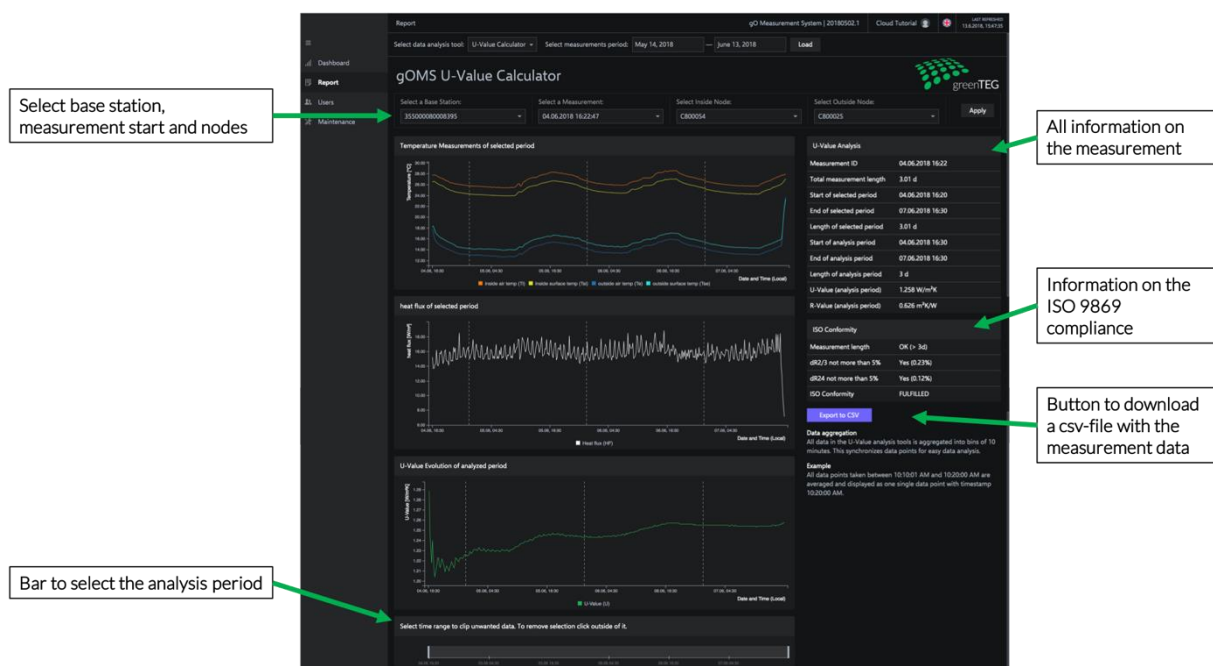


Abbildung 2: Analysis of an U-value measurement in the online analysis tool

On the left-hand side diagrams of the selected measurement data can be seen. In the table “U-Value Analysis” on the right-hand side the selected period, analysis period, measurement length, measured R-value and U-value can be seen. By default the selected period is always the entire measurement period, but can be changed with the selection bar at the bottom. This can be useful, if a certain part of a measurement should not be analyzed for example because of external disturbance. The analysis period is the part of the selected period of which the U-value is calculated. It is always a multiple of 24 hours and starts with the start of the selected period. In the ISO 9869 compliance table it can be seen if the ISO 9869 conditions are fulfilled for the selected period.

3. Analysis of the aw-value measurement

In the following the analysis of the aw-value measurement at the camping fridge is presented. The corresponding measurement nodes are:

- Humidity measurement, node type 3 C800037
- Wall temperature measurement (here outside wall of the fridge) node type 1 C800054

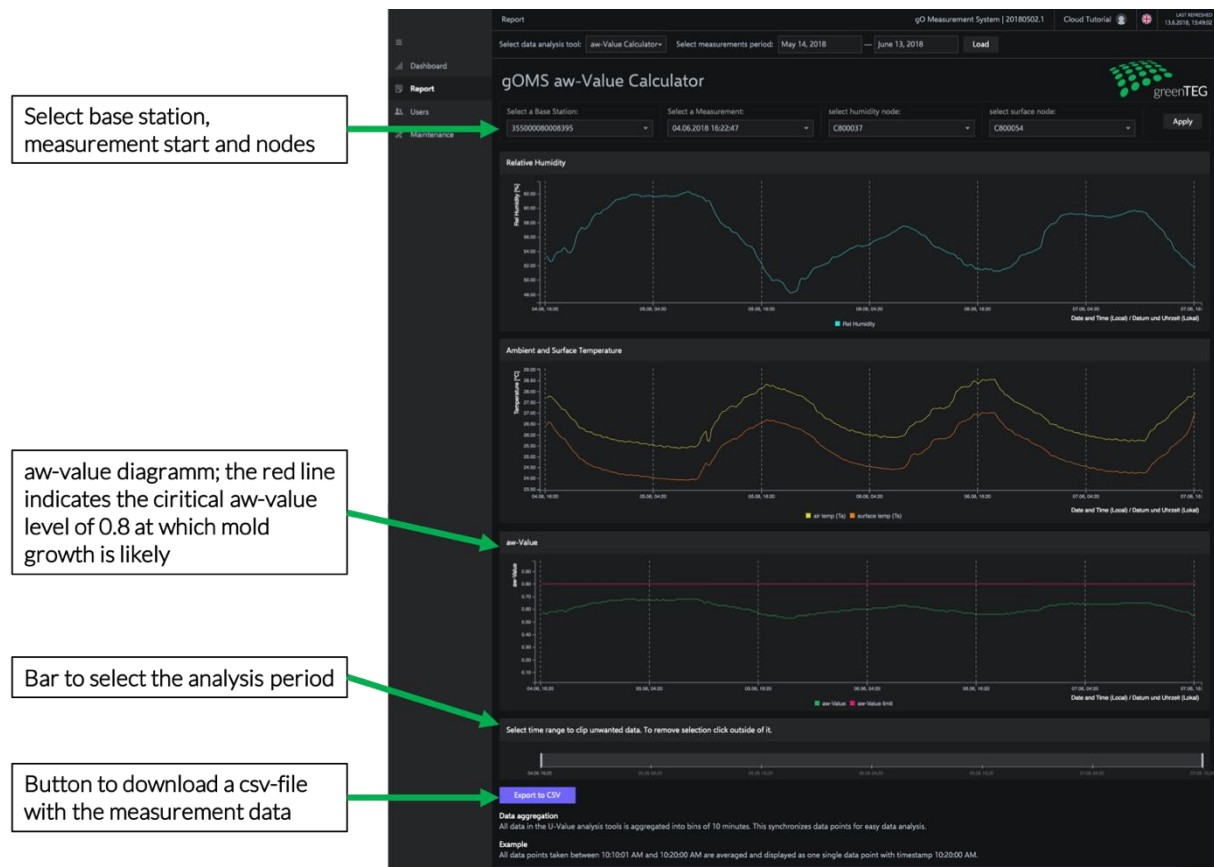


Figure 3: Analysis of an aw-value measurement in the online analysis tool

Again go to the report wizard (2. Button upper left) and choose "Aw-Value Calculator" as data analysis tool. Choose the measurement period (here June 2018) and click "Load". After that choose the base station, measurement (start of the measurement), humidity node (C800037) and surface node (C800054). After clicking on "Apply" the view as in figure 3 can be seen.

In the three diagrams the relative humidity, ambient air temperature, surface temperature and aw-Value can be seen. The red line in the aw-Value diagram indicates the critical level for mold growth which is at 0.8. If not the entire measurement period should be analyzed the desired period can be selected with the selection bar at the end of the page.

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Revision History

Date	Revision	Changes
14.06.2018	1.0	Initial Version