Viridix

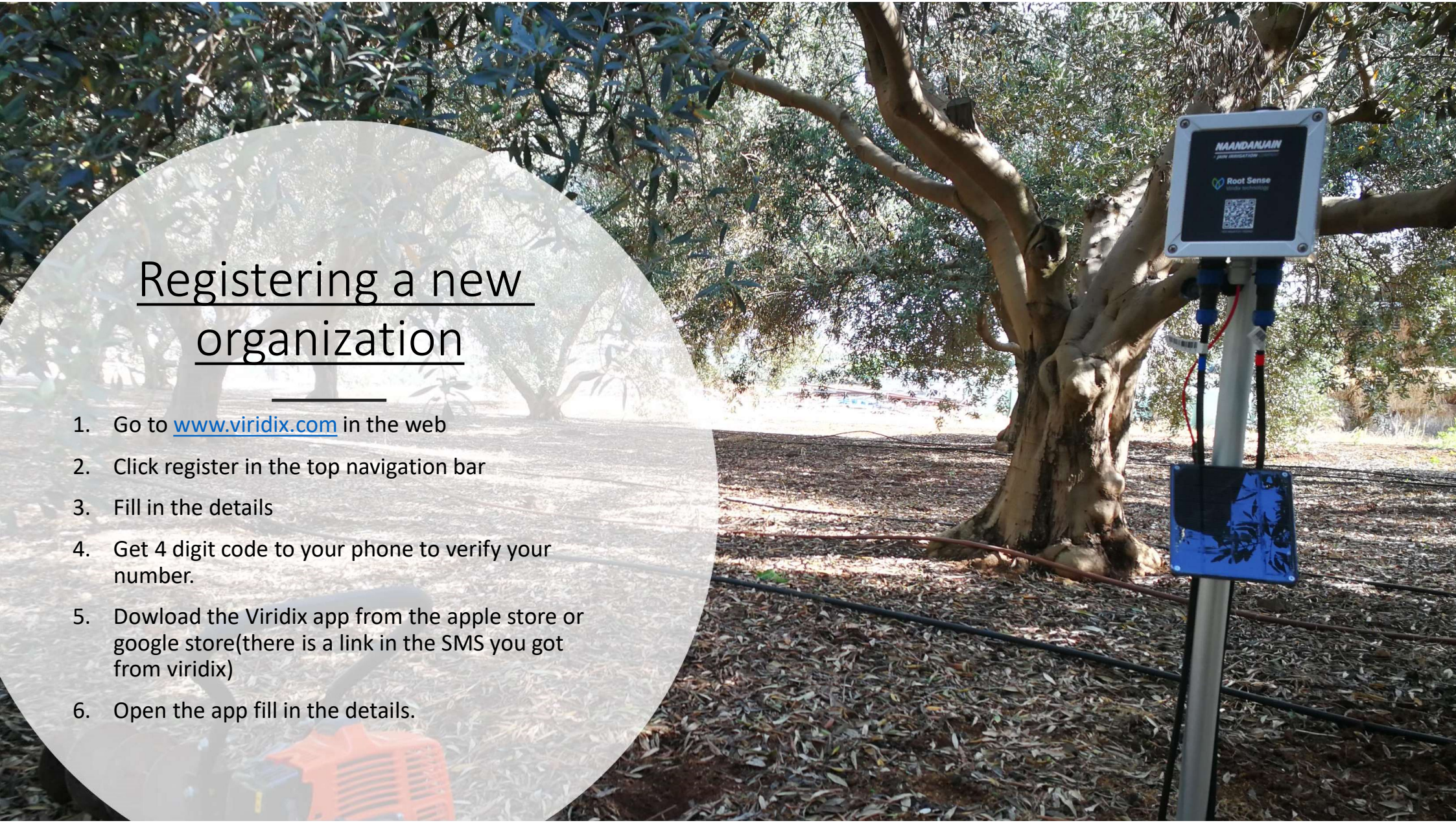
Installation guide

Topics

- System overview.
- Registering a new organization.
- Subscribing a new device.
- How many systems and where to install.
- Getting the system ready.
- Installation in the field.
- Pairing your new device with the application.
- Working with the application and setting alerts.
- Working with the web page.

System overview

1. Data logger- rechargeable battery, cellular 2G/3G modem, processing unit
2. Solar panel
3. Aluminum lightweight pole (3 pieces)
4. 2 Viridix RootSense sensors- measure water potential and temperature

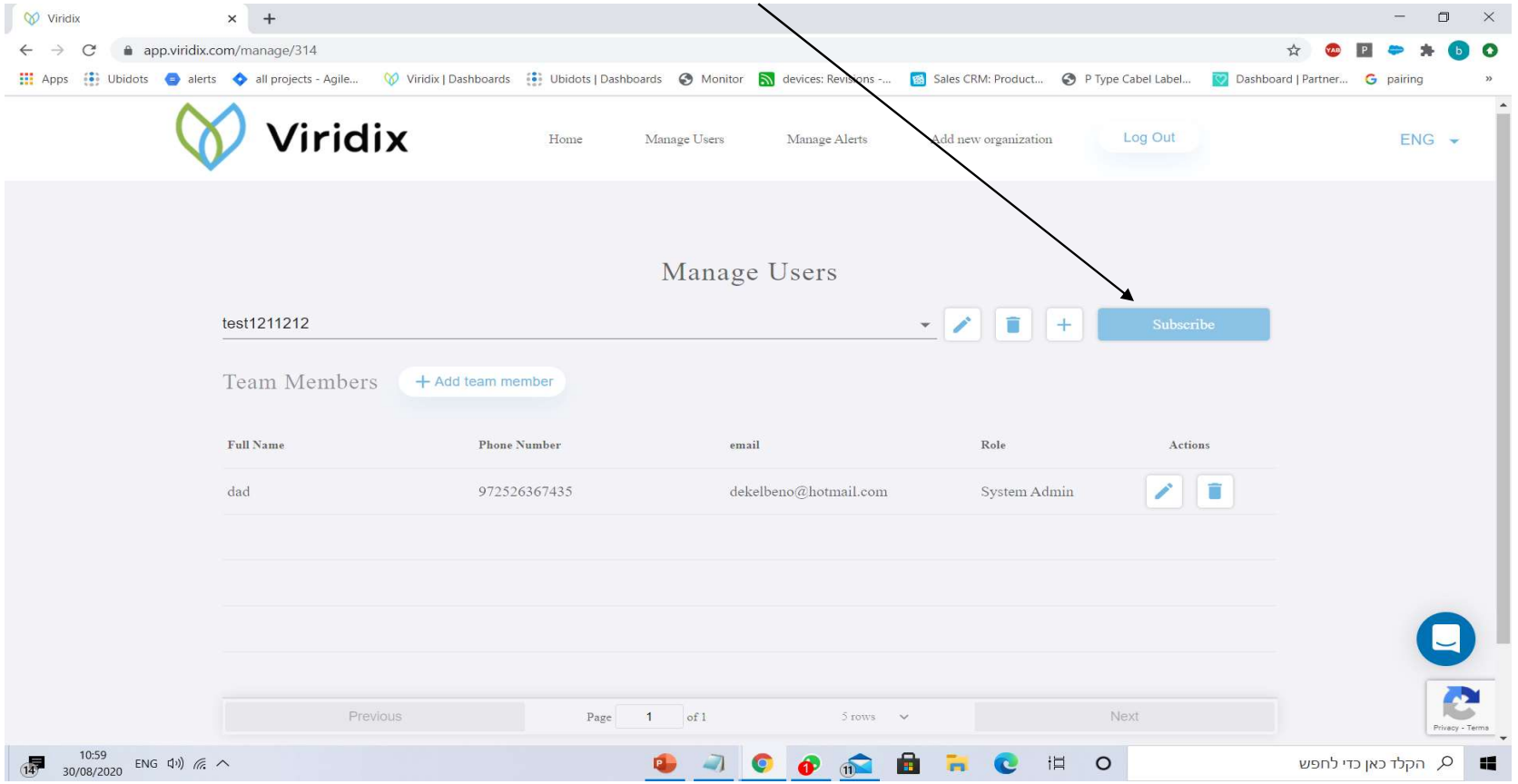


Registering a new organization

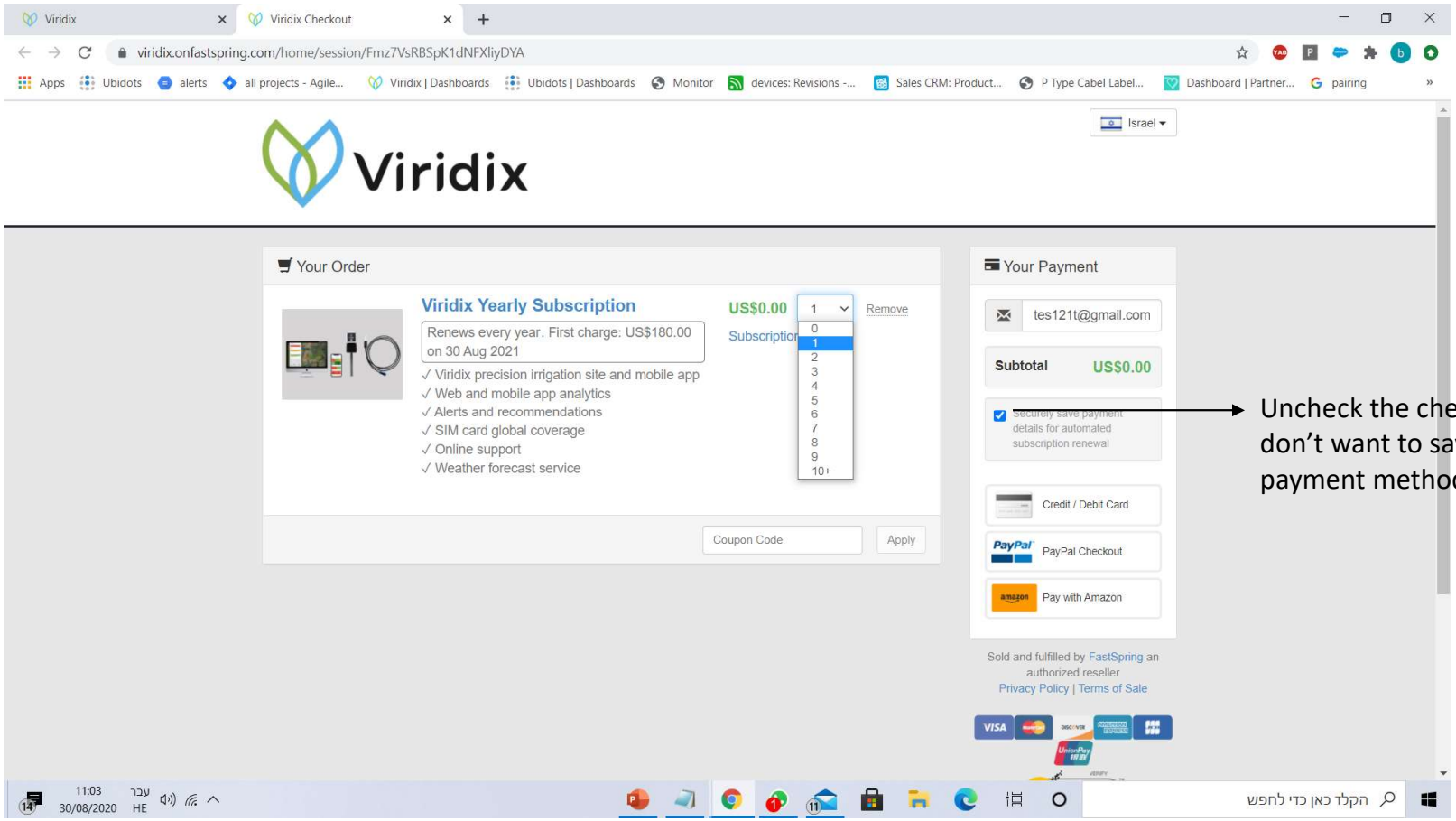
1. Go to www.viridix.com in the web
2. Click register in the top navigation bar
3. Fill in the details
4. Get 4 digit code to your phone to verify your number.
5. Dowload the Viridix app from the apple store or google store(there is a link in the SMS you got from viridix)
6. Open the app fill in the details.

Subscribing a new device

Inside your organization click subscribe



1. Fill in the number of devices you want to subscribe for 1 year.
2. Add client payment details (this is to make it easier to renew the subscription next year, the client will not be charged for the first year)
3. Click enter payment details, fill in the information, click place your order.



Uncheck the checkbox if you don't want to save the clients payment method.

How many systems and where to put them?

- We recommend to put one system on each irrigation valve so the client can react, and change irrigation protocol based on data.
- If we have a field with a lot of variability in it, we recommend to put 1 system in the good area and 1 system in the bad area and compare them.
- We want to pick a good representative plant or tree to monitor, not the biggest or the smallest tree, something in the middle.
- We want to place the system not in the beginning or the end of the row to avoid outlines errors, again we want a good representation.

Getting the system ready

1. Connect the 3 pieces of the pole together and close the clips.
2. Open the data logger and connect the battery wire to the battery socket.
3. Watch the led light complete the cycle and turn off (cellular check).
4. Connect the red solar panel wire to the red wire from the data logger and face the panel to the sun to check charging (red led light turn on).
5. Install the sensors in the hole in the ground.
6. Connect the sensors to data logger (red sensor to red socket and blue sensor to blue socket)
7. Press reset button inside the data logger.
8. Place the system pole in the ground facing the sun for good battery charging.
9. Attach the sensor cable with the holding strap to the pole.
10. Cover the remaining sensors wires in the ground.

Installation of the sensors

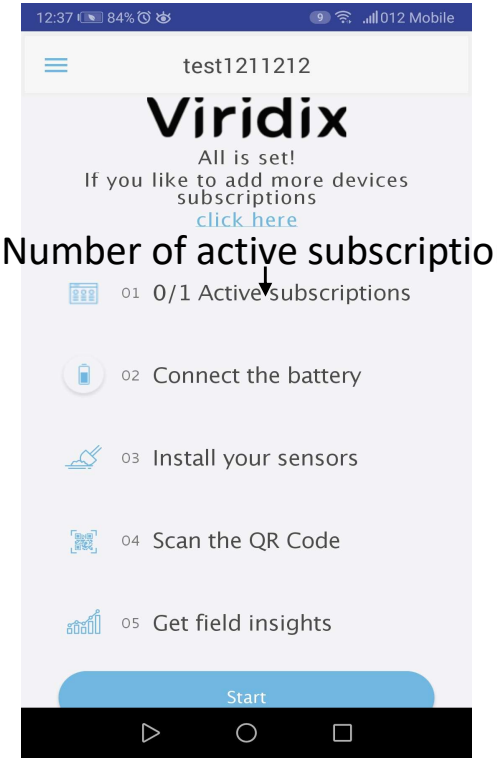
1. Drill a hole in the ground under the irrigation drip and make sure it is close to the roots for best results (too far from irrigation drip will not give us representative results).
2. **Take off** the cover of the sensor from the ceramic cup.
3. Place the blue sensor in the bottom of the hole standing(deep sensor) and place around it clean soil(only soil and no rocks). If the soil is very dry it is best to pour water on the soil and close all the air gaps. Make sure the ceramic part of the sensor has good contact with the ground around it **(very important)**
4. Close the rest of the hole until you want to place the second sensor (red sensor) make sure to slightly pack the soil back to its original state(add water if needed).
5. Install the sensor in the same manner as the blue sensor, make sure you have good contact with the ceramic part with the ground.
6. Close the remaining hole with soil and use water if the soil is dry.
7. Connect the sensors to the data logger and cover up the remaining cable wire with soil.

Sensor installation

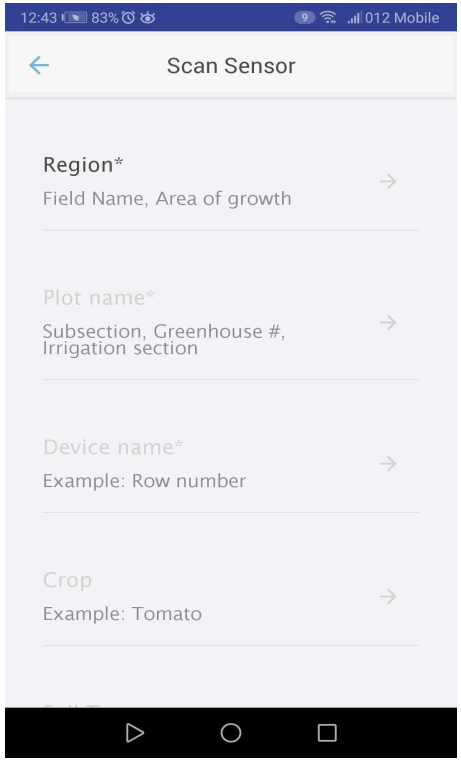
- Close to the tree
- Under irrigation drip
- In the roots area
- Use only soil (no rocks, leaves)
- Correct depth based on crop type

Cover the remaining sensor cable with soil and close the hole.

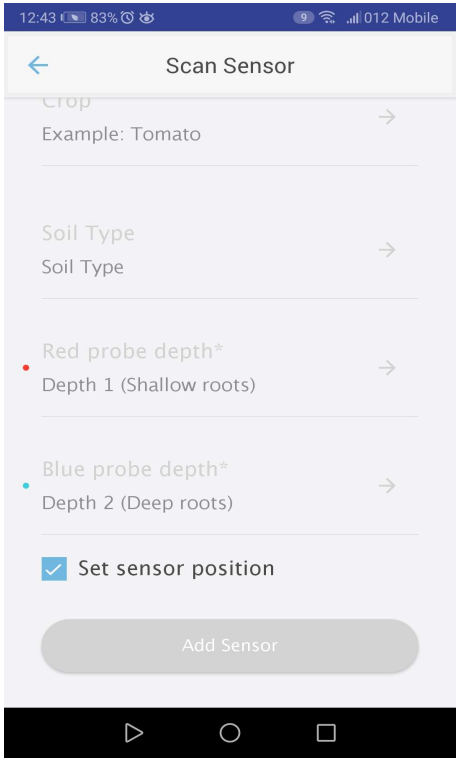
Pairing your new device with the application



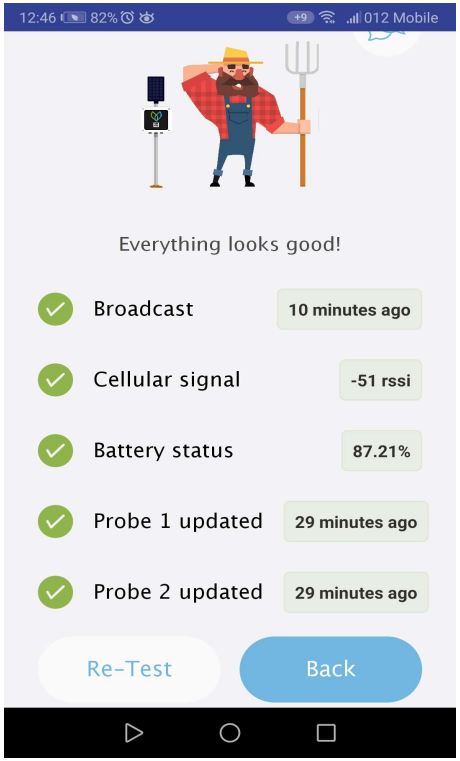
1. Click start
2. Read the manual
3. Click Add Sensor
4. Scan the QR code on the data logger



- Fill all the system information(region, plot name, crop type, soil type, depth of sensors).

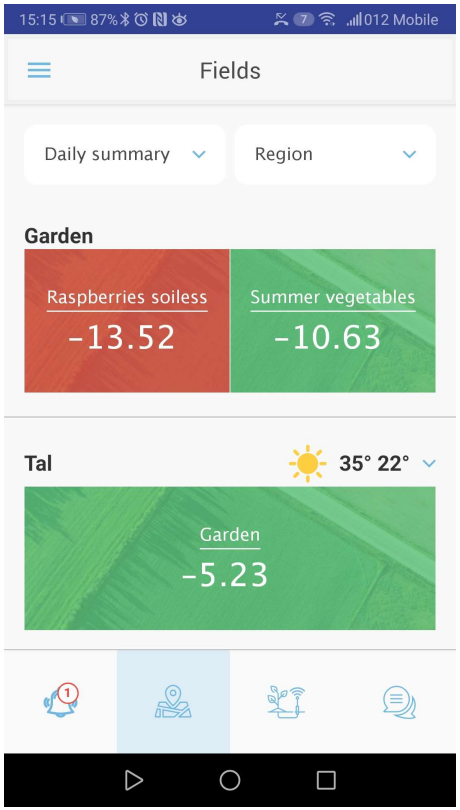


- Click Add Sensor

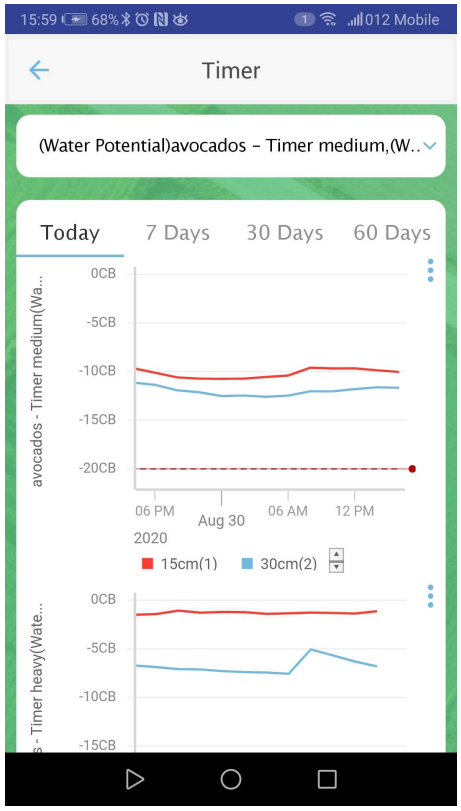


- Check that the system is running well.

Plot View



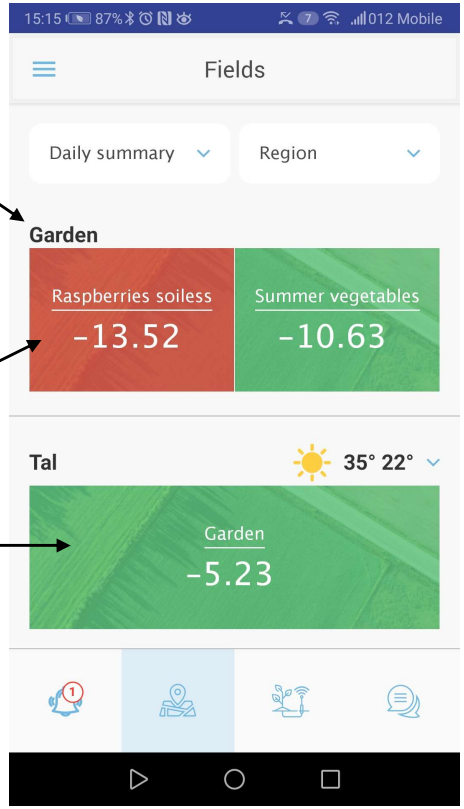
- High level View of all the systems.
- Daily, weekly, monthly summery.
- Selector of Region or crop type.
- Plot colors change based on sensor threshold (green=good, yellow=medium, red=needs attention, grey=no threshold alert set)
- Weather predictions based on the GPS position of the system.



- You can select and compare between systems.
- You can add or remove different parameters to see:
- Water potential
- Ground temperature
- air temperature
- Precipitations(rain fall)
- System battery

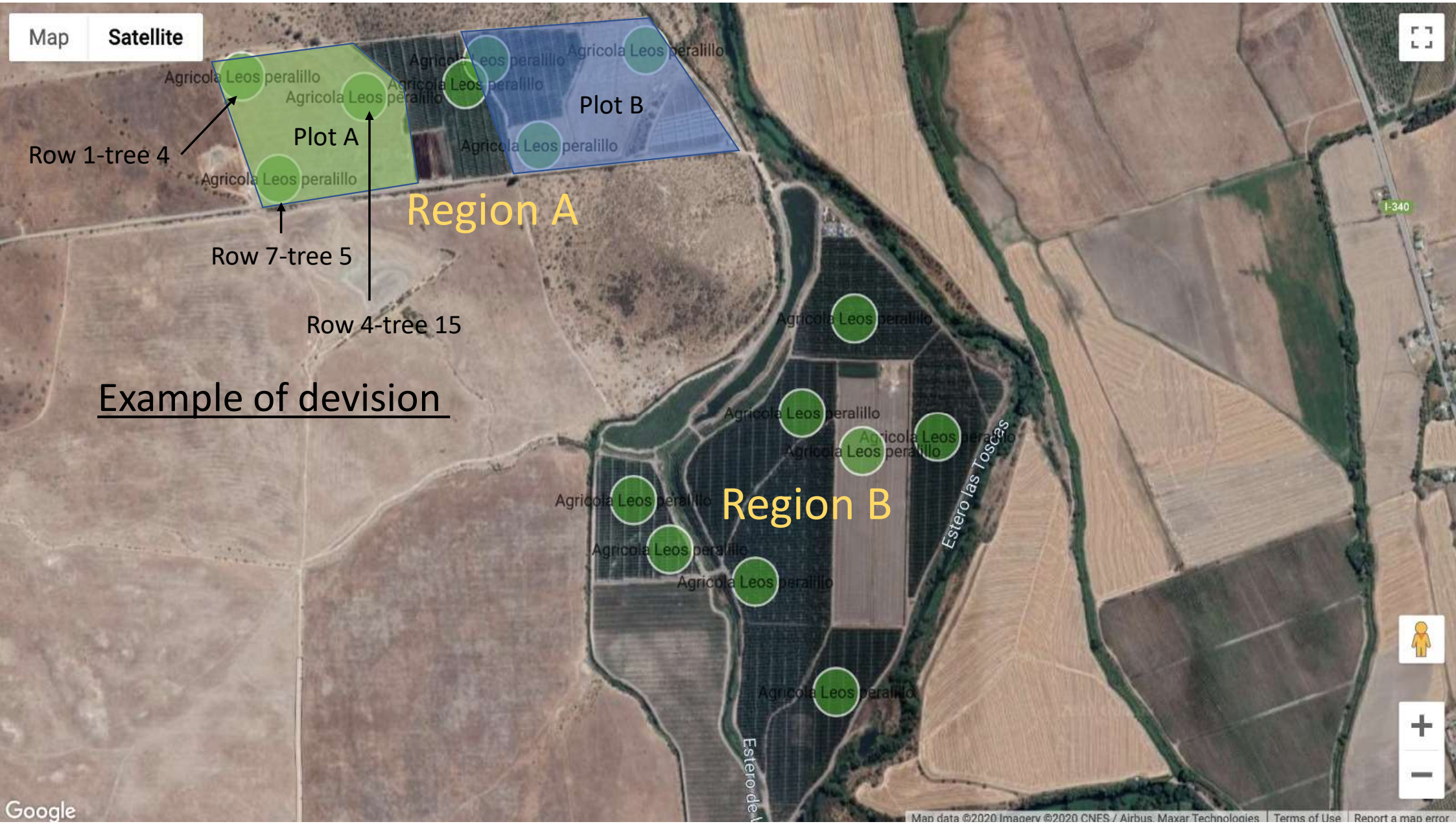
How to get the most from Plot View

1. Systems in the same area should have to same Region name.
2. If you have 2 or more systems in the same plot, give them different device name(row 6-tree 5).
3. Set threshold alerts to get insights about your field water potential.
   Red color = needs attention.
   Yellow color = consider irrigation.
   Green color = field is taken care of.



Example

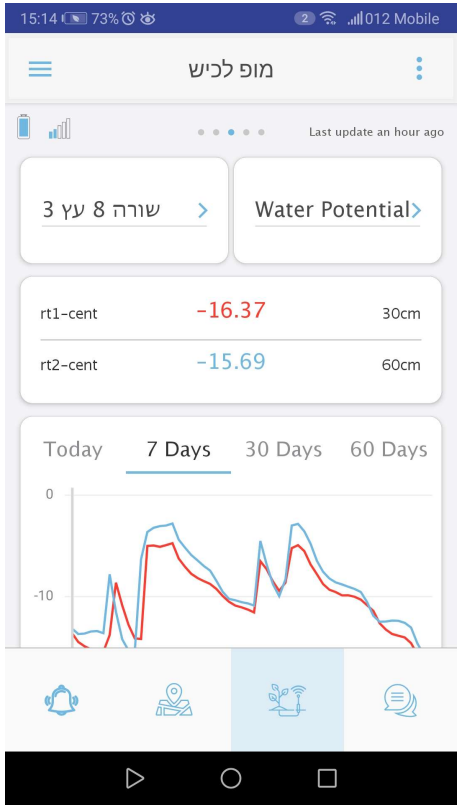
- Region
  - Plot
    - Sensor name
    - Sensor name
- Garden
  - Raspberries soiless
  - Summer vegetables


Map
Satellite
Plot A
Plot B
Row 1-tree 4
Row 7-tree 5
Row 4-tree 15
Region A
Region B
Example of devision
Agricola Leos peralillo
Estero las Toscas
I-340
Google
Map data ©2020 Imagery ©2020 CNES / Airbus, Maxar Technologies
Terms of Use
Report a map error

Working with the application and setting alerts.

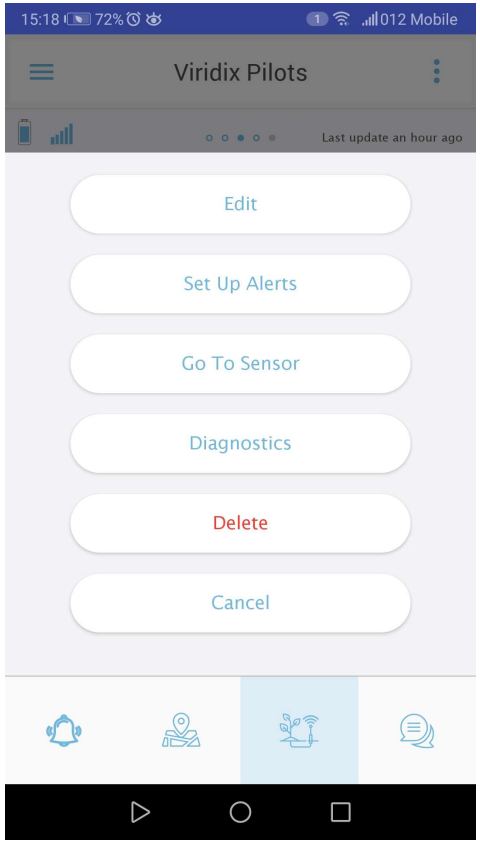
System overview:

- Battery level
- Cellular signal
- Last update
- Device selector
- Sensor last value
- Graph with date selector
- Data selector:
- water potential
- Ground temperature
- battery level
- Map with GPS position

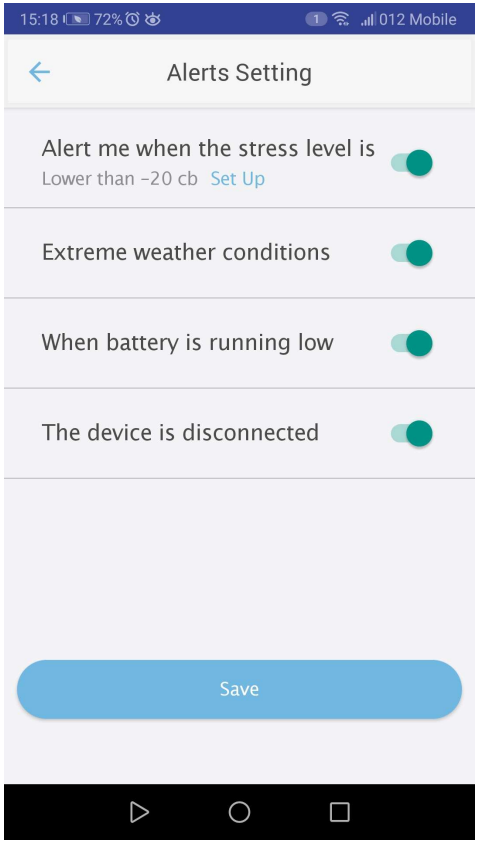


Device settings and alerts

- In the sensor view:
- Click the 3 dots in the top right corner to enter settings
- Click set up alerts
- Navigate to the system with Waze or Google maps
- Diagnostic tool(check the system)
- Delete the system from the organization
- Edit system details

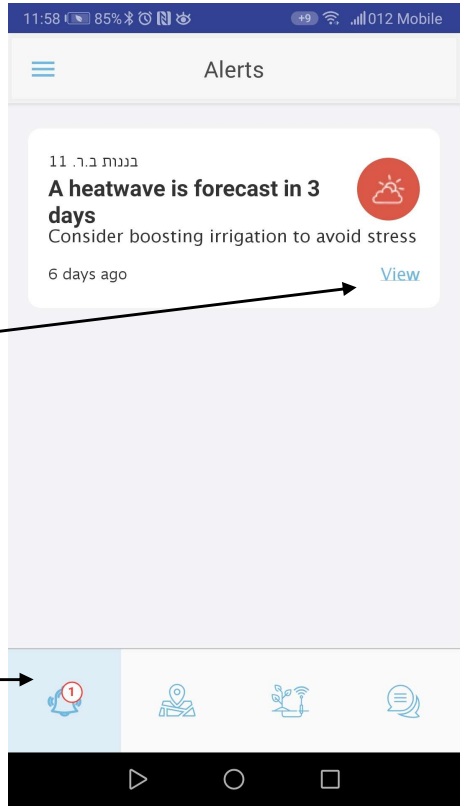


- Click set up alerts
- Selects the alerts you want.
- System will send a notification if any of the alerts happened
- Alert types:
- Water potential stress is building up
- Harsh weather coming(heat wave or frost)
- Low battery
- Device offline



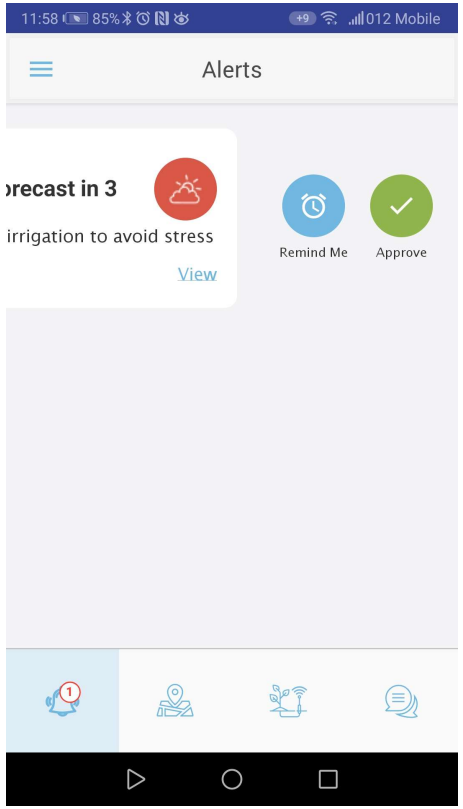
Alerts page

- All the system alerts will be displayed (heatwave, frost, water potential low, system disconnected, low battery)
- Click on view will take you to system view for more details.



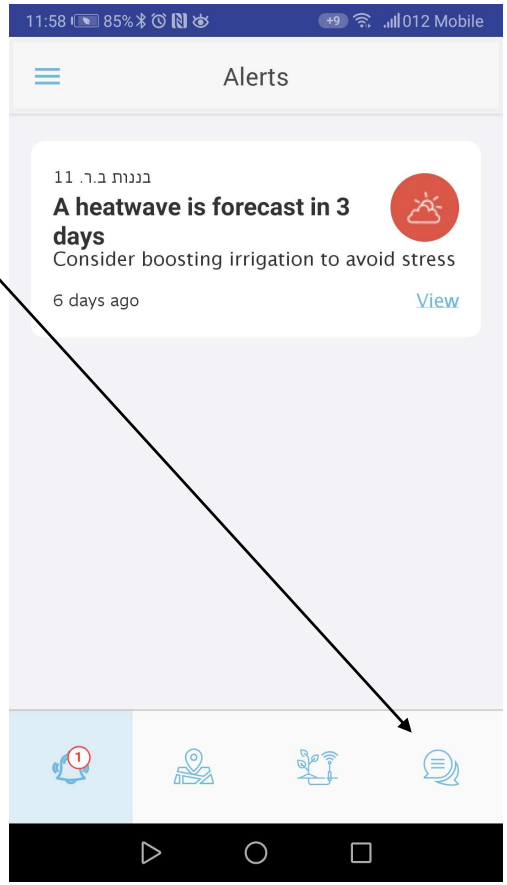
Alerts tab

1. Slide the alert left to decide what to do with the alert.
2. Select approve to delete the alert. You can write the reason if you want, its optional
3. Select remind me later if you want the app to remind you again.

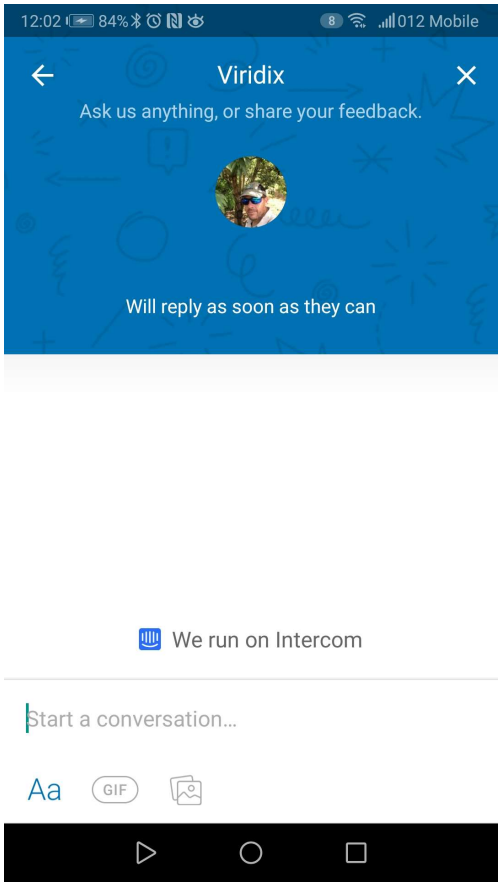


Contact us via the app

Click on the chat tab from anywhere in the app

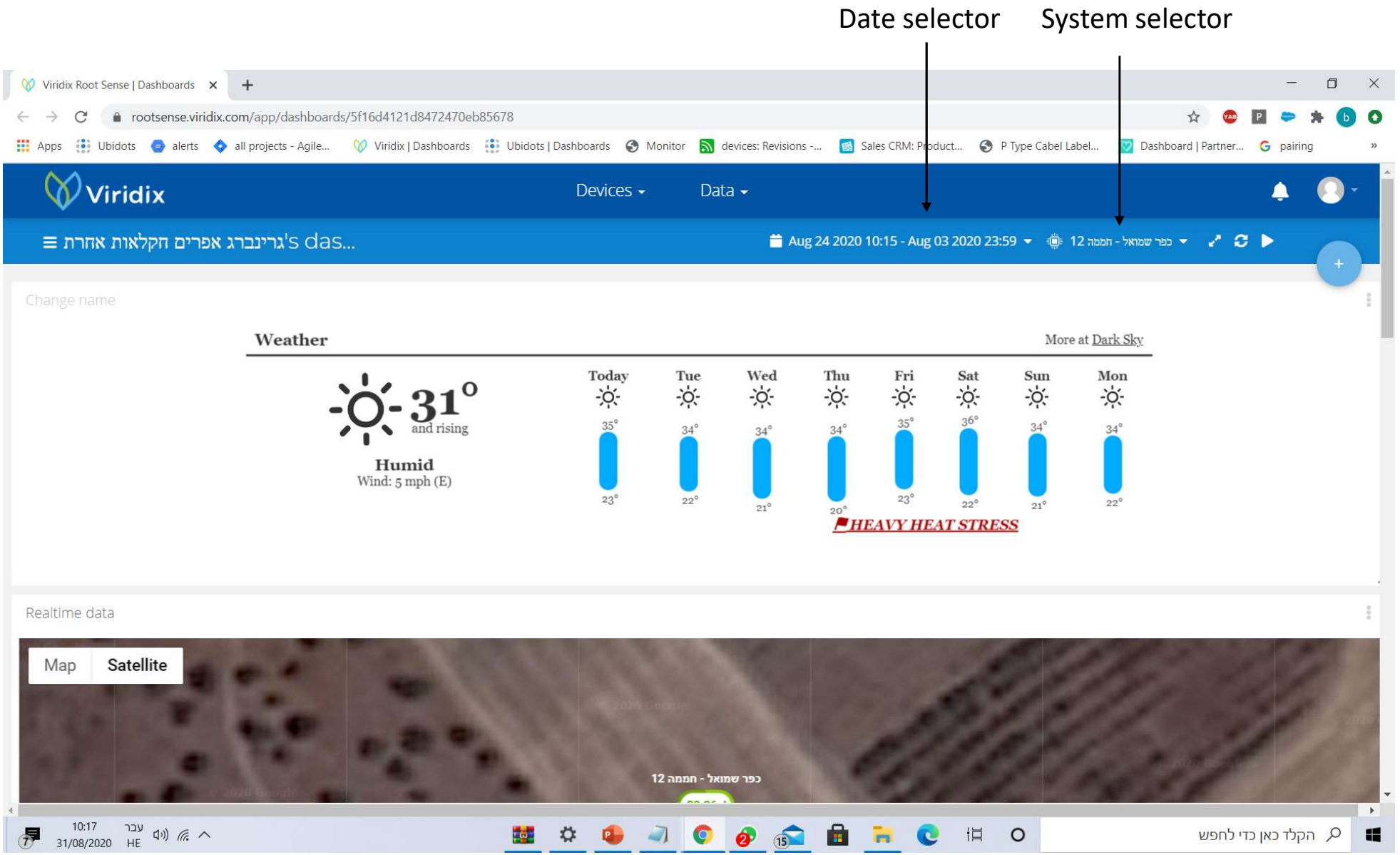


Chat with our support team on any question or problem you have. The client can contact us directly from this chat



Working with the web page

- After pairing a device with the organization you will get an email with invitation to your organization web page.
- In the mail you see your username.
- Click on the link and then you will be asked to setup a new password.
- Create a password and enter your organization web page.


Date selector
System selector
Viridix Root Sense | Dashboards
rootsense.viridix.com/app/dashboards/5f16d4121d8472470eb85678
Apps
Ubidots
alerts
all projects - Agile...
Viridix | Dashboards
Ubidots | Dashboards
Monitor
devices: Revisions -...
Sales CRM: Product...
P Type Cabel Label...
Dashboard | Partner...
pairing
Viridix
Devices
Data
גרינברג אפרים חקלאות אחרת's das...
Aug 24 2020 10:15 - Aug 03 2020 23:59
12 חממה - כפר שמואל
Change name
Weather
More at Dark Sky
31°
and rising
Humid
Wind: 5 mph (E)
Today Tue Wed Thu Fri Sat Sun Mon
35° 34° 34° 34° 35° 36° 34° 34°
23° 22° 21° 20° 23° 22° 21° 22°
HEAVY HEAT STRESS
Realtime data
Map
Satellite
כפר שמואל - חממה 12
10:17
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עבר
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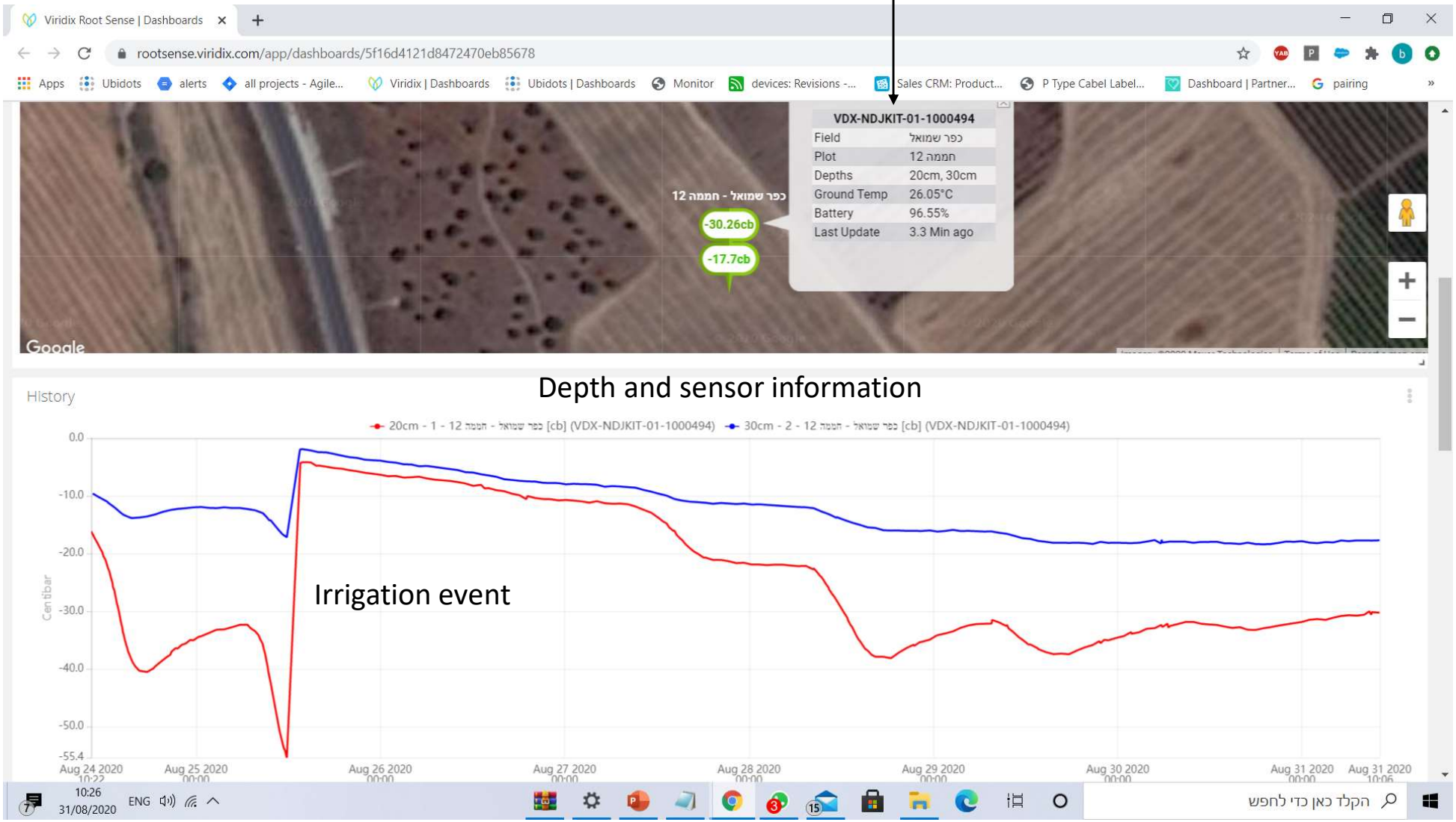
הקלד כאן כדי לחפש

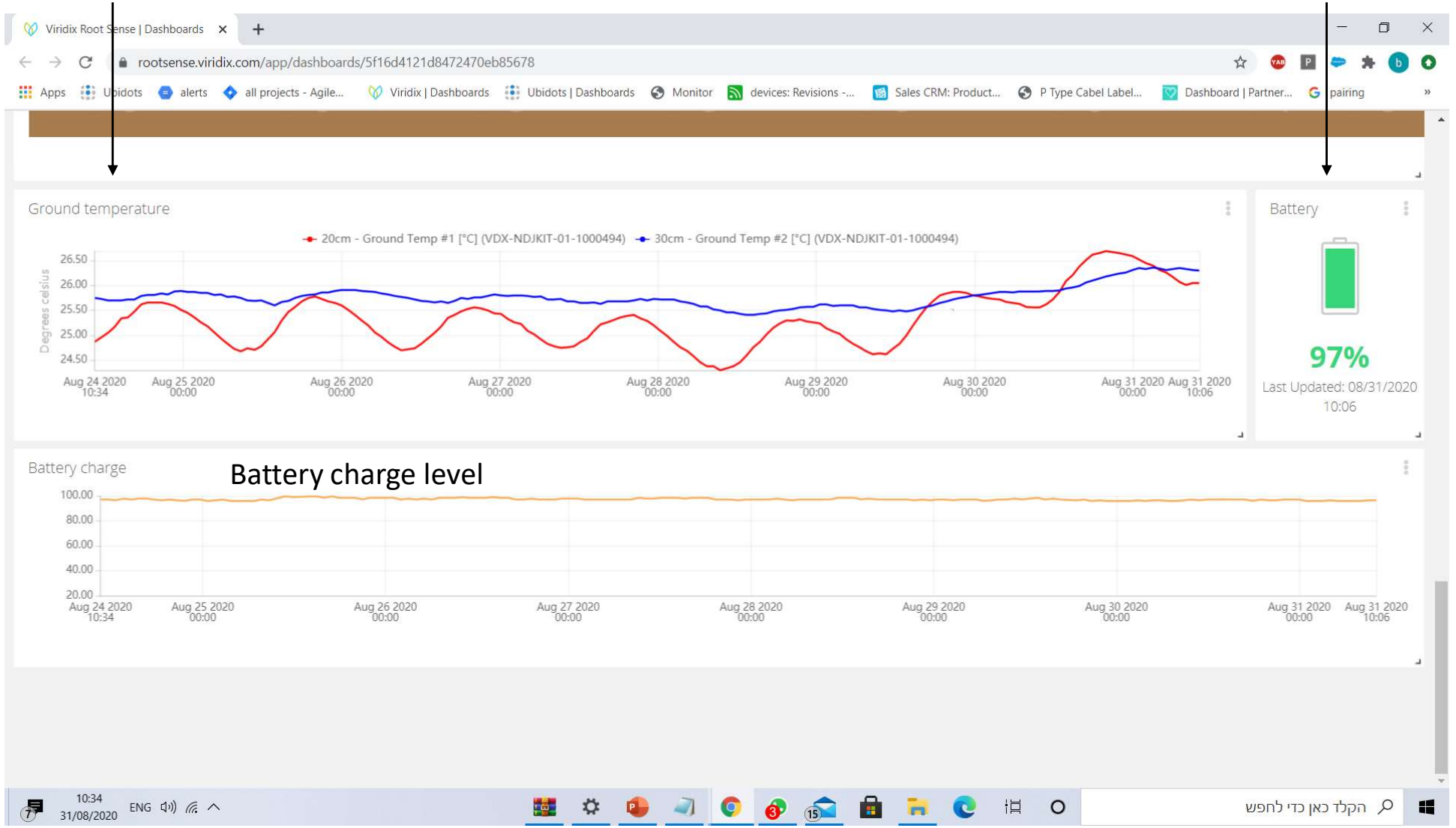
Map with GPS position and last system information



Depth and sensor information

Ground temperature

Battery level



Thank you
Viridix
support team