5. Visualizing data in Chart view

Once data logger is entered into the DataTrac 3 database using the various data entry ways mentioned

in the previous sections, the data collected can be viewed in a chart format following the steps below.

In the DataTrac 3 device directory, select the logger for which data is going to be viewed.

If data is in Table view, click on "Chart' on the toolbar or in View menu (shortcut Ctrl+G) to view

data in chart.

A Chart view for weather station is given in Figure 4. An axis will appear for each type of measurement

being displayed. Using the mouse pointer, any of the x- or y-axes can be moved for ease of viewing. It is

possible to zoom in on a specific area of the chart using the zoom-in (+ sign) tool in the lower right

corner. Specific range of dates can be inserted in the "Chart Period" box at the bottom of the graph to

visualize data from that period. A Day, Week, Two Weeks, Month, Season, or All Data can be selected in

the "Chart period" drop-down menu for custom views of the data (Decagon Devices, Inc. 2013).

Data is arranged in the "Chart View" such that the current data point is at the right of the screen. For

example, to view data from June 2009 to June 2010, the table would display data from just before the

first and slightly after the last data points in that range. However, when selecting Week view for

example, the chart will place the current date's data point at the right of the screen and display data

from a week before it to the left. By scrolling over and stopping on a specific data point, the exact date

and associated data can be seen. By double clicking with the left mouse button on a chart data point, an

annotation box will appear that allows describing certain data points (Decagon Devices, Inc. 2013).

A right mouse click on the chart will bring up a menu with the following choices:

Show Table View: opens the Table of the corresponding chart.

Toggle Drag: turns this feature on or off

Toggle Zoom Box: switches between the pointer and the Zoom box function on the mouse

Zoom In: allows mouse clicks to zoom in on a certain location.

Zoom Out: allows mouse clicks to zoom out on a certain location.

Copy Chart to Clipboard: copies displayed chart for pasting in external locations

Export Chart...: allows you to save chart as a picture files (such as BMP).

Toggle Grid: switches grid lines on and off

Clear All Annotations: removes all annotations on a chart and from the database.

Toggle Legend: Switches the legend on and off.

The chart axes were designed to be larger than necessary to allow the user to drag traces on and off of the screen. For example, if you have a busy chart and want to move a particular trace to make more space, click on that trace's chart axis and drag the mouse upward to take the trace off the screen. The trace will be returned to its starting position if you leave the chart view and return to it. You can also shrink and expand the axes by double clicking on the axis. To add comments to the chart, double click on the location where you would like an annotation and enter any comments about the selected time period that you feel would be helpful.

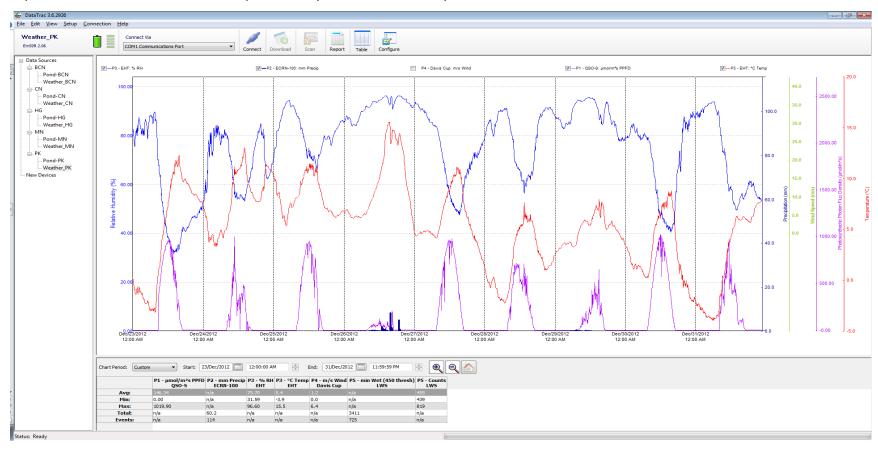


Figure 4. Chart view.