

Smart Farming 2023



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Profyta:

- 142 employees
- Active in West-East Africa
- Homefarms/training facility's at Tanzania (Iringa - GVA) and Nigeria (Benin town, PASL).

www.profyta.com

www.greenvalleyagagro.com

www.primeagro seeds.com



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Smartfarming: for kind of crops.



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Sensoring/testing in the Netherlands to ensure the system is ready to use in Jordan.

Main points we want to find out:

- Extreme high humidity are the sensors able to produce the right information.
- High humidity and effects of salts on the sensor (leakage, erosion).
- Testing before we install in Jordan, which “reading” system will be stable for the employee in this set-up.

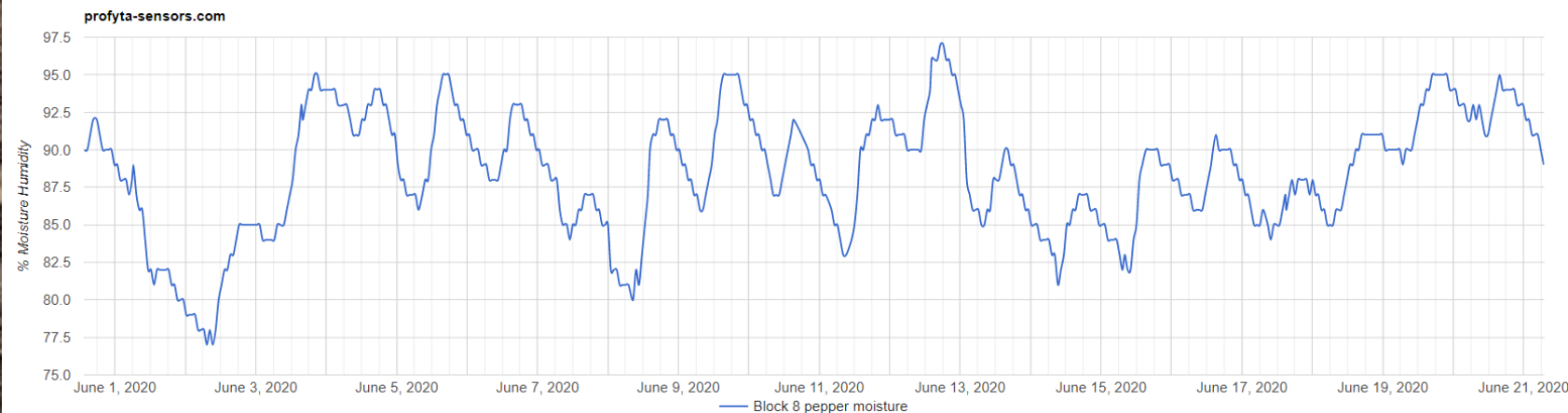
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Sensing with the “white sensor”.

- At the greenhouse with “dry” circumstance, less issue’s

<https://www.profyta-sensors.com/ph/moredetails.php>

Example Zambia



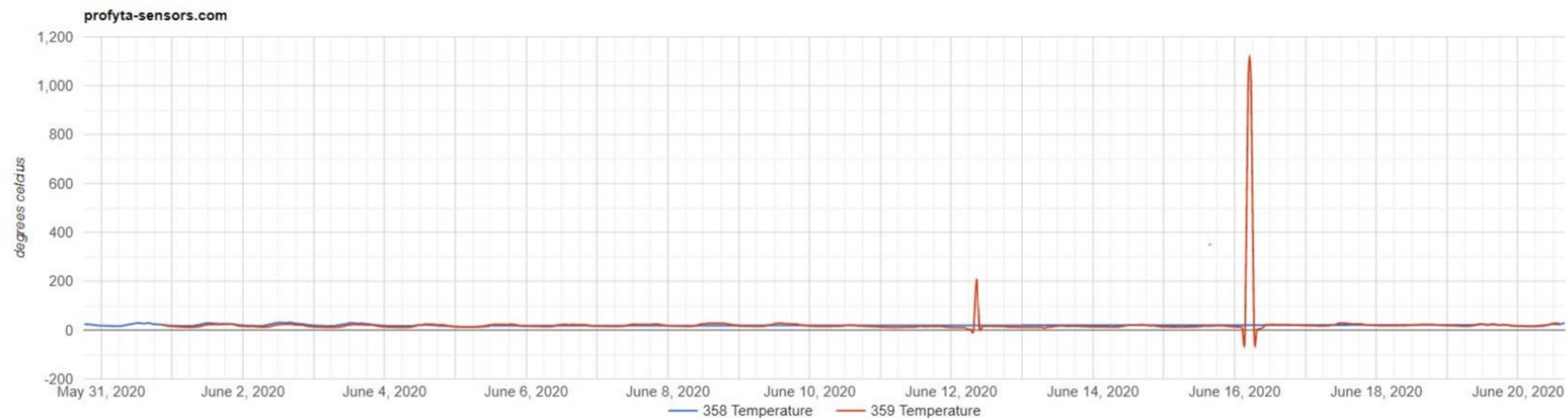
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Sensoring with the “white sensor”.

- At the greenhouse with “dry” circumstance, less issue’s
- At the openfield, with more rain/high humidity issue’s with the sensor, stops with measuring and/or issue’s with data.



Menu



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Jordan: we have 2 sensors: reading by BLE (Blue Tooth) give's several time's issue's.

The start after installing was good, now we find several issue's.

Solutions:

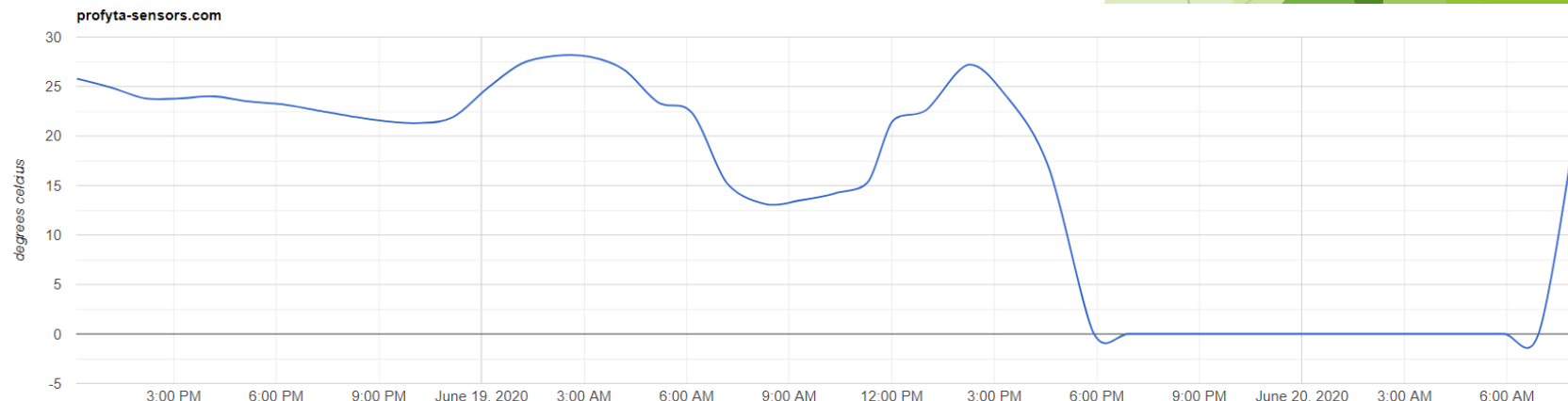
- Close the battery holder complete with an other seal or with paste,
- Using the other sensors, like we test now in the Netherlands (see the slide below), we have this system now running, and we invest at another system.

BLOCK 3
BAY 1
ROLL 4
SECTION 6
SENSOR 325

BAY 2
ROLL 5
SECTION 2
SENSOR 326

BAY 3
ROLL 6
SECTION 9
SENSOR 327

BAY 4
ROLL 4
SECTION 7
SENSOR 320



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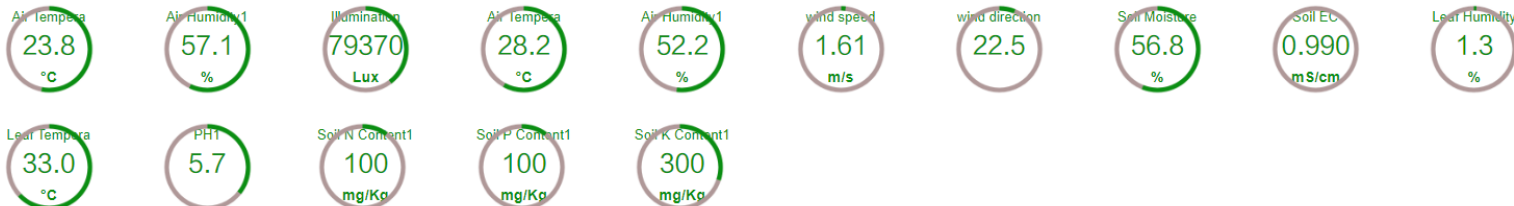


New system: arrived May 2023 in the Netherlands:

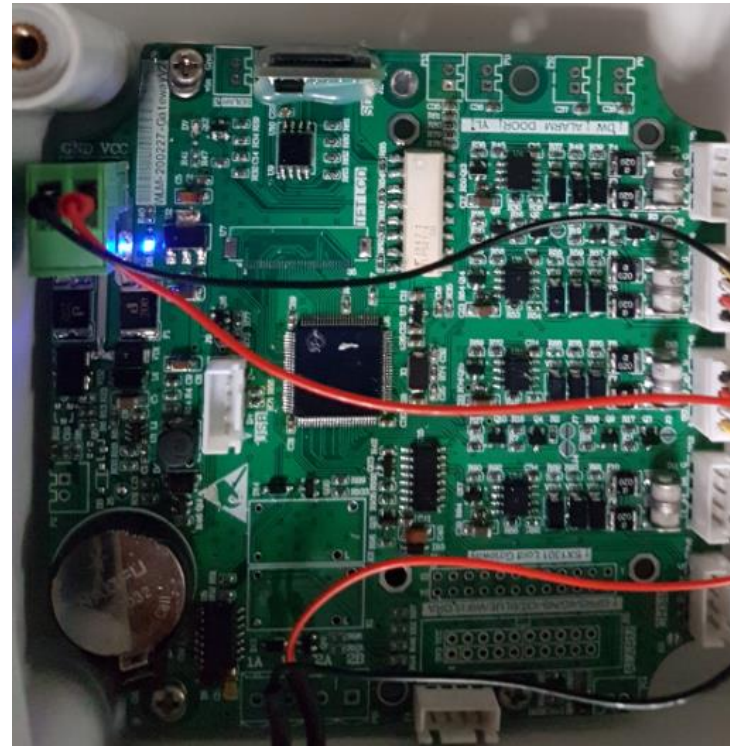
Temperature/humidity/wind speed/directions runs well.

Soil moisture/pH, EC, NPK just in the calibration phase.

Also in the website, will be running fully before end August (export to Excel, intervals, and fully English)



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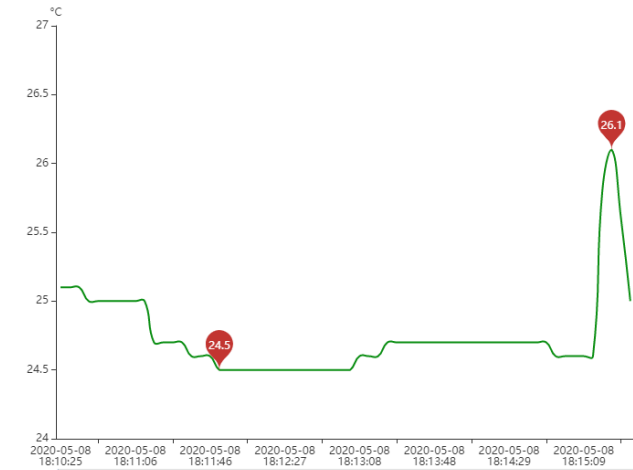


Building the system, from separate sensors/spare parts till a system.

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Second week of May
system communicate
with the website

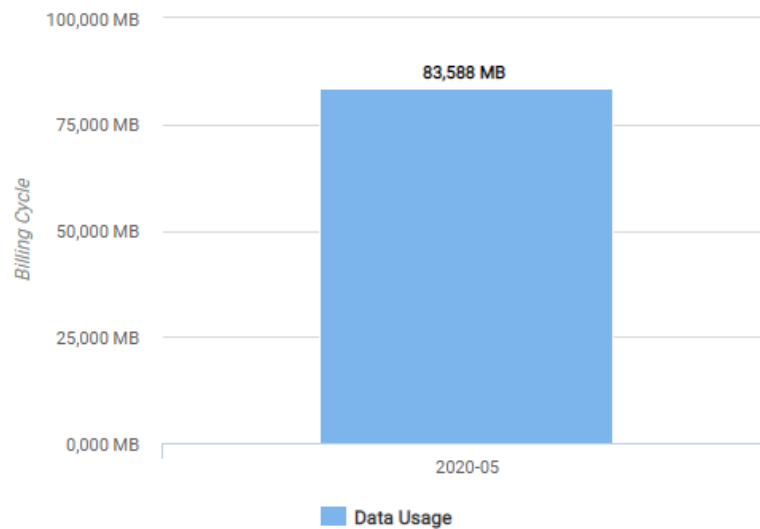


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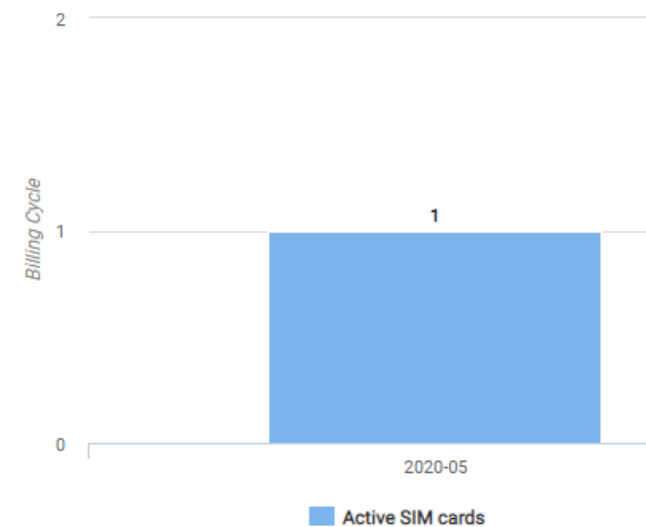
This month's data usage

76,42MB

Previous Data Usage



Previous Active SIM cards



Learning and manage the M2M (Machine to Machine) system, after using 3 different sim-cards, Olivia is working.

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<https://sensorex.com/oxidation-reduction-potential-orp/>

<http://www.hmgawater.ca/blog/demystifying-oxidation-reduction-potential>

<https://www.grozone.com/2015/05/05/hydroponic-orp-controls/>

ORP measuring: we measure

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Trials are in an tunnel, with an very high humidity and open field, to simulate as good as possible the situation of Jordan.

All plants are labelled, to see precise the reaction on the climate condition, which we measure with “white sensor” and the new system (next month even with an extra sensor system).

