



## Basic Totalization Graphing

A very basic use of the Compound Line Equation function would be to add up the number of items, occurrences, pulses etc that occur as time goes on. This would be a simple addition and totaling of events that are not occurring at a particular rate.

What we are doing is simply applying an external formula to the data we have collected and displaying this on the graph as well. Using TrendReader 2, the formula looks like the following:

**Answer1 = Answer1 + (Source0)**

**Answer0 = Answer1**

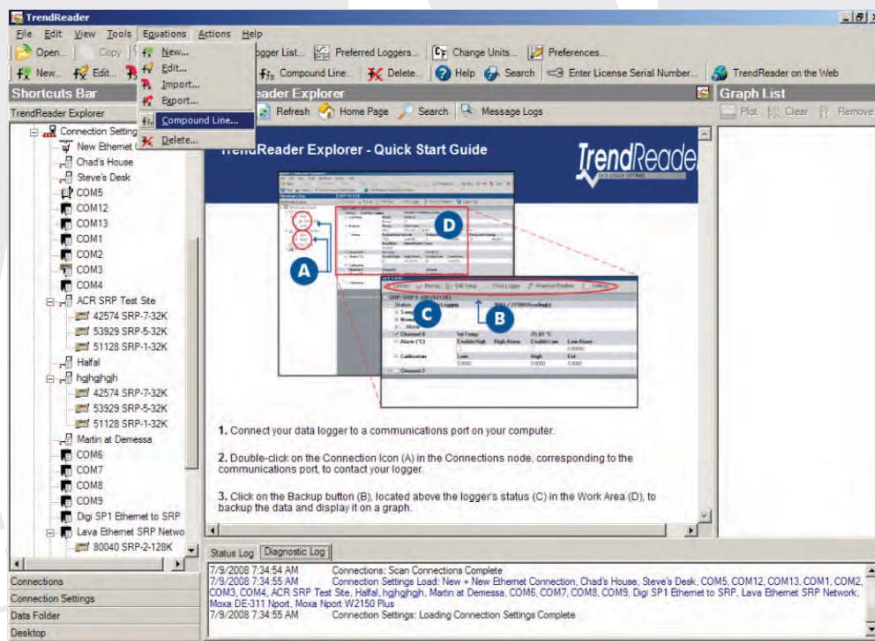
**Answer1** is the result obtained from performing the calculation.

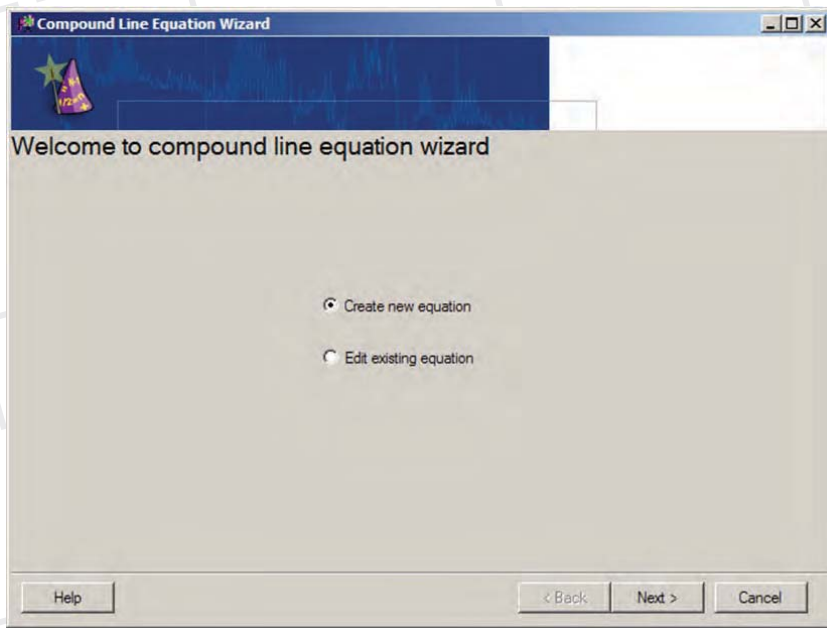
**Source0** is the input variable. (from the data graph - each item or pulse) that we wish to accumulate.

**Answer0** is the final result that gets plotted to the graph.

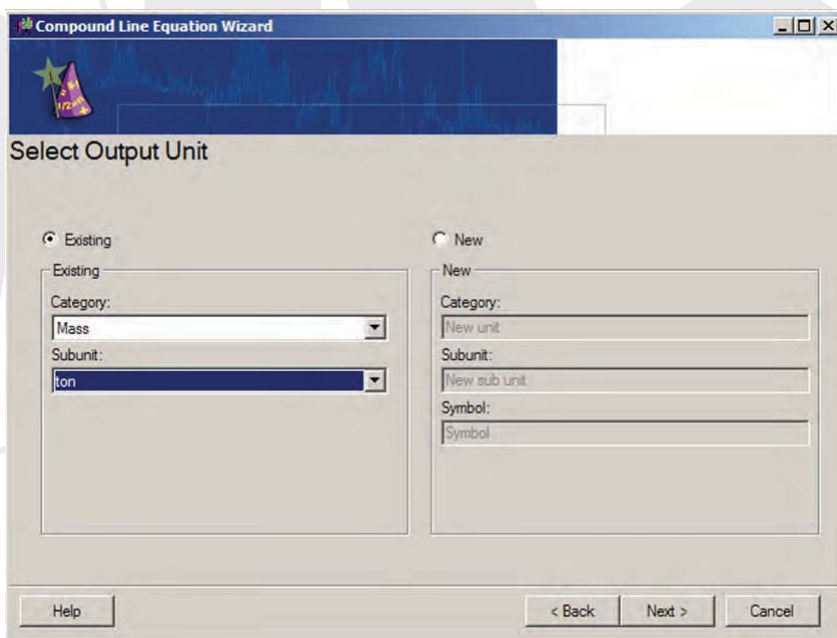
This equation is simply taking a reading from the graph and adding it to the previous reading and plotting the result. As a simple example, if garbage was being dropped off at an incinerator or landfill every so often, how much garbage would there be accumulated at the end of the time period in question?

To create the compound line equation in TrendReader 2 select Compound Line from the equation menu and take the following steps:



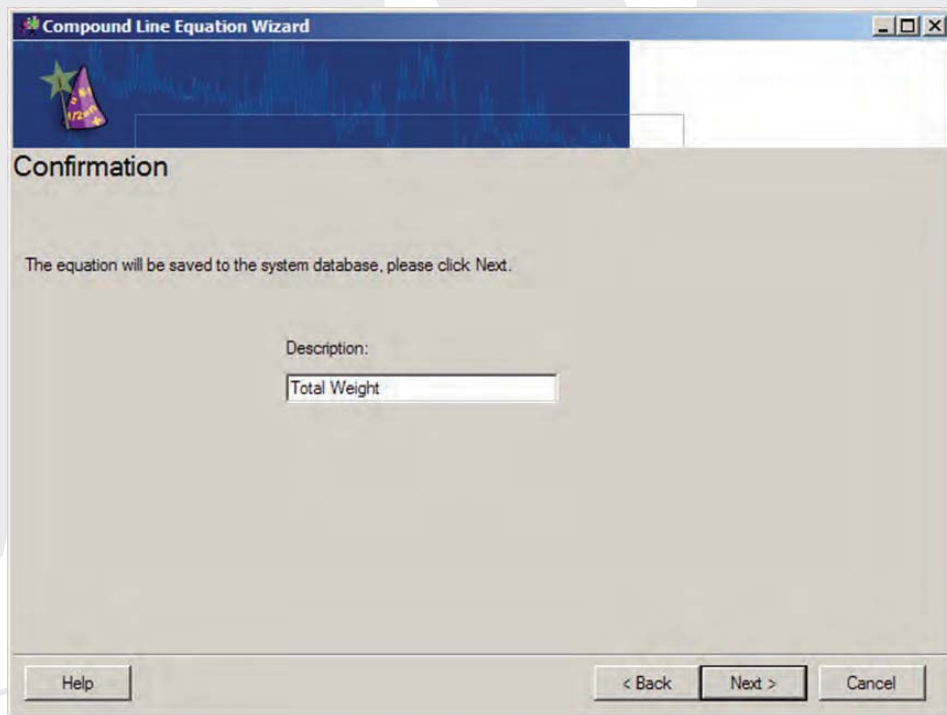
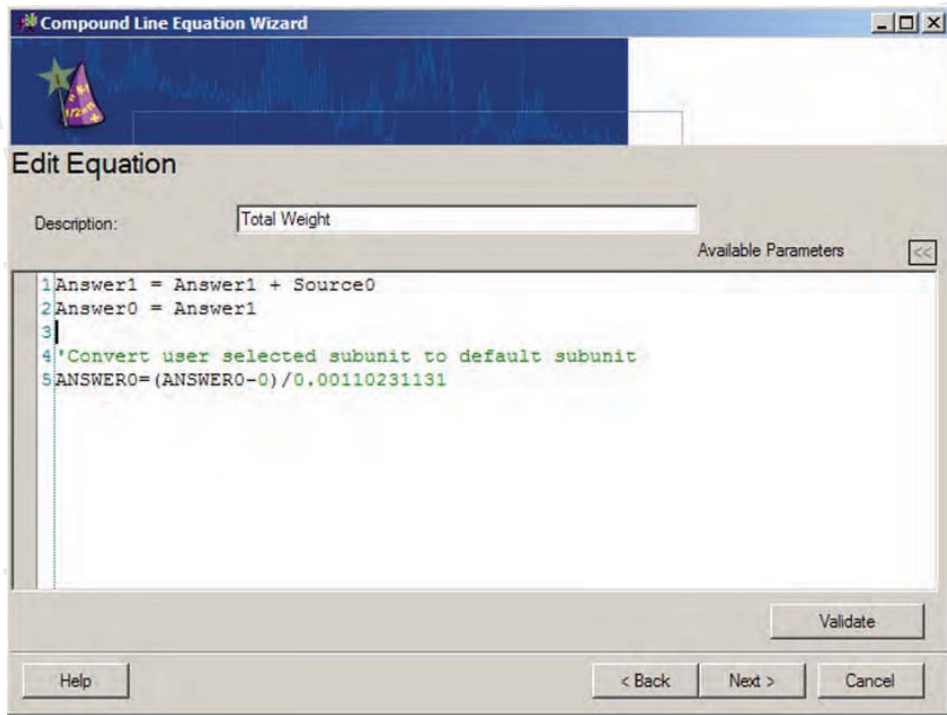


Select Existing if the Category exists already or select New if you need to create a category that is not currently in the software.

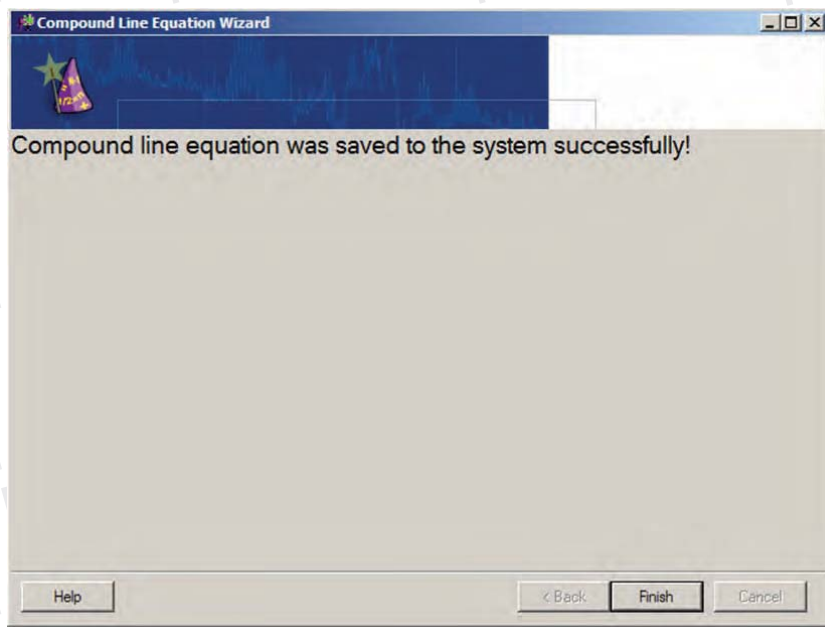




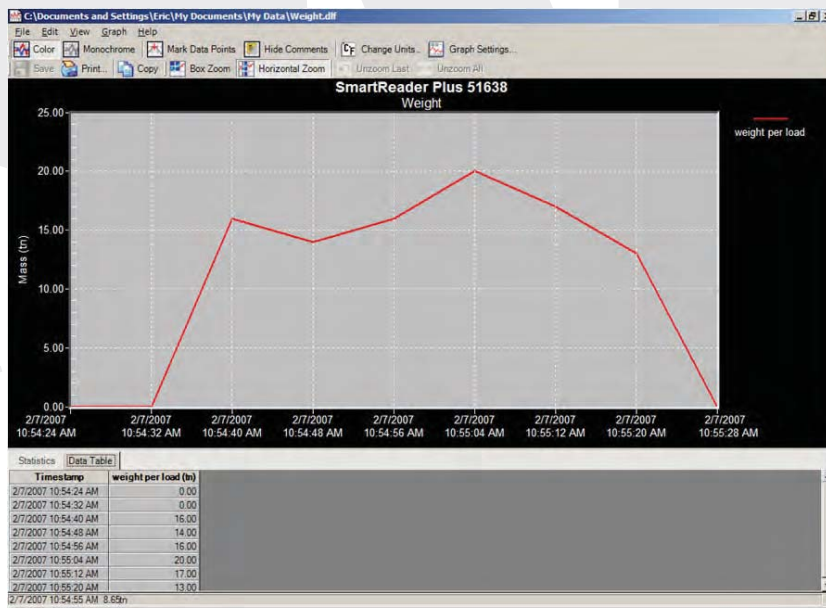
Enter a description and the equation syntax.



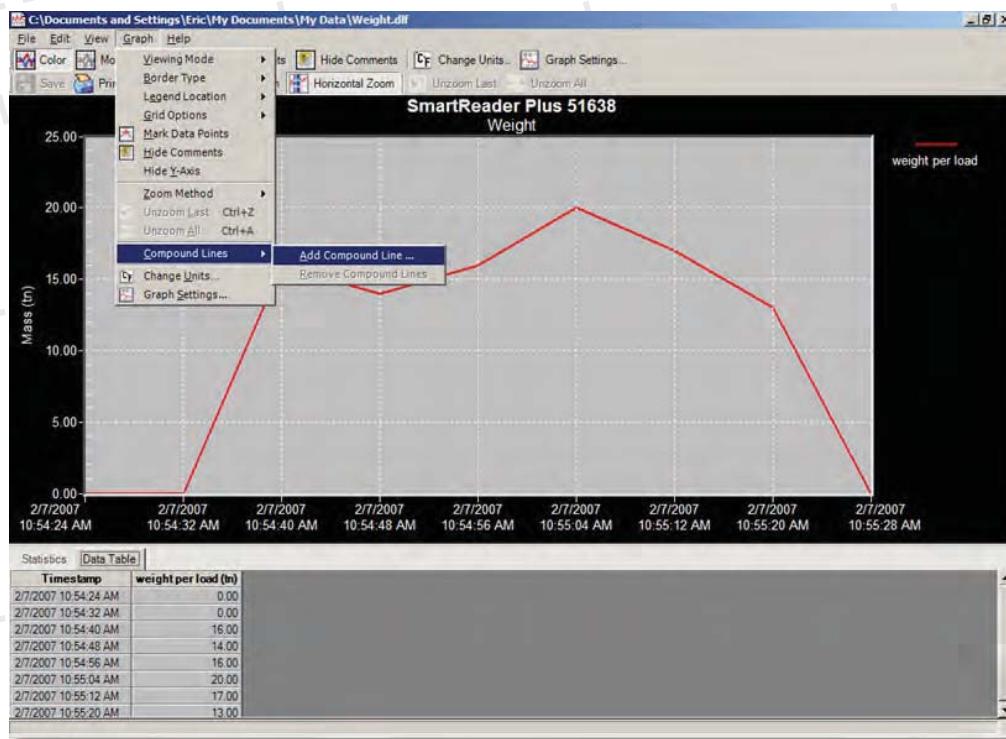
Confirm the result.



Click Finish to complete the creation of the Compound Line equation. The next step is to apply the equation to a graph requiring totaling:



Next, we apply the Compound Line equation we created earlier.

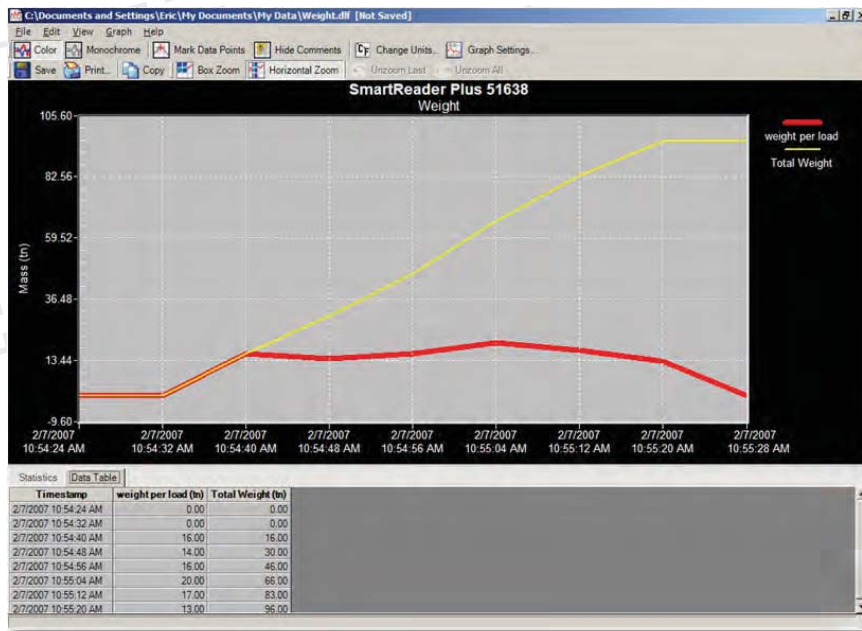


Select the equation from the list:

The screenshot shows the "Add Compound Line" dialog box. It contains the following fields and options:

- Compound line equation:** A dropdown menu with "Total Weight" selected.
- Line Name:** A text input field containing "Total Weight".
- Type in a constant number or assign a graph line to each:** A dropdown menu with "SOURCE0" selected, and a secondary dropdown menu with "Logger 51638 - Channel 0 - weight per load" selected.

At the bottom of the dialog box are "OK" and "Cancel" buttons.



The finished graph shows both the weight per load and the total weight accumulated. The data table shows the running total at each sample interval. The Statistics tab also has a complete breakdown of the data as well.

