

4.2. System Settings

Click on “Settings” and “Base Station Settings” to go to the “Systems Settings” page (Figure 11). In this page, you can add graphics image/map of the farm that will appear on the homepage. This can be for example a view of the farm taken from Google Maps. The geographic coordinates of the location can also be entered in this page. This information is used to set the Sensorweb™ time zone as well as sunrise and sunset times.

Then, set the channel and sub channel for the radio base. This has to be the same channel and sun channel set on the nodes installed on the production blocks. The default channel and sub channel for Sensorweb™ are 0 and 0. For information on how to set the channel and sub channel when installing nodes, visit [Using ECH2O Utility Software](#) module. The Sensorweb™ homepage will display various colors on node icons based on ranges of values of various measurement types. These colors are based on set values for each parameter -- and the minimum and maximum values for displaying various colors are set on this page. After making your preferred changes to these ranges, click on “Update” to save all the changes made to the settings.

Site Image: WyeREC2.png No file chosen

Latitude and longitude are used by the system to compute sunrise and sunset times
 Base Station Latitude
 Base Station Longitude

These options adjust the radio channel and sub-channel that the base will use to communicate with the nodes. The nodes and base must have matching channel and sub-channels in order to communicate. This command can take several minutes to take affect.
 Base Station Radio Channel (0-7)
 Base Station Radio Sub Channel (0-9)

This changes the size of the node picture displayed on the main map.
 Node Marker Size (1-5)

Configure ranges for home page measurement color coding?

Measurement Type	Units Used			MIN	MAX	MIN	MAX	MIN	MAX
Battery Life	%	70.0	100.0	25.0	70.0	10.0	25.0	0.0	10.0
Daily Irrigation	Minutes	0.0	10.0	10.0	60.0	60.0	100.0	100.0	600.0
Electro-Conductivity (EC)	dS/m	2.0	3.0	1.5	2.0	1.2	1.5	0.0	1.2
PAR	umol/(m ² *s)	3000.0	5000.0	1000.0	3000.0	250.0	1000.0	0.0	250.0
Sun Power	W/m ²	3000.0	5000.0	1000.0	3000.0	250.0	1000.0	0.0	250.0
Rainfall (Precipitation)	mm	100.0	500.0	50.0	100.0	10.0	50.0	0.0	10.0
Rainfall (Volume)	ml	100.0	500.0	50.0	100.0	10.0	50.0	0.0	10.0
Soil Moisture (%VWC)	%VWC	70.0	100.0	50.0	70.0	20.0	50.0	0.0	20.0
Temperature (Fahrenheit)	Fahrenheit	75.0	125.0	25.0	75.0	0.0	25.0	-20.0	0.0

Figure 11. The Sensorweb™ “System Settings” page

Once the graphic image/map of the farm is uploaded into Sensorweb™, node symbols/icons can be used to locate actual positions of nodes on the farm.

- A. Go to “Settings” and click on “Add/ Modify Node Locations”.
- B. The node icons can be created by double clicking on the desired area on the map and entering “Location Name”. This feature is very useful as it is used to organize nodes in Sensorweb™.
- C. On the home page, the node location icons can be also be setup to show different colors based on range of values of various measurement types.