

Double Click the data studio icon to open it

Data

Displays

Click create experiment to start a new experiment

Welcome to DataStudio

How would you like to use DataStudio?

Open Activity

Create Experiment

Enter Data

Graph Equation

Show each time this program starts.

Data

Experiment Setup

Add Sensor or Instrument...

Setup Timers...

Calibrate Sensors...

Sampli

Click this to
add sensor



Click any channel to add a sensor.



Choose the type of sensor , Digital or analog, motion sensor is a digital sensor

Choose sensor or instrument...

- ScienceWorkshop Analog Sensors
- ScienceWorkshop Analog Sensors
- ScienceWorkshop Digital Sensors

Instruments

- Barometer
- Carbon Dioxide Gas Sensor
- Charge Sensor
- Colorimeter
- Conductivity Sensor
- Current Sensor
- Depth Sensor
- Dissolved Oxygen Sensor
- EKG Sensor
- Electrometer (Basic)
- Force Platform
- Force Sensor
- Force Sensor (Student)
- Heart Rate Sensor

OK Cancel

Experiment Setup

Add Sensor or Instrument...

Setup Timers...

Calibrate Sensors...

Sampling Options...

Choose Interface...



Motion Sensor

CI-6742

Measurements | Motion Sensor

Visibility, Name

- Motion Timer, Ch 1&2
- Position, Ch 1&2
- Velocity, Ch 1&2
- Acceleration, Ch 1&2

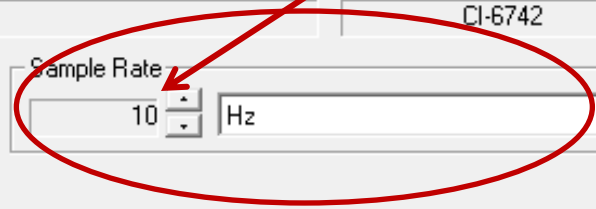
Unit of Measure

- Time
- m
- m/s
- m/s/s

Sample Rate

10

Hz



Change the sample rate to 50 Hz

Sensor Sampling Options

Zero sensor automatically on start

Zero Sensor

DataStudio

File Edit Experiment Window Help

Summary Setup Start STOP 00:00.0 Calculate

Data

- Position, Ch 1&2 (m)
- Velocity, Ch 1&2 (m/s)
- Acceleration, Ch 1&2 (m/s/s)

1. Double click on graph icon

Experiment Setup

Add Sensor or Instrument... Setup Timers... Calibrate Sensors... Sampling Options... Choose Interface...

ScienceWorkshop® 750

2. Click on position Ch 1&2(m)

Please Choose a Data Source

Choose a Data Source

- Position, Ch 1&2 (m)
- Velocity, Ch 1&2 (m/s)
- Acceleration, Ch 1&2 (m/s/s)

3. Click OK

OK Cancel

Displays

- FF
- Graph
- Histogram
- Meter
- Scope
- Sound Analyzer
- Sound Creator
- Table
- Workbook

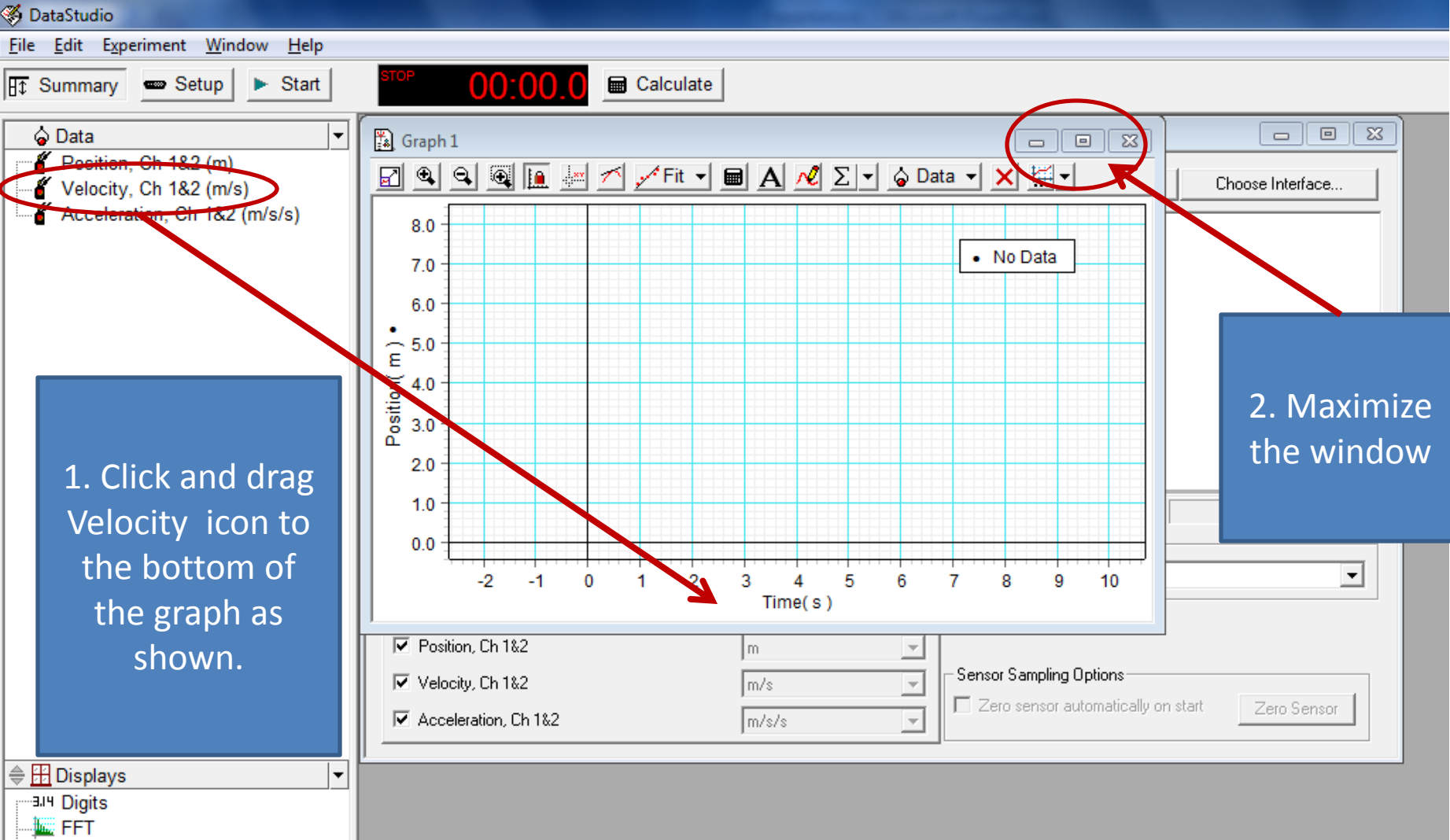
Measurements Motion Sensor

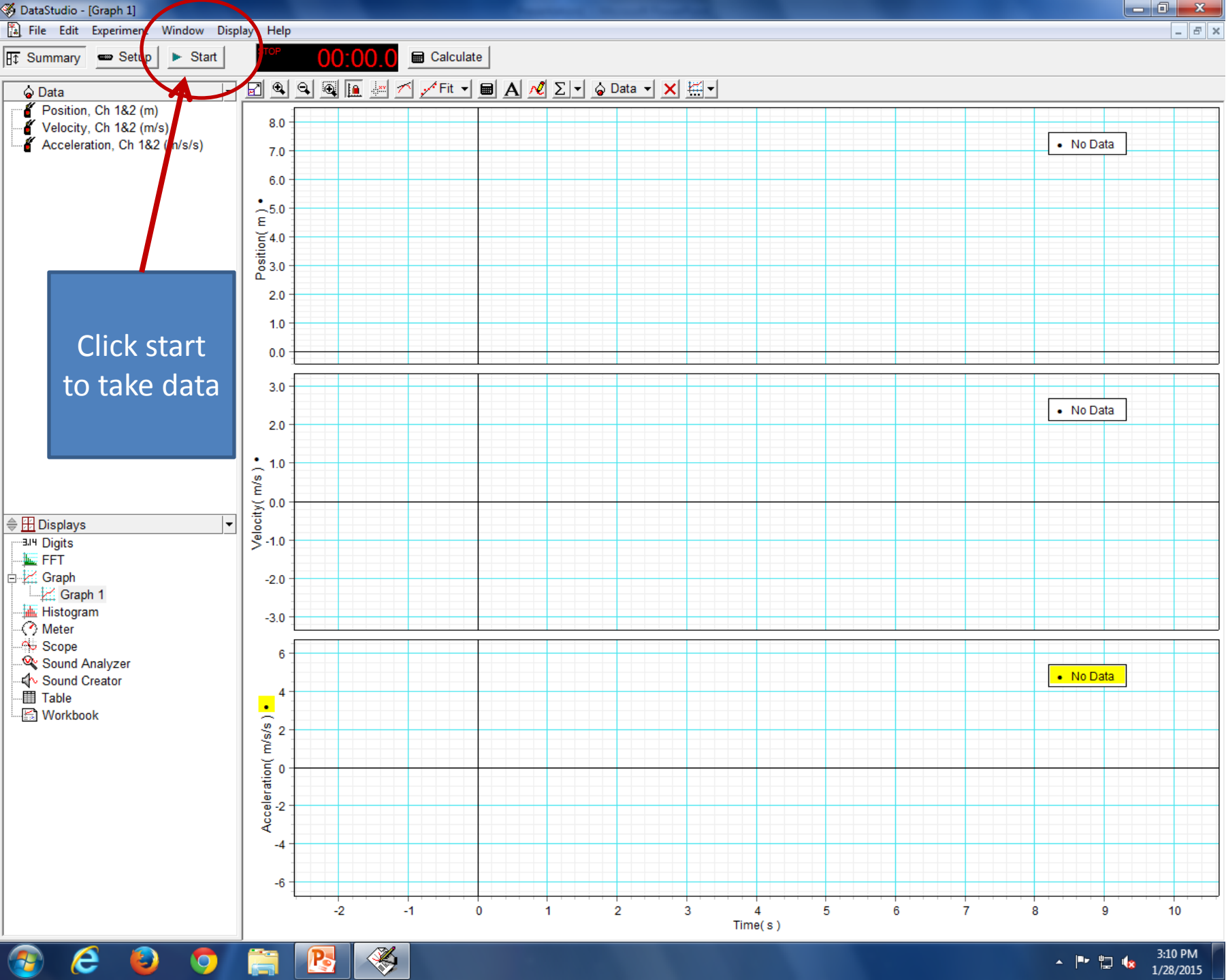
Visibility, Name

- Motion Timer, Ch 1&2
- Position, Ch 1&2
- Velocity, Ch 1&2
- Acceleration, Ch 1&2

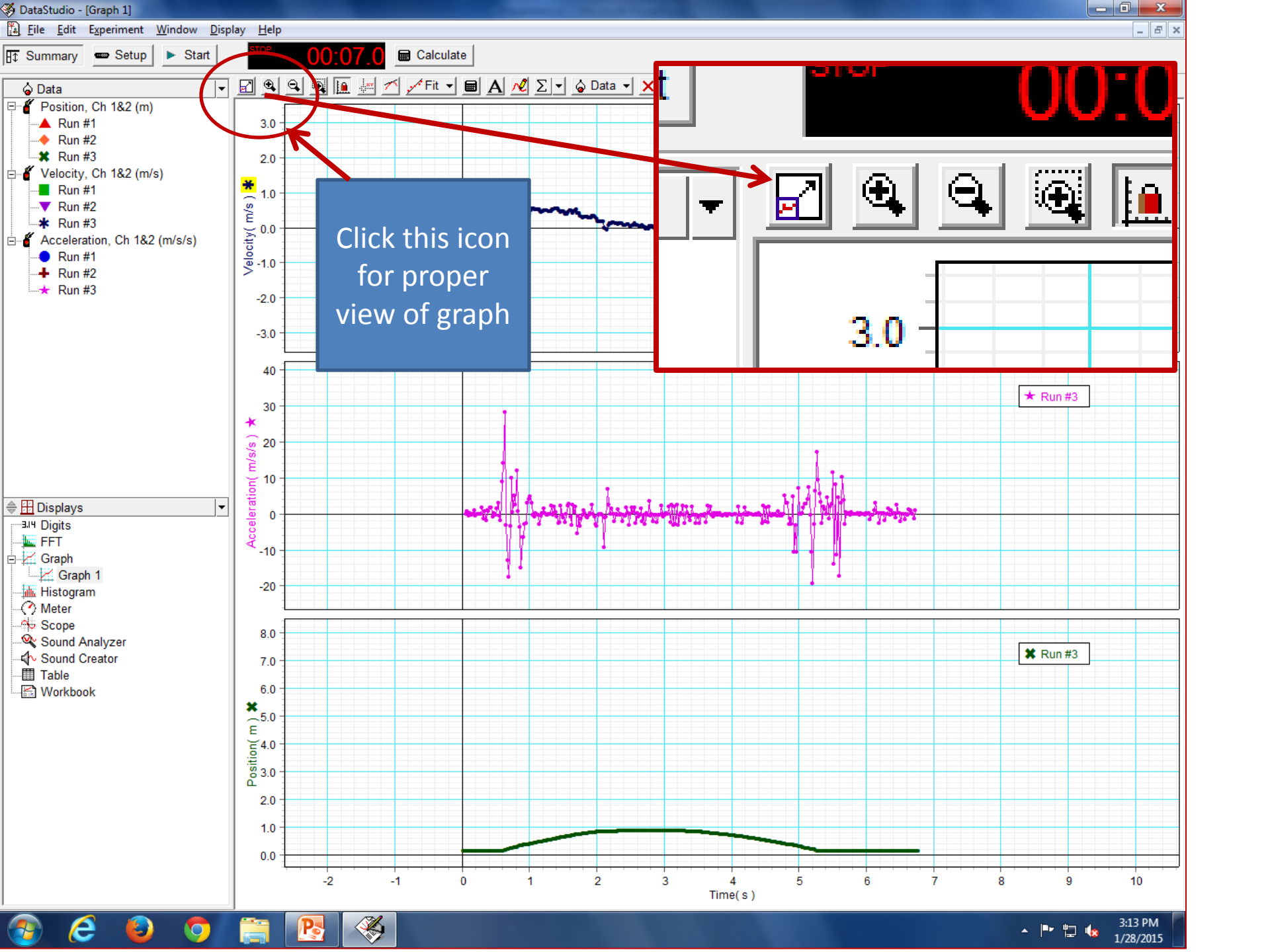
CI-6742

Zero Sensor





Click start
to take data

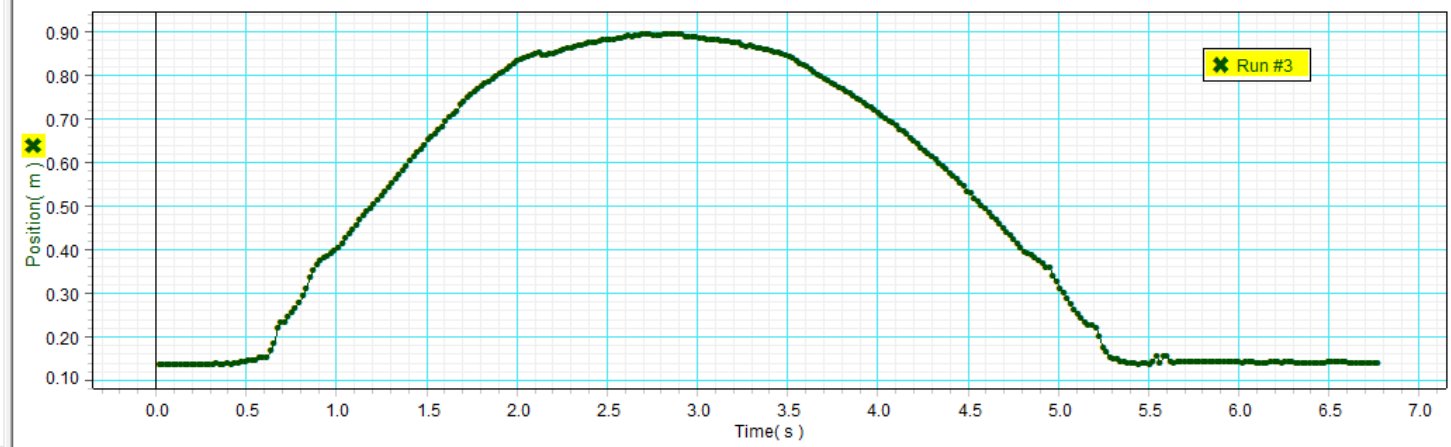
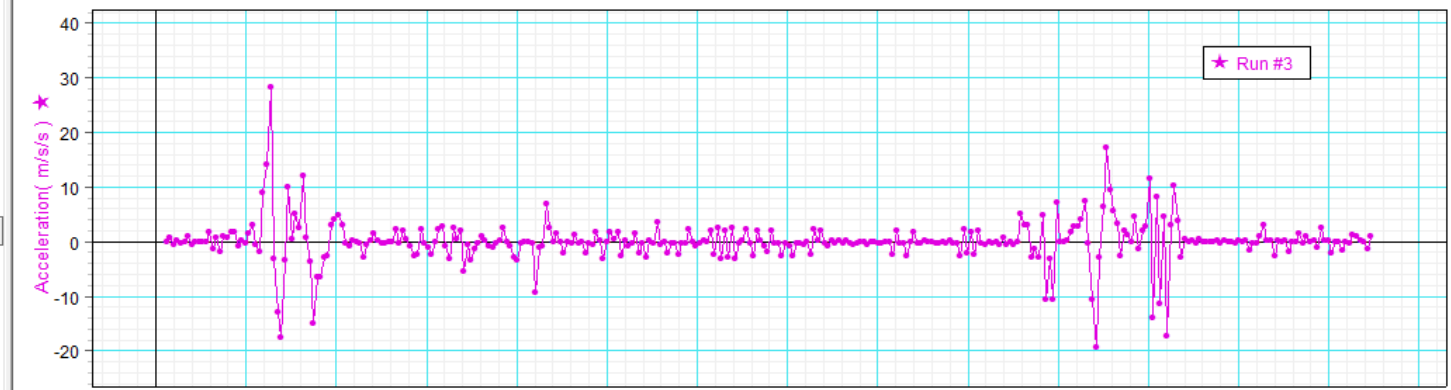


Data

- Position, Ch 1&2 (m)
 - Run #1
 - Run #2
 - Run #3
- Velocity, Ch 1&2 (m/s)
 - Run #1
 - Run #2
 - Run #3
- Acceleration, Ch 1&2 (m/s/s)
 - Run #1
 - Run #2
 - Run #3

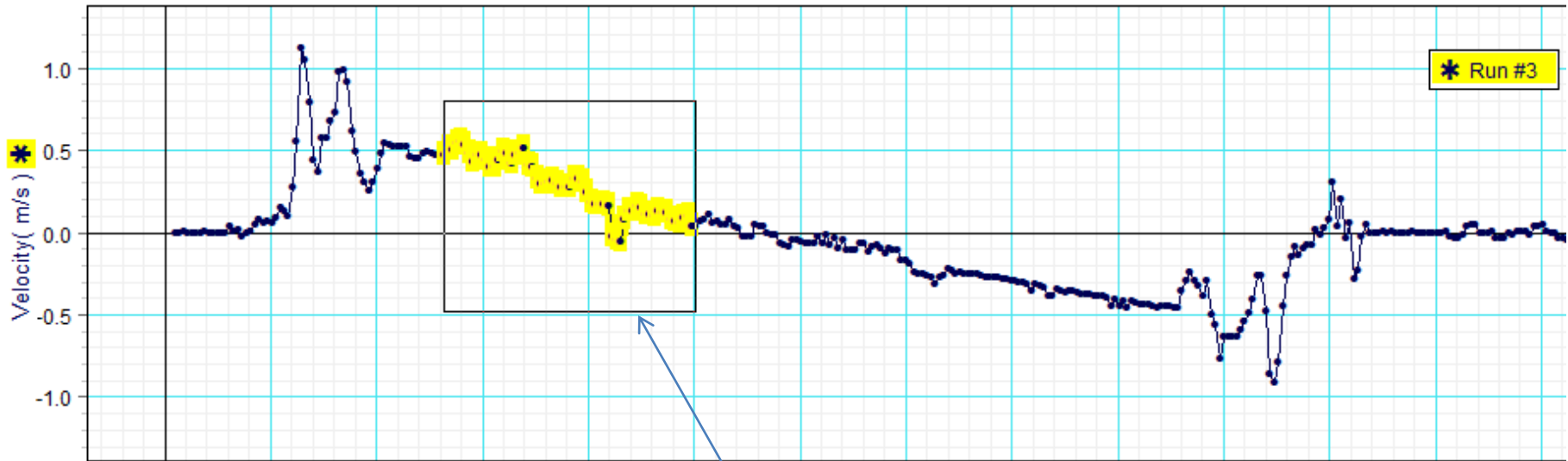
Displays

- Digits
- FFT
- Graph
 - Graph 1
- Histogram
- Meter
- Scope
- Sound Analyzer
- Sound Creator
- Table
- Workbook

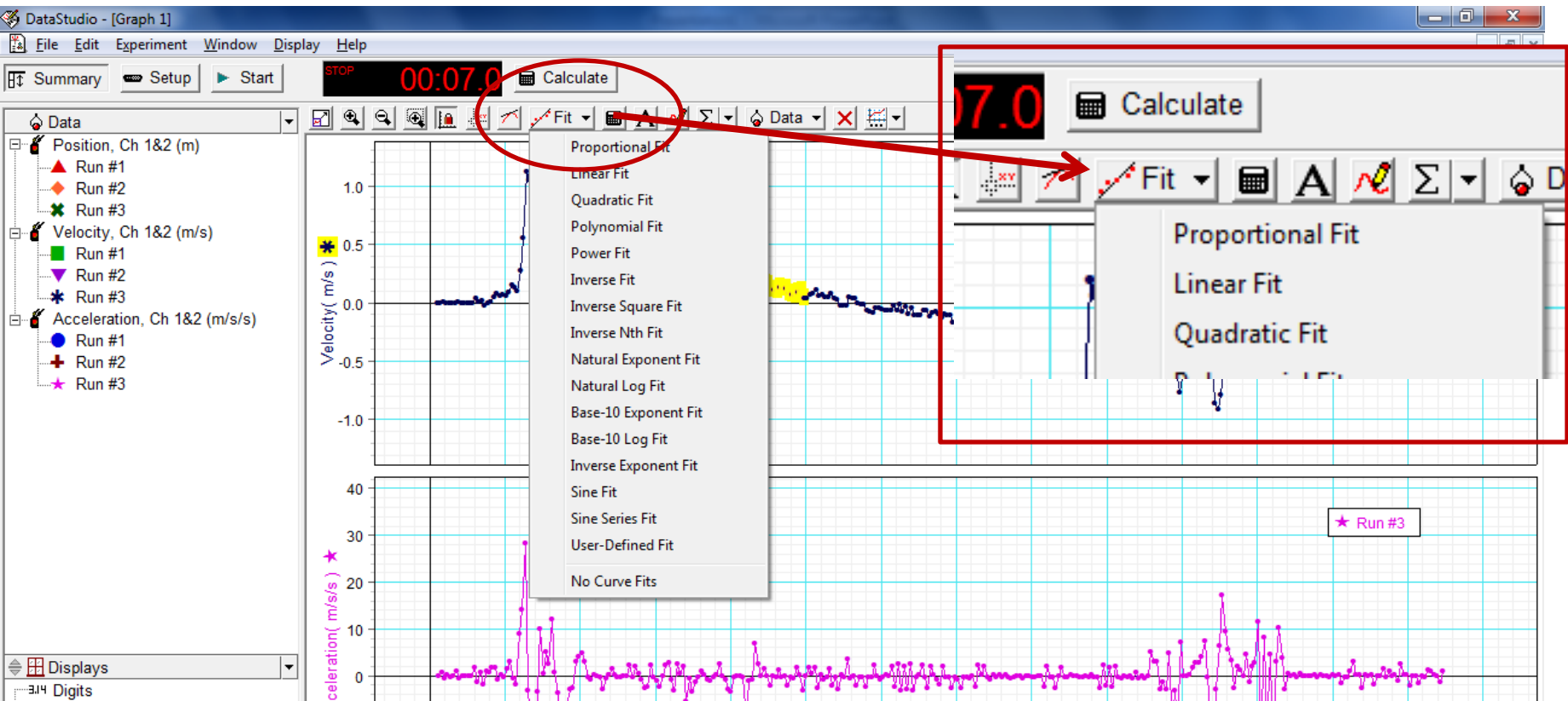


STOP 00:07.0

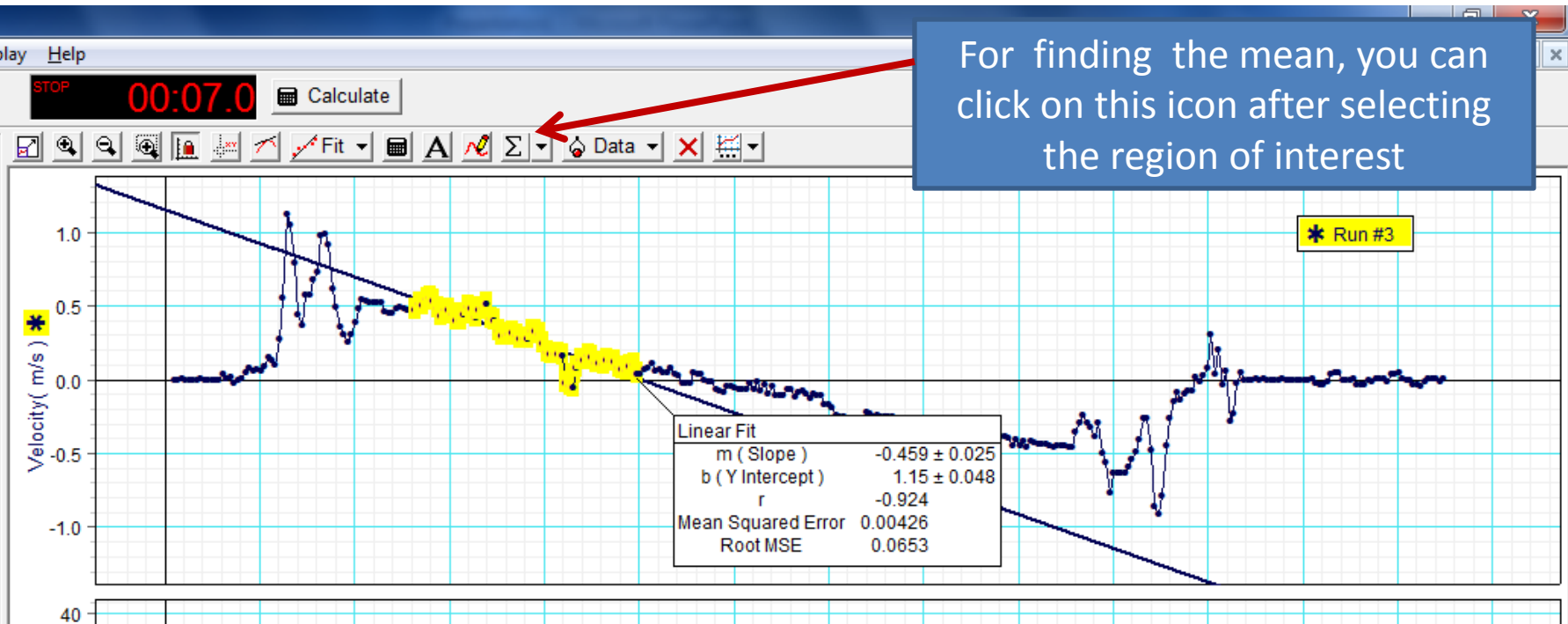
Calculate



To fit a curve select the region of your interest

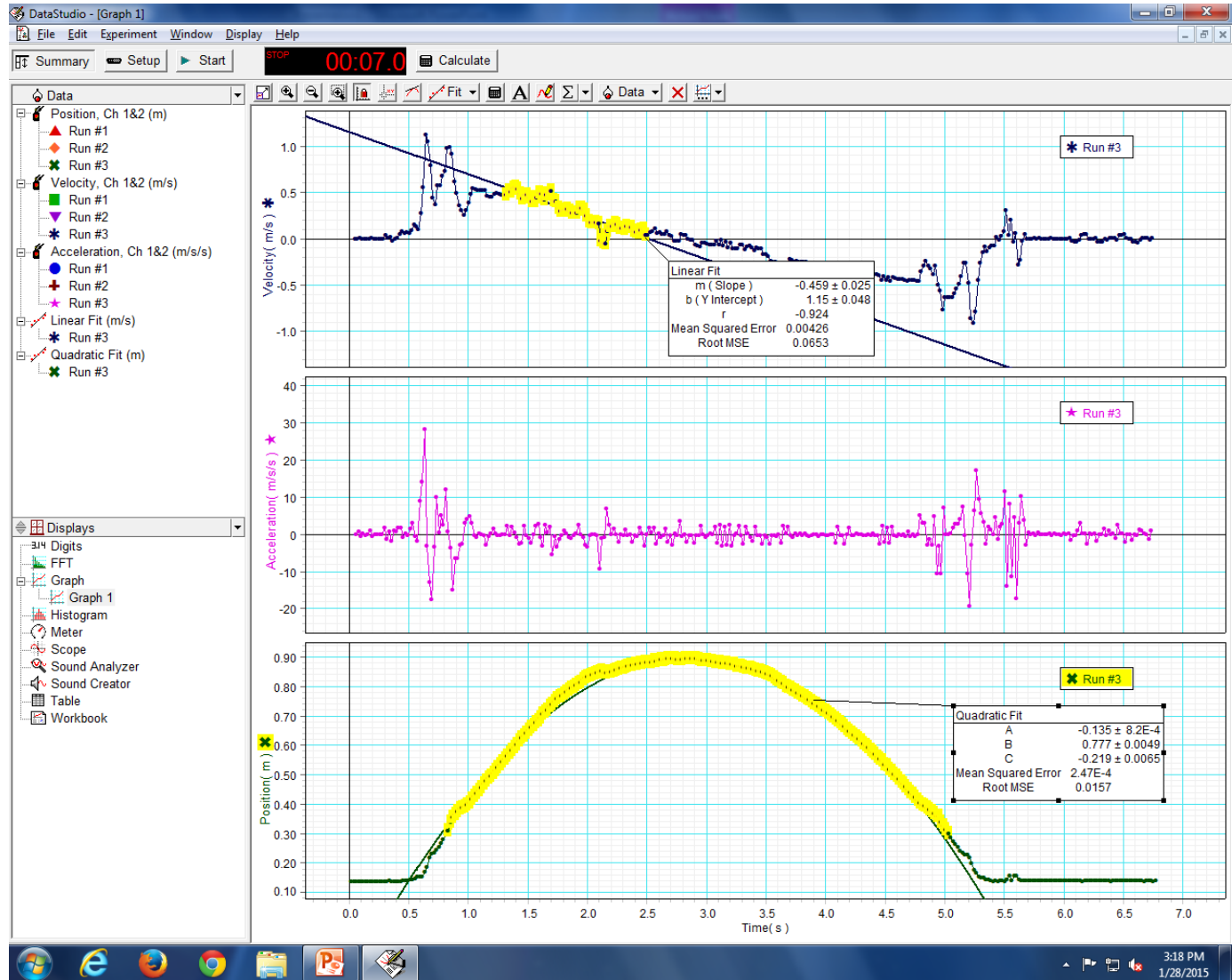


Click on fit tab, and select the function you want to fit from the drop down menu

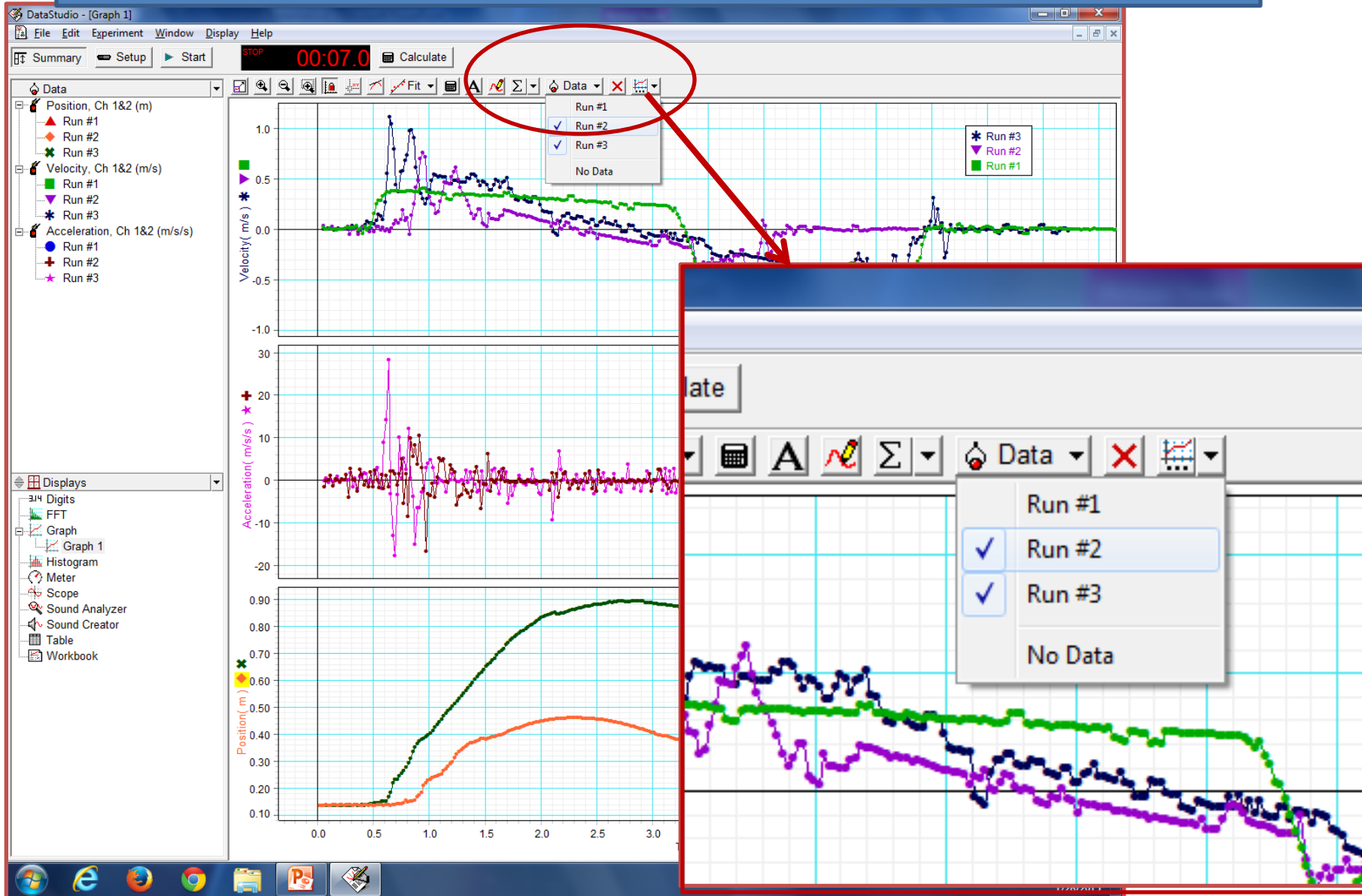


For finding the mean, you can click on this icon after selecting the region of interest

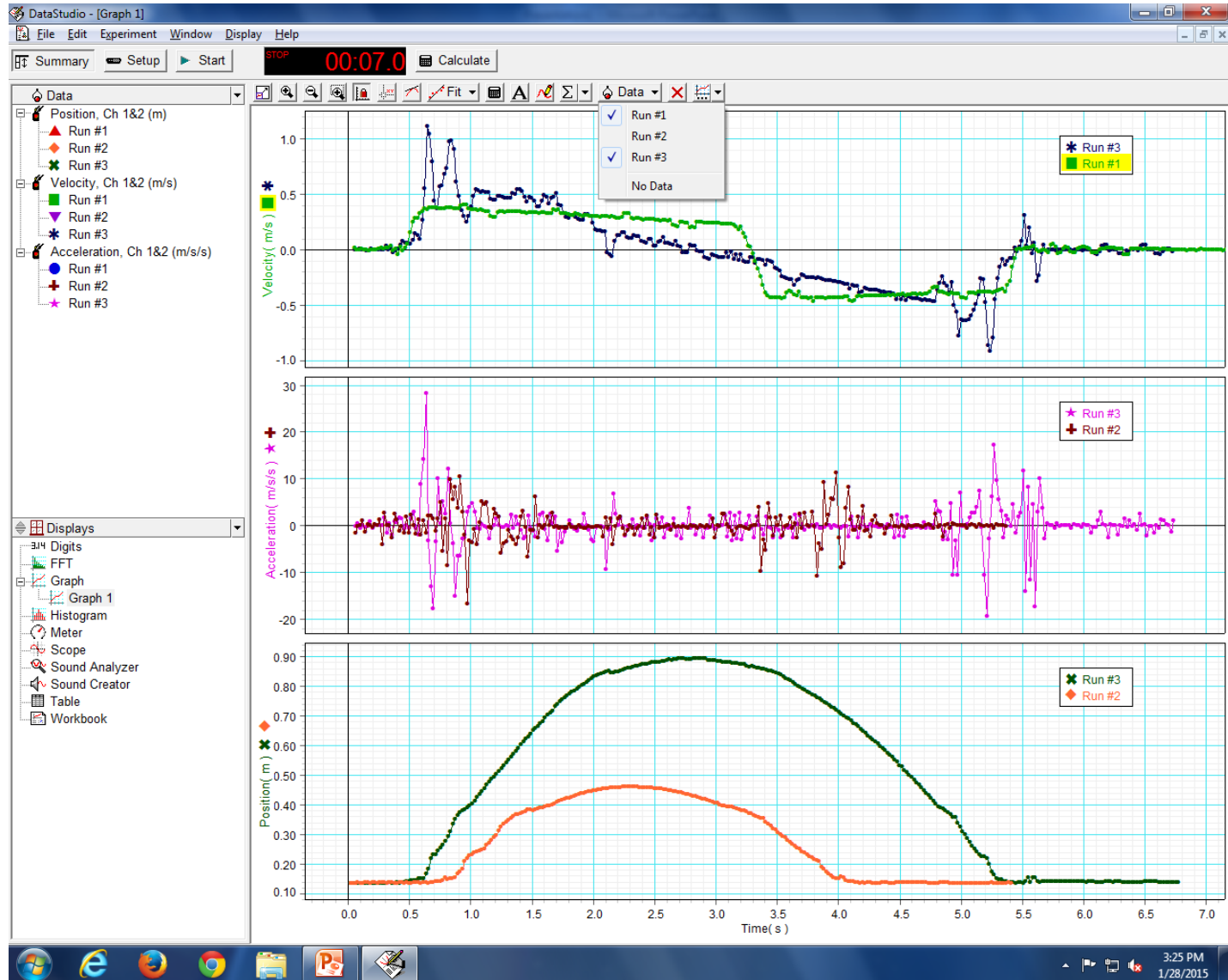
Here linear fit was selected thus a straight line was fitted, and the parameters related to the straight line are shown.



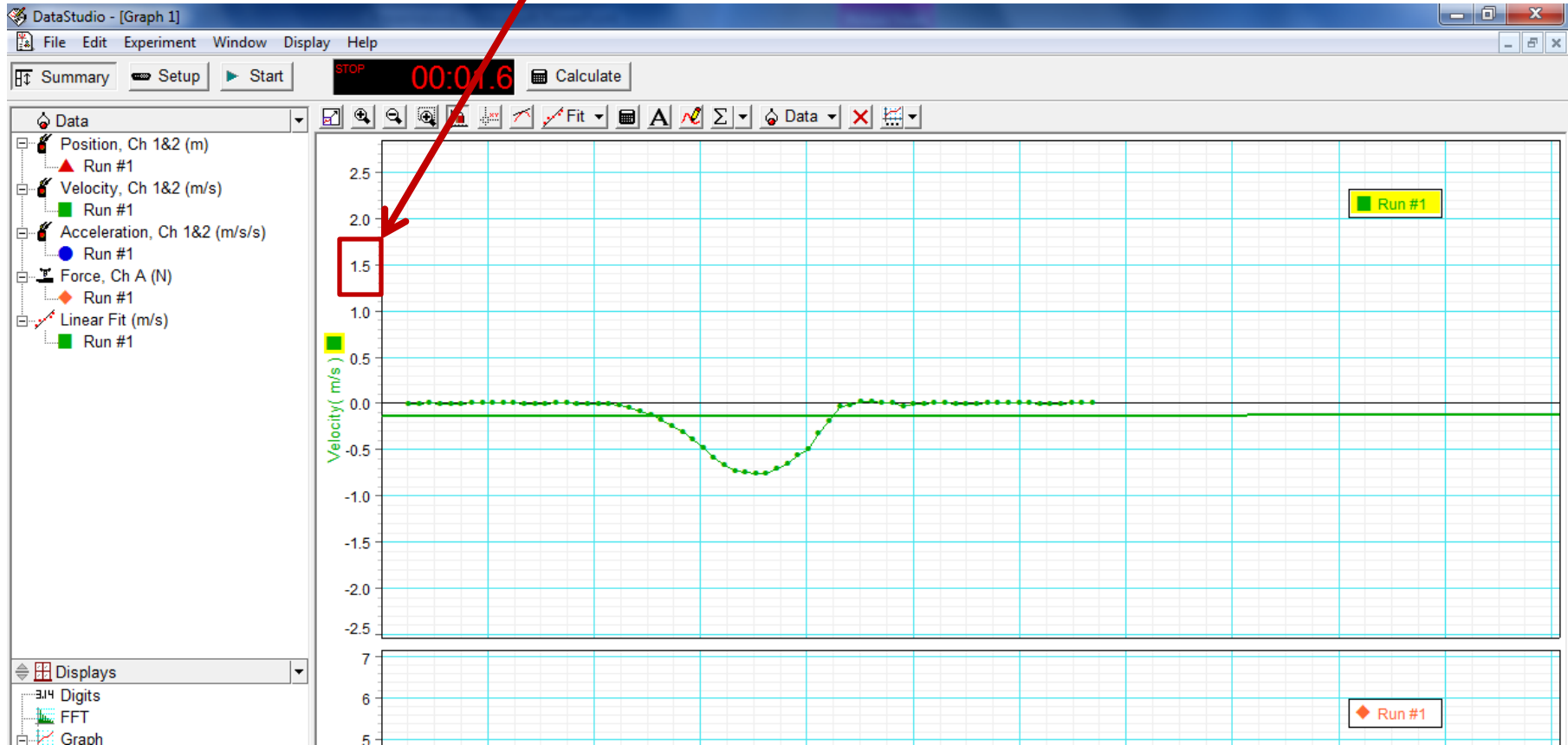
To hide data from a particular run, click on the graph which you want to activate(want to modify), then click data and then uncheck the run which you want to hide, and check the run which you want to show



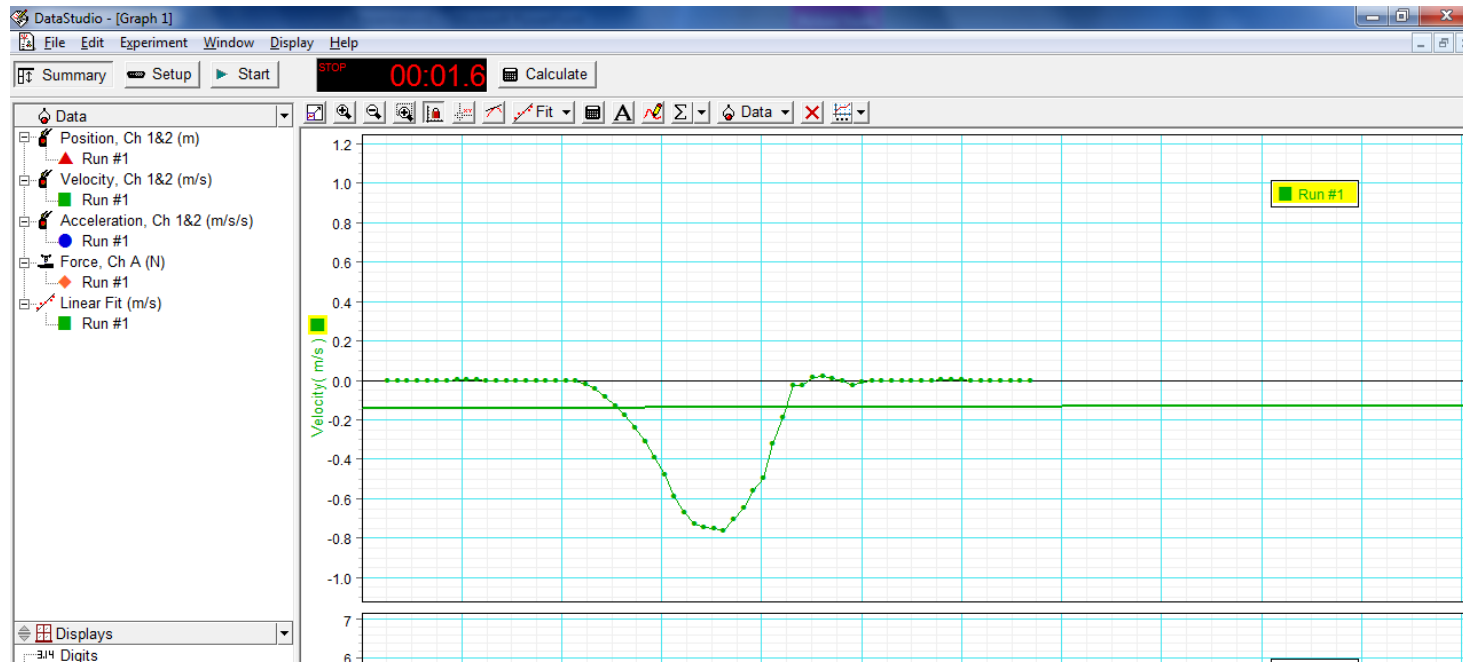
In Velocity time graph ,run 1 and 3 are checked and run 2 is unchecked. So only run 1 and 3 are visible in velocity time graph. Each graph is selected individually to show/hide the data. In position time graph run 2 and 3 were checked.



To zoom in the Y axis, select the number on y axis and drag it up (to zoom in) or down (to zoom out)



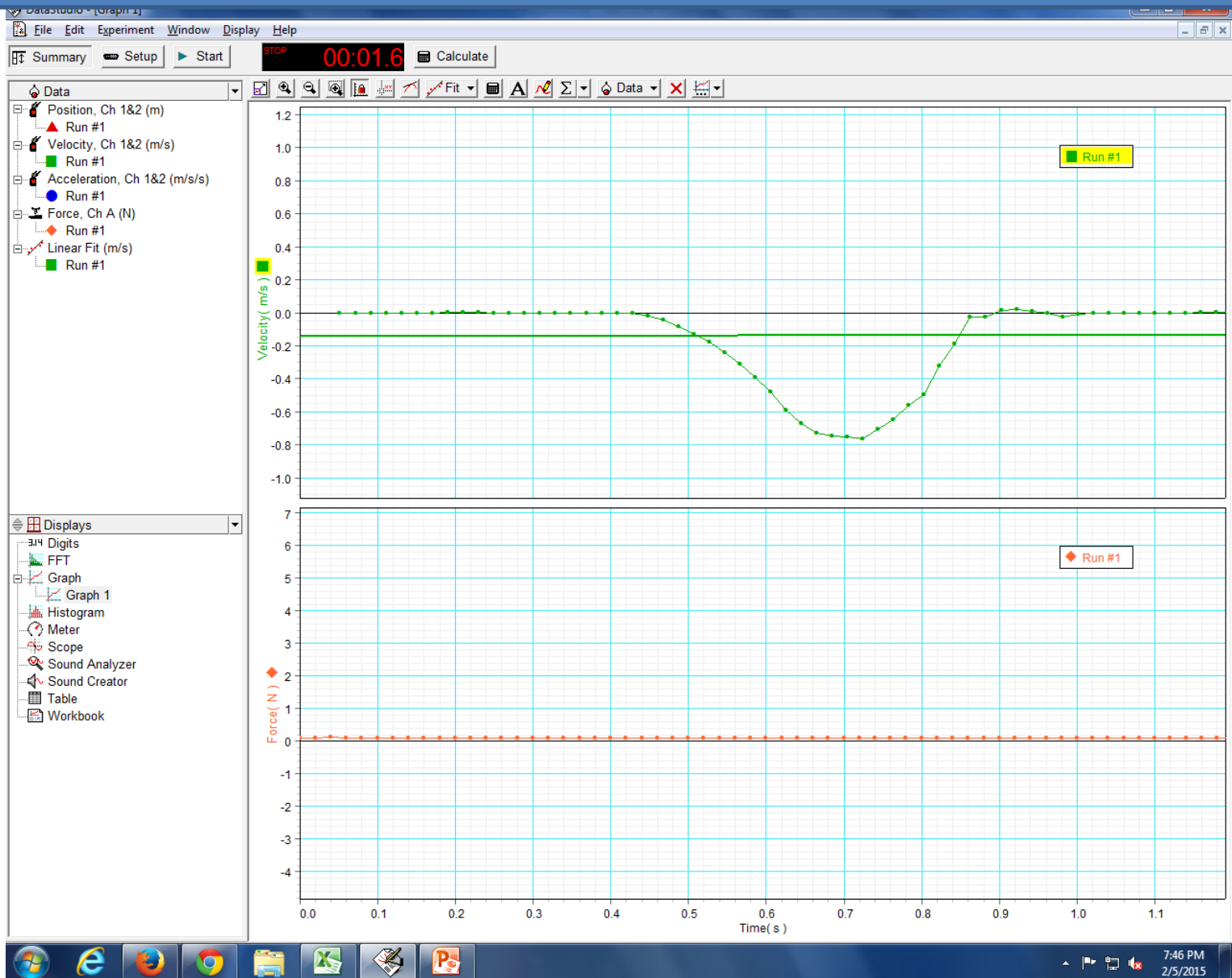
In this figure Y axis was dragged up to zoom in



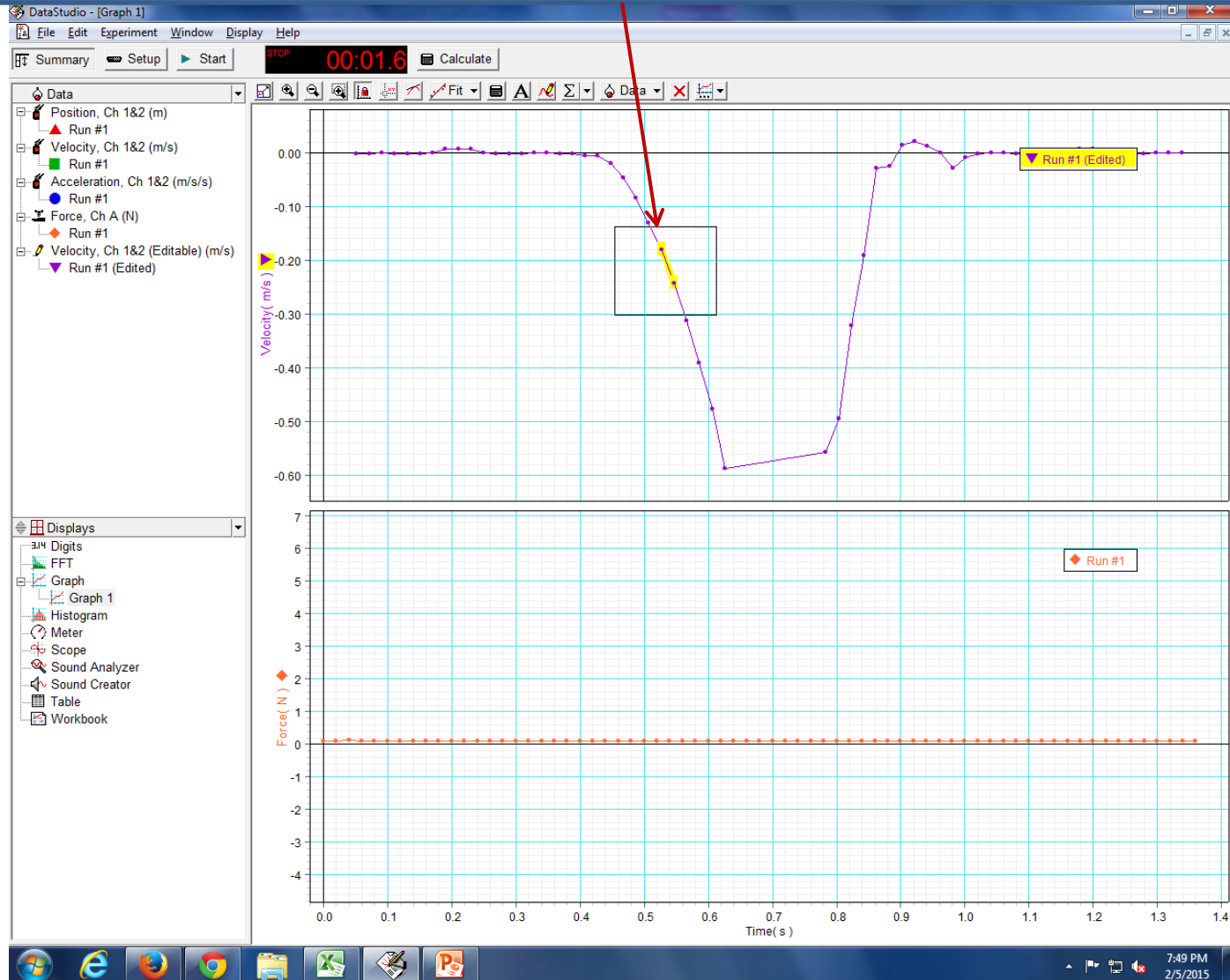
To zoom in the X axis click on the number and drag it right (to zoom in) or left (to zoom out)



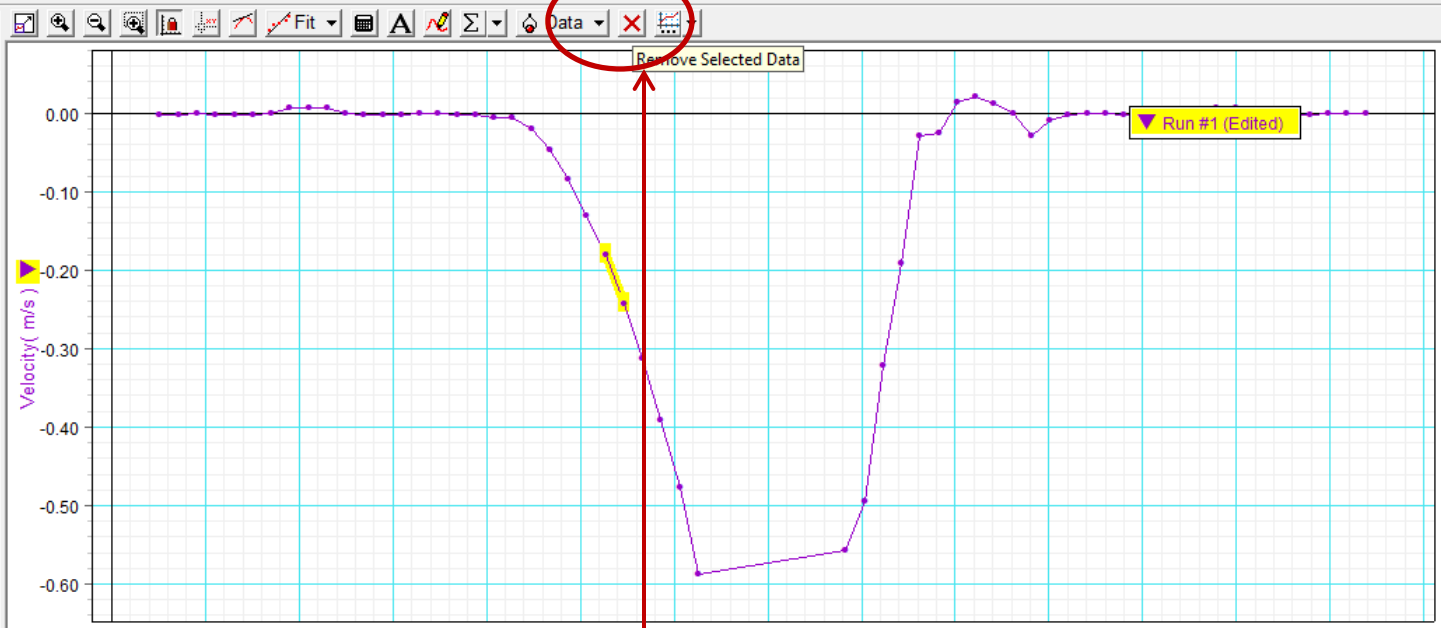
Click on the graph which we want to activate (i.e. which we want to modify), here Velocity Vs time graph was activated and then X axis was dragged towards right to zoom in the velocity vs time graph.



To delete data points , select them



- Data
 - Position, Ch 1&2 (m)
 - Run #1
 - Velocity, Ch 1&2 (m/s)
 - Run #1
 - Acceleration, Ch 1&2 (m/s/s)
 - Run #1
 - Force, Ch A (N)
 - Run #1
 - Velocity, Ch 1&2 (Editable) (m/s)
 - Run #1 (Edited)
- Displays
 - Digits
 - FFT
 - Graph
 - Graph 1
 - Histogram
 - Meter
 - Scope
 - Sound Analyzer
 - Sound Creator
 - Table
 - Workbook



Then click on cross icon to delete the selected data points

