

Error Bars on Excel

This task is a self-guided instruction in putting error bars on an EXCEL spreadsheet graph.

1. The data we are using is in the table below.

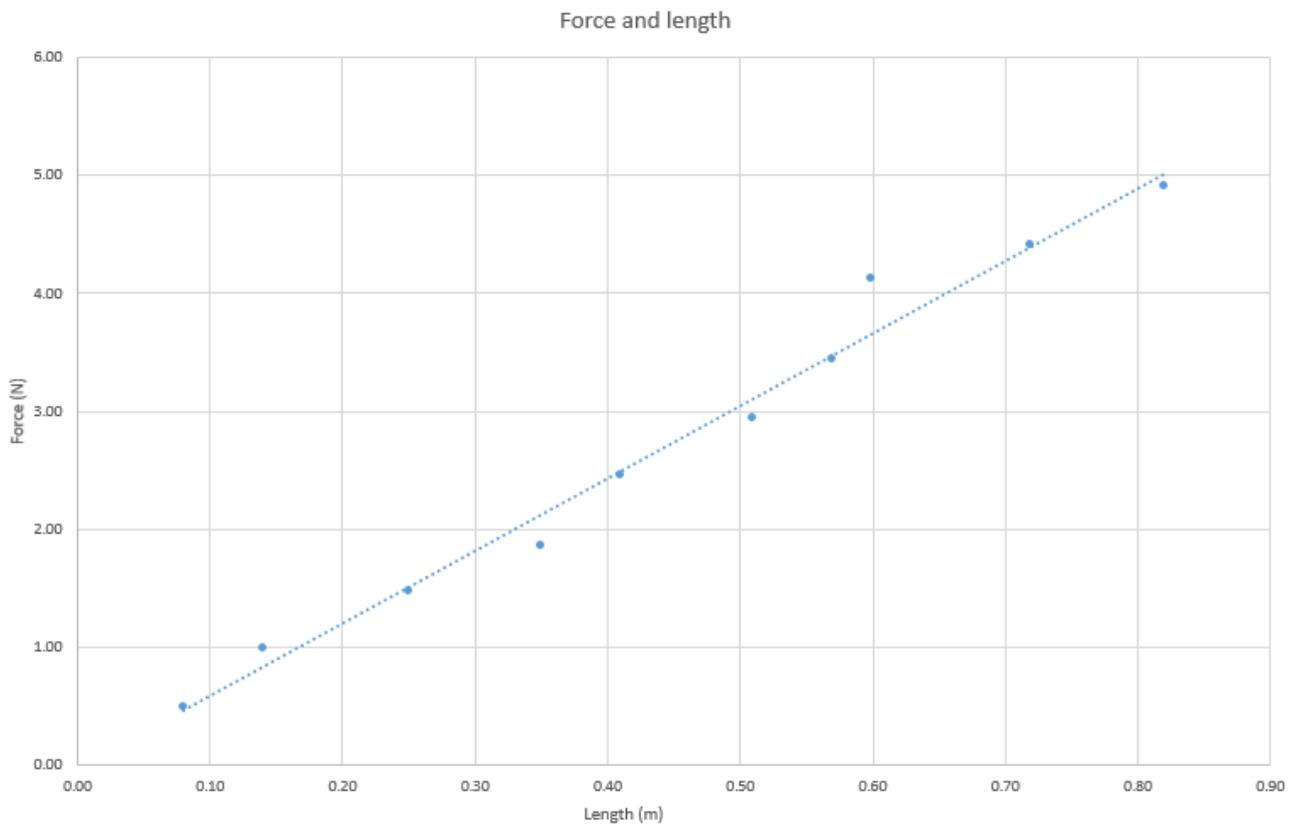
| Length (m) | Force (N) |
|------------|-----------|
| 0.08 | 0.49 |
| 0.14 | 0.98 |
| 0.25 | 1.47 |
| 0.35 | 1.96 |
| 0.41 | 2.45 |
| 0.51 | 2.94 |
| 0.57 | 3.43 |
| 0.60 | 3.92 |
| 0.72 | 4.41 |
| 0.82 | 4.90 |

Uncertainties

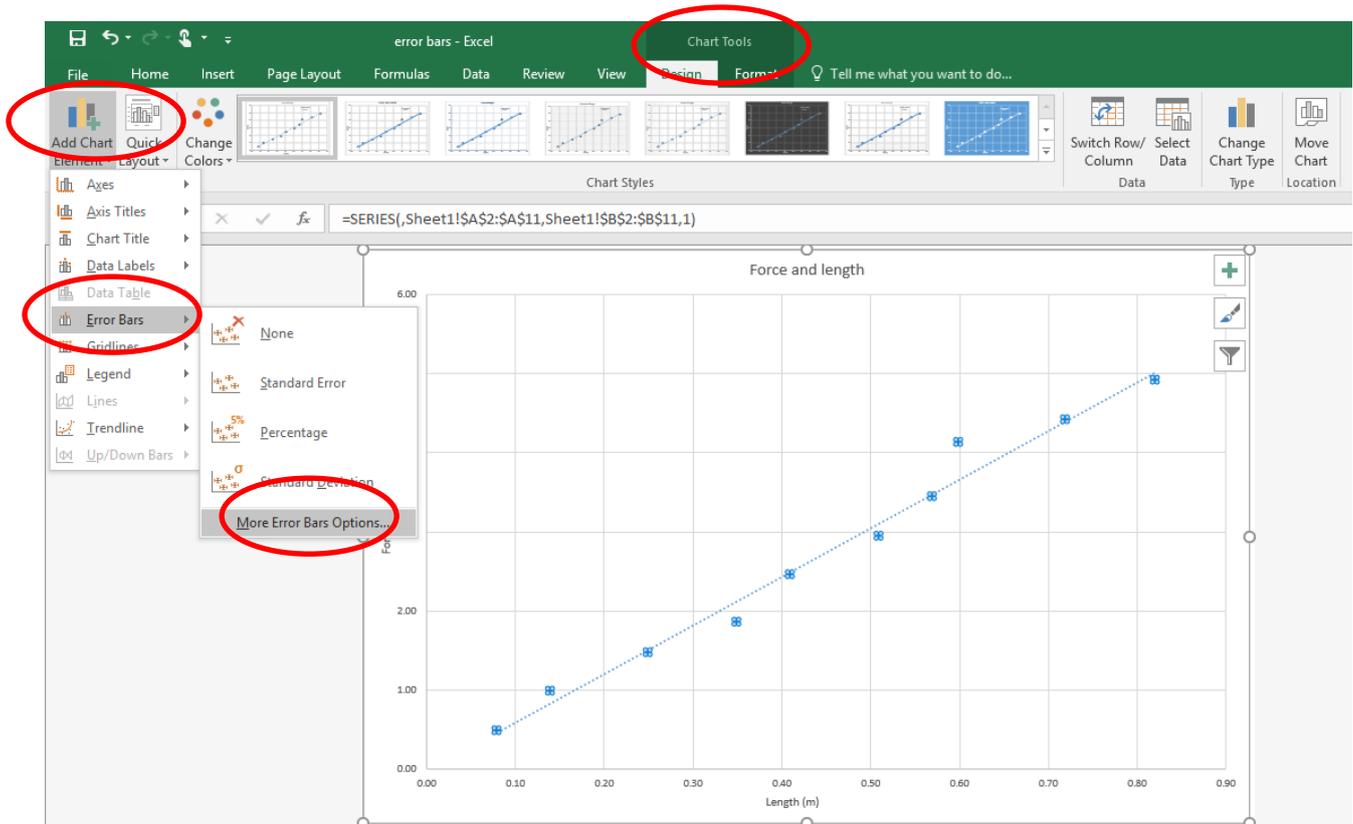
Length ± 0.05 m

Force ± 0.05 N

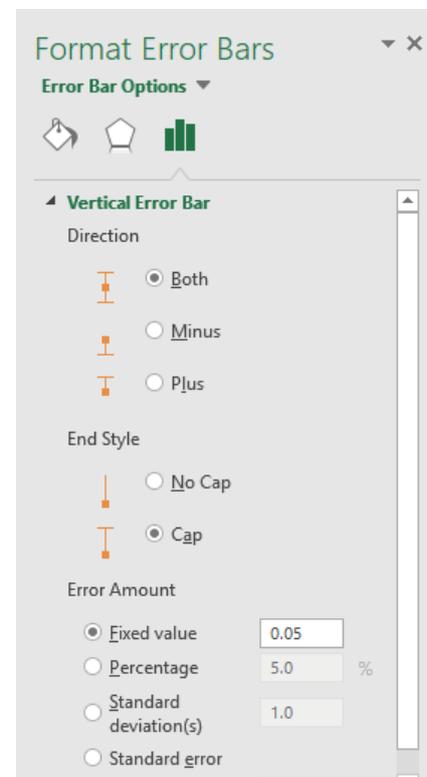
2. A Graph of the data is shown below.

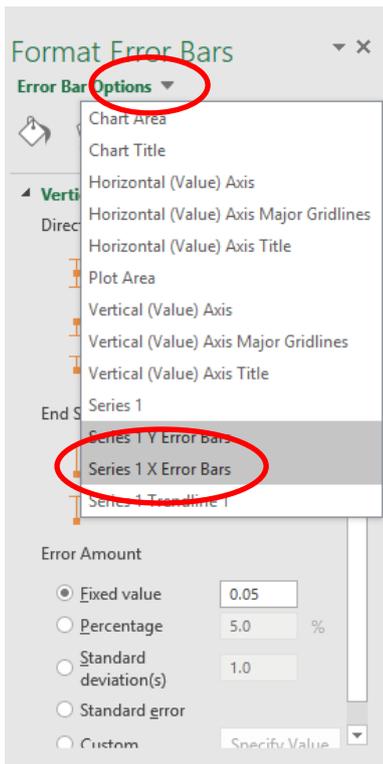


- To place error bars we Left Click on one of the Data points. Go to Chart Tools, Add Chart Element, Error Bars, More Error Bar Options.



- Excel will then put in some Error Bars. Probably not the ones we want. In this example the Length and Force both have an error of ± 0.05 . Check the Direction option as Both and the Fixed Value Option, type 0.05 into the box.





5. You then need to Got to the Error Bar Options arrow click and select Series 1 X Error Bars. Repeat the process. And close the dialog box by clicking on the X

You now have a graph with Error Bars.

