


# Object Tracker Beta: Plots and trendlines using Excel

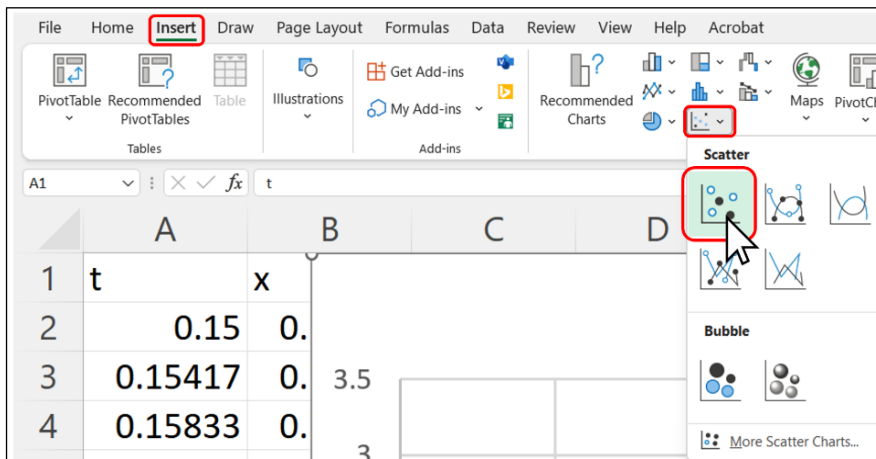
## 1. Create scatter plot

Identify the y-variable and x-variable of your plot (Hint: Time is almost always the x-variable). Highlight your entire y-variable column (1). Then hold down the CTRL key (or Command key on Mac) and highlight the entire x-variable column (2). Holding the CTRL key allows you to highlight/select multiple things at once. Now both columns should be highlighted.

As shown below, go to the "Insert" tab at the top of the screen and click this symbol:  in the "Charts" section. Select the first option (scatter plot with no lines).

1.


	A	B	C
1	t	x	y
2	0.15	0.728571	2.385714
3	0.154167	0.728571	2.421429
4	0.158333	0.732143	2.430357
5	0.1625	0.737143	2.446667
6	0.166667	0.740136	2.463946
7	0.170833	0.742286	2.476571
8	0.175	0.744762	2.497619
9	0.179167	0.752721	2.508163
10	0.183333	0.75559	2.520497



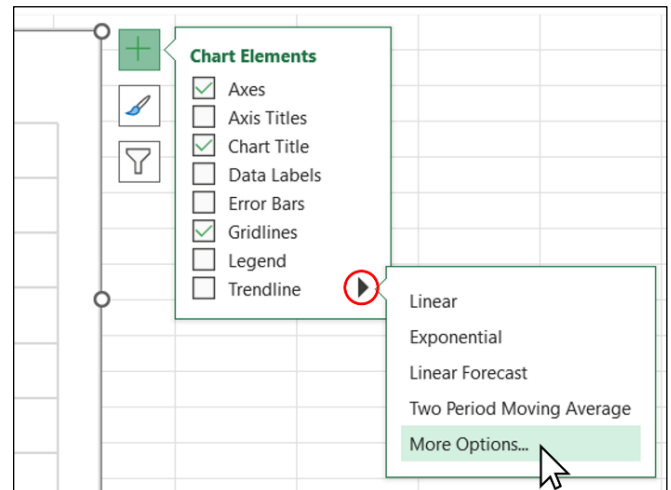
2.

	A	B	C
1	t	x	y
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## 2. Fit a trendline to the plot

Click the plot to select it, then click the "+" icon in the upper right corner of the plot to pull up the "Chart Elements" menu (as shown on the right). Click the arrow  next to "Trendline" at the bottom of the menu and select "More Options...". This will open the "Format Trendline" menu on the right side of your screen.

Select the appropriate trendline type (linear, exponential, etc.). Then scroll to the bottom of the menu and check the box next to "Display Equation on chart". Record this equation.



**Note:** If you select "Polynomial" trendline type, there is an option to change the "Order". Order 2 is a quadratic ( $\sim x^2$ ), order 3 is a cubic ( $\sim x^3$ ), etc.