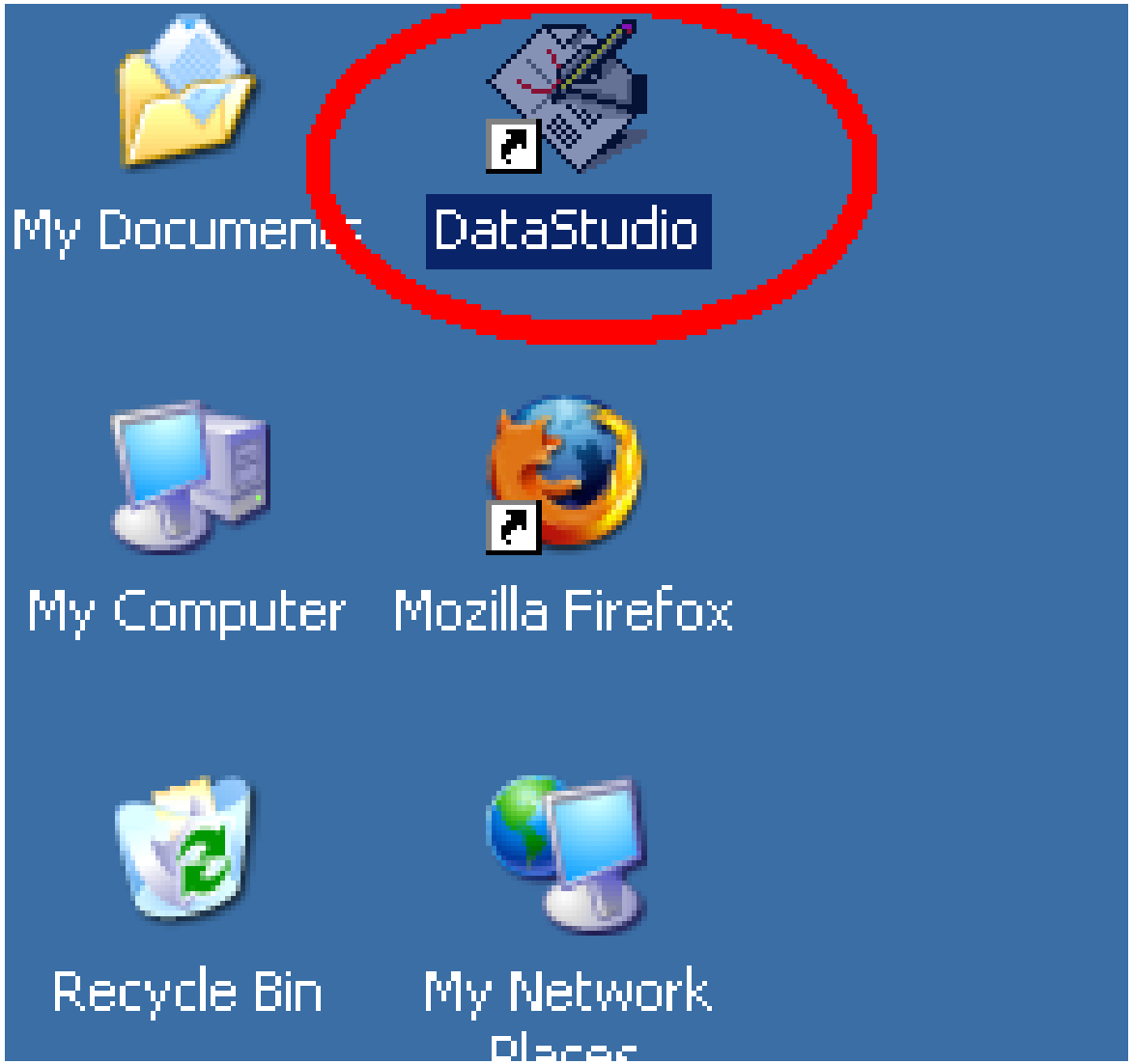
How to use DataStudio for friction measurements

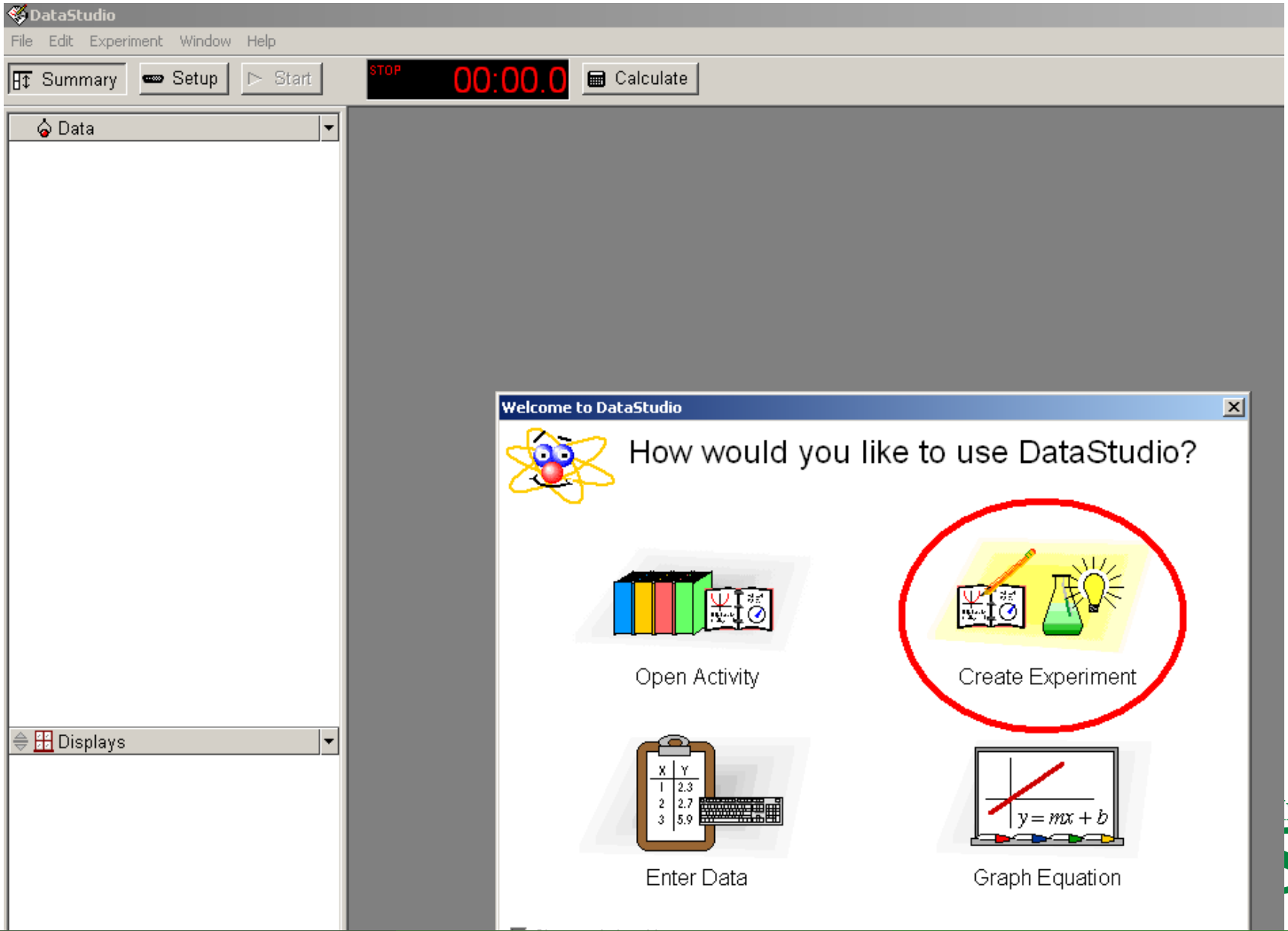
Physics 23 Lab O3

Missouri University of Science and Technology

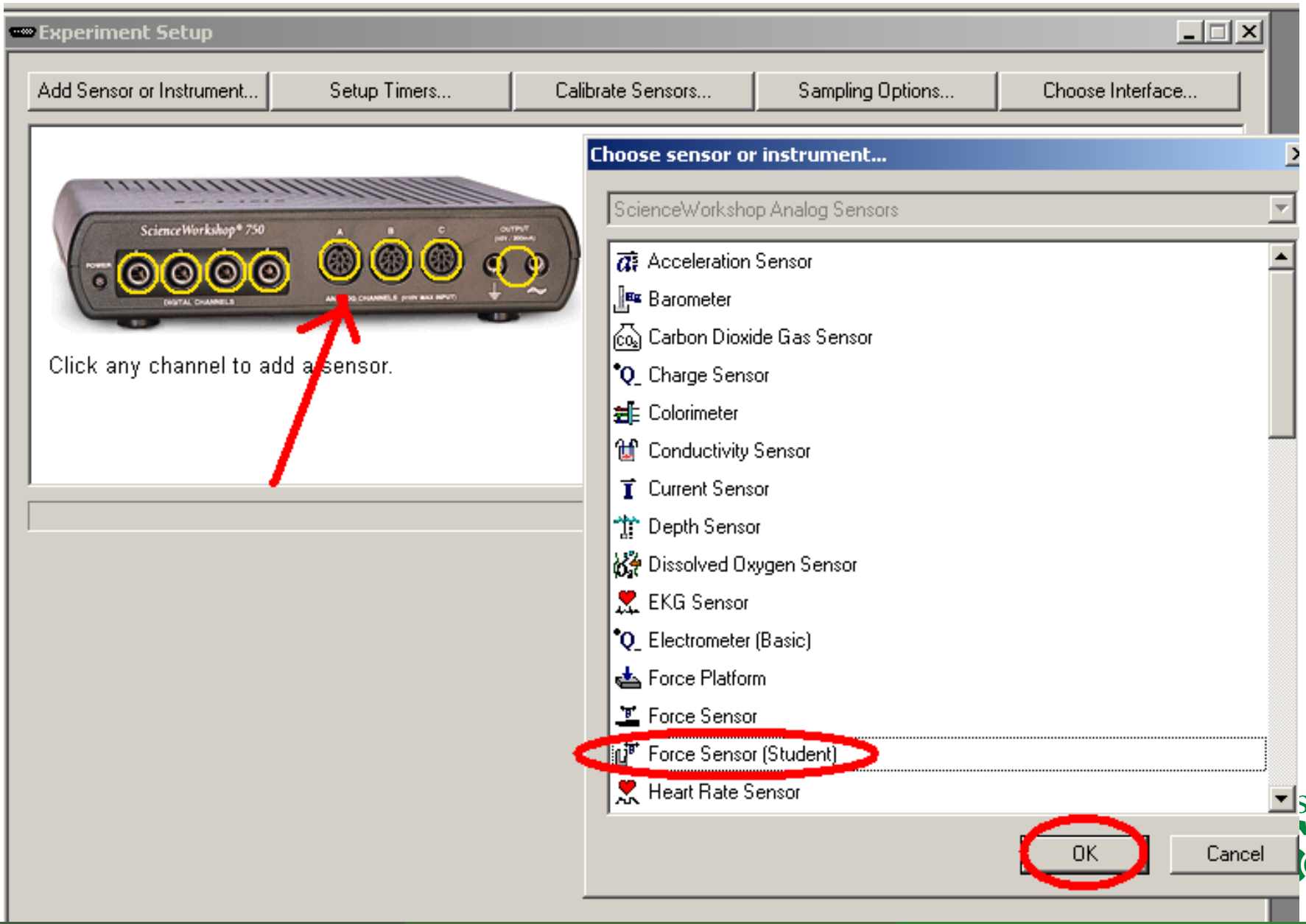
DataStudio icon on desktop



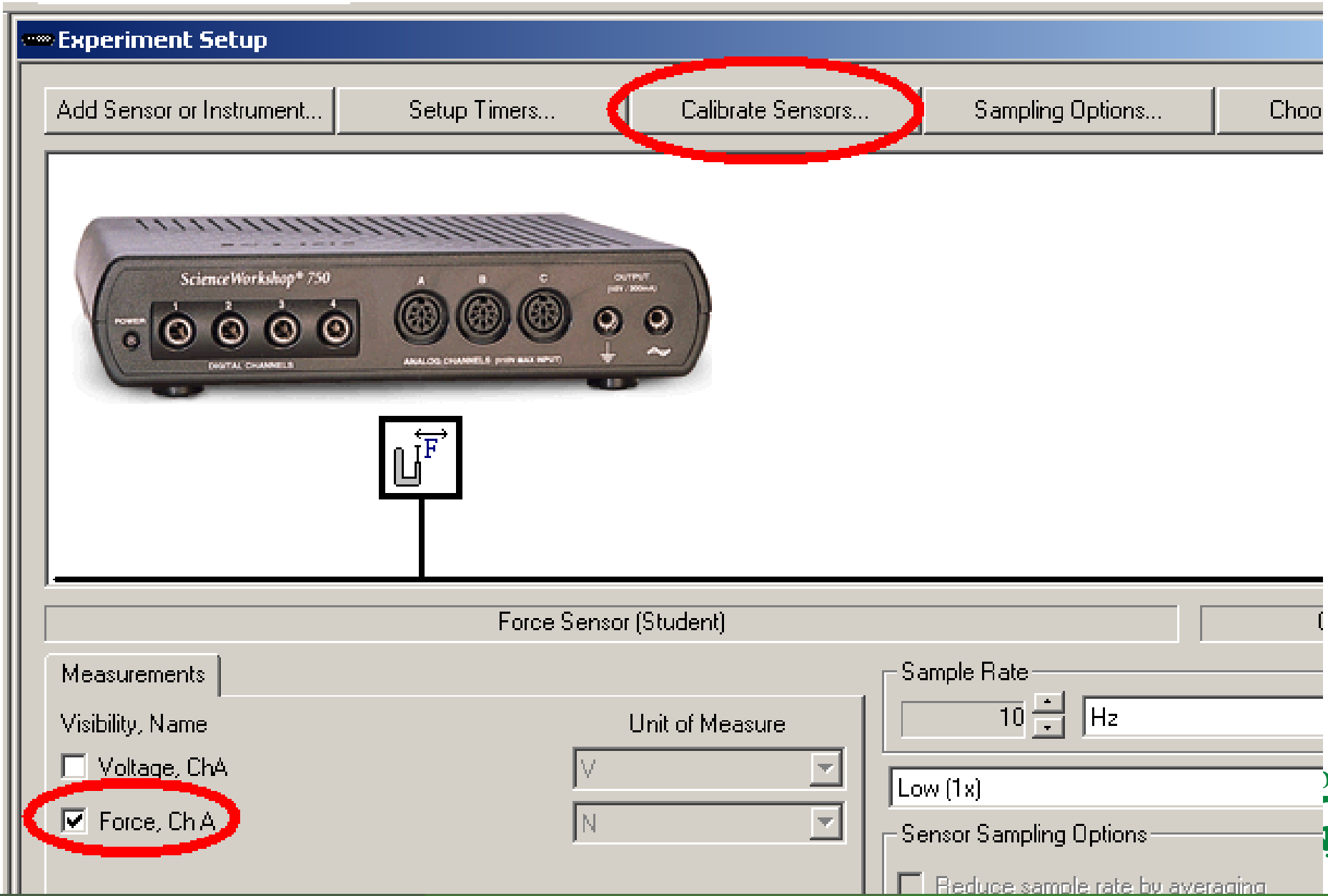
Create Experiment



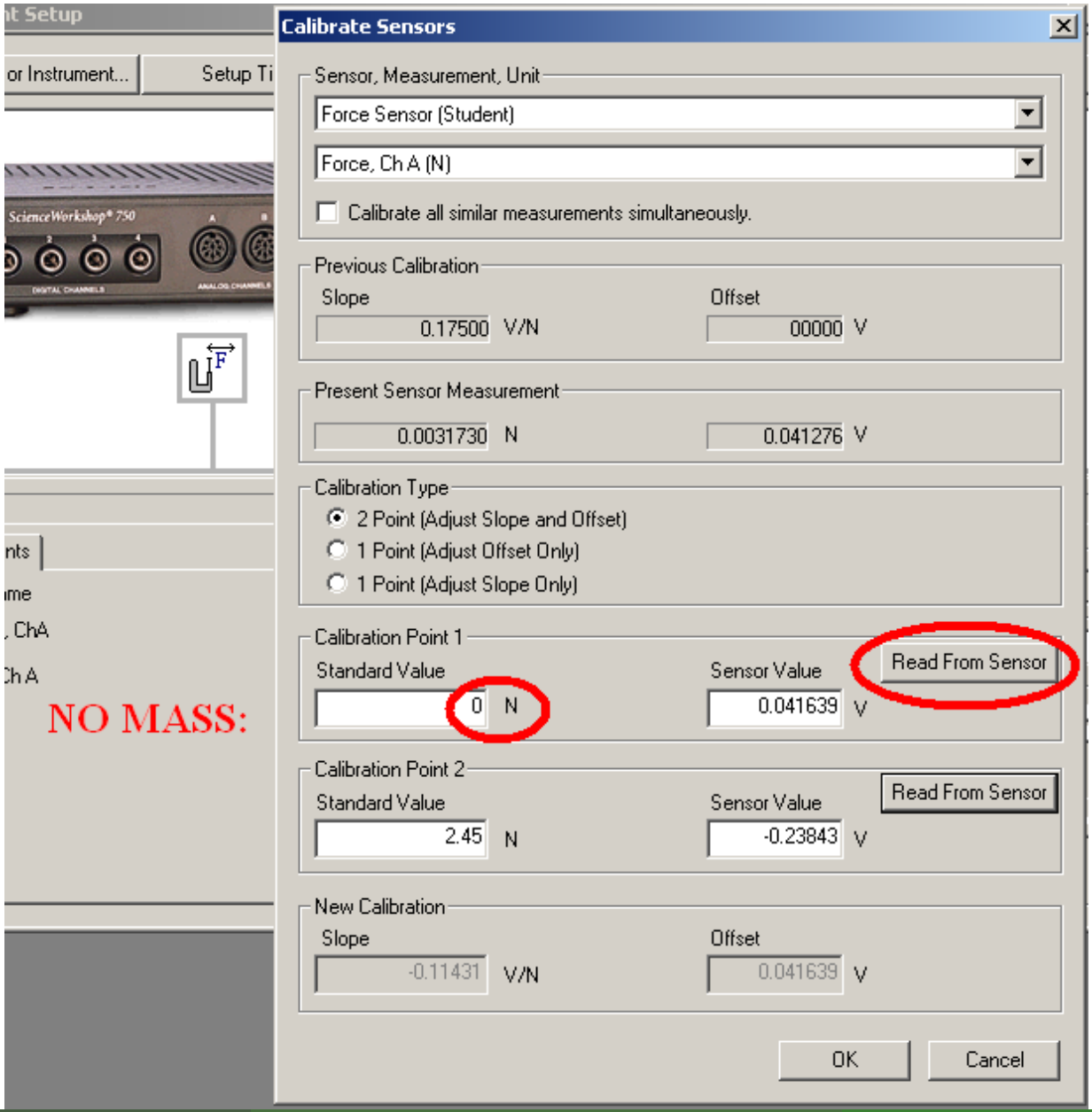
Left-click input A; select "Force Sensor (student)"



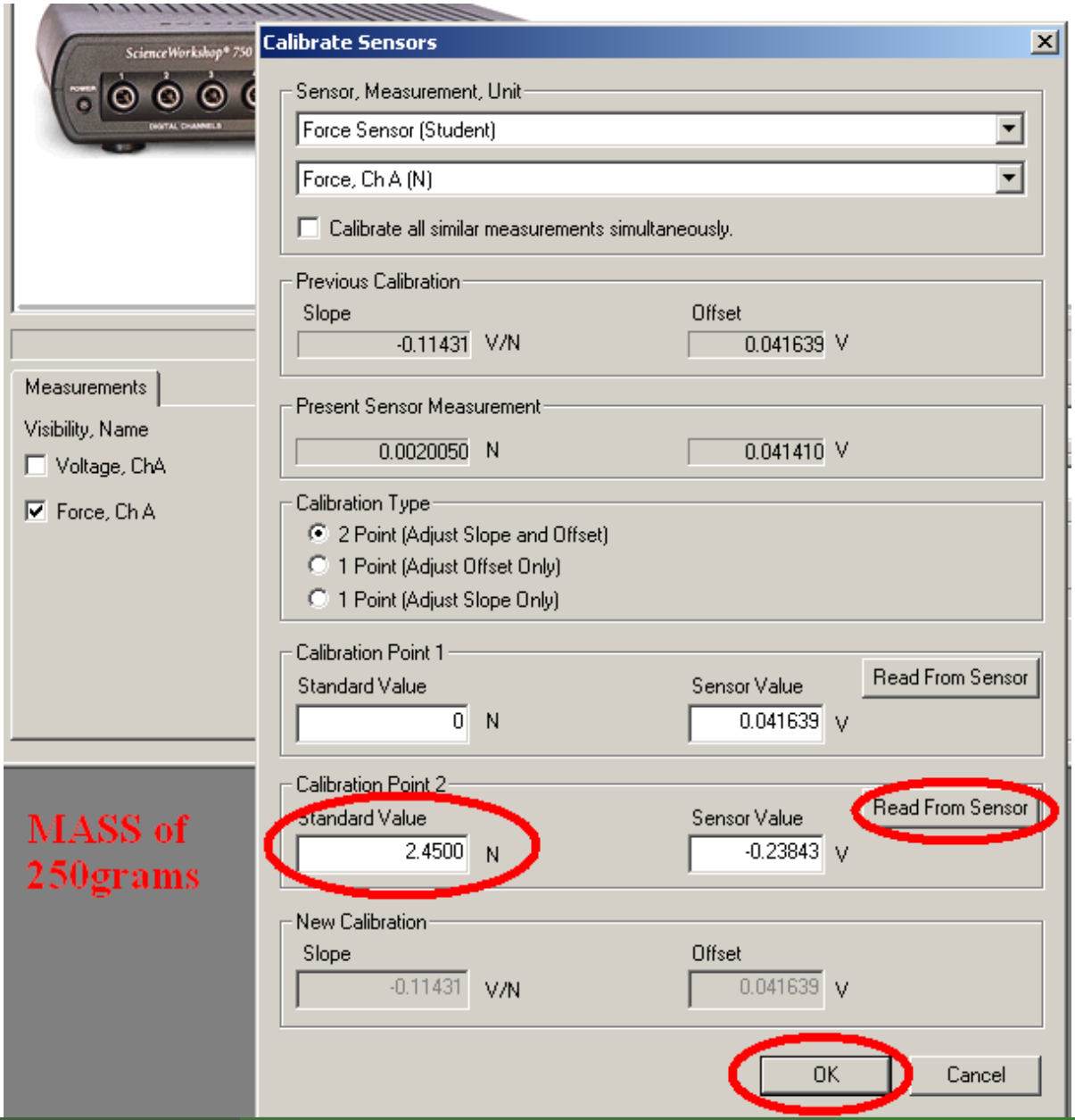
Calibrate Force



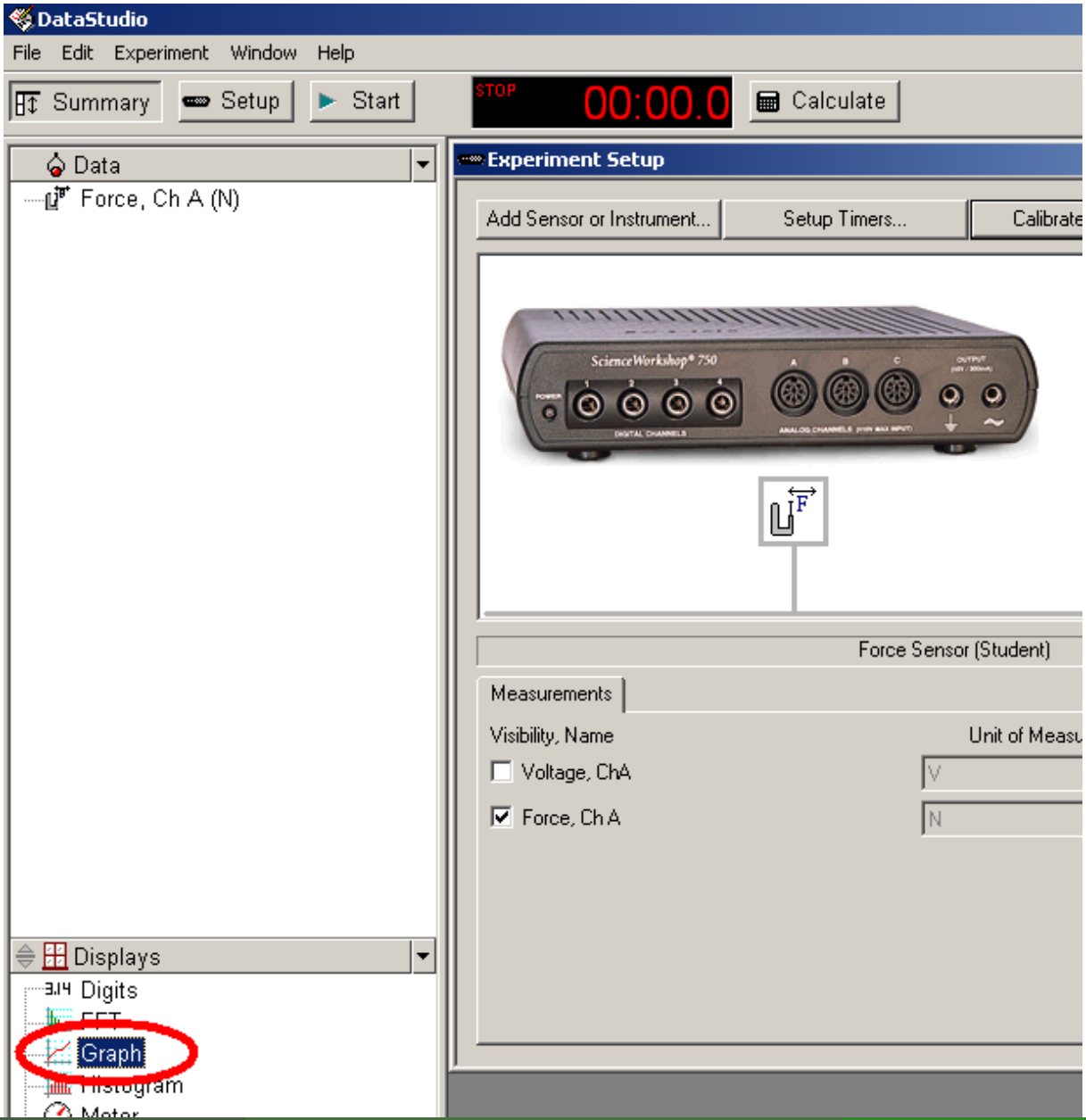
Calibrate with no mass



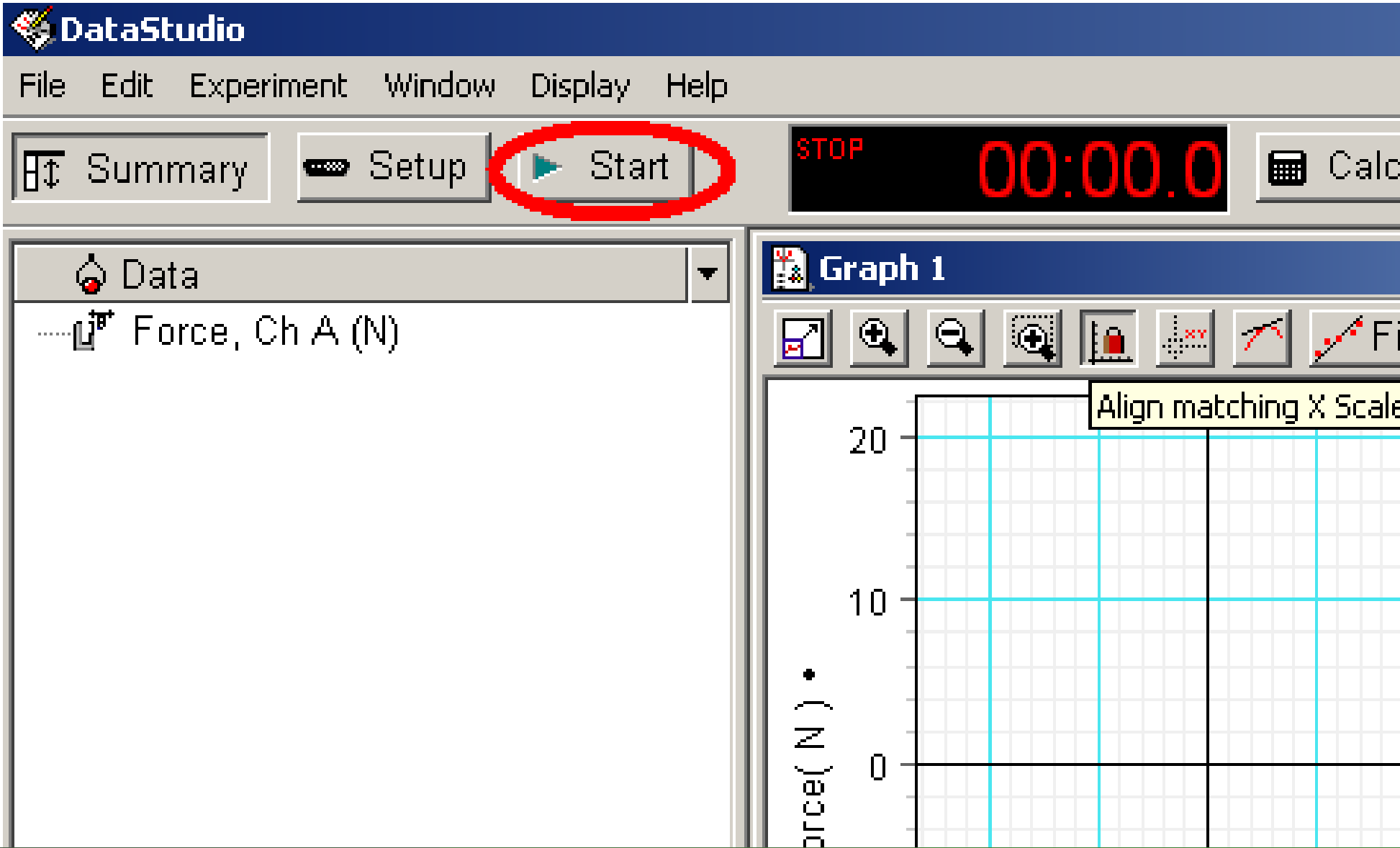
Calibrate with 250 grams



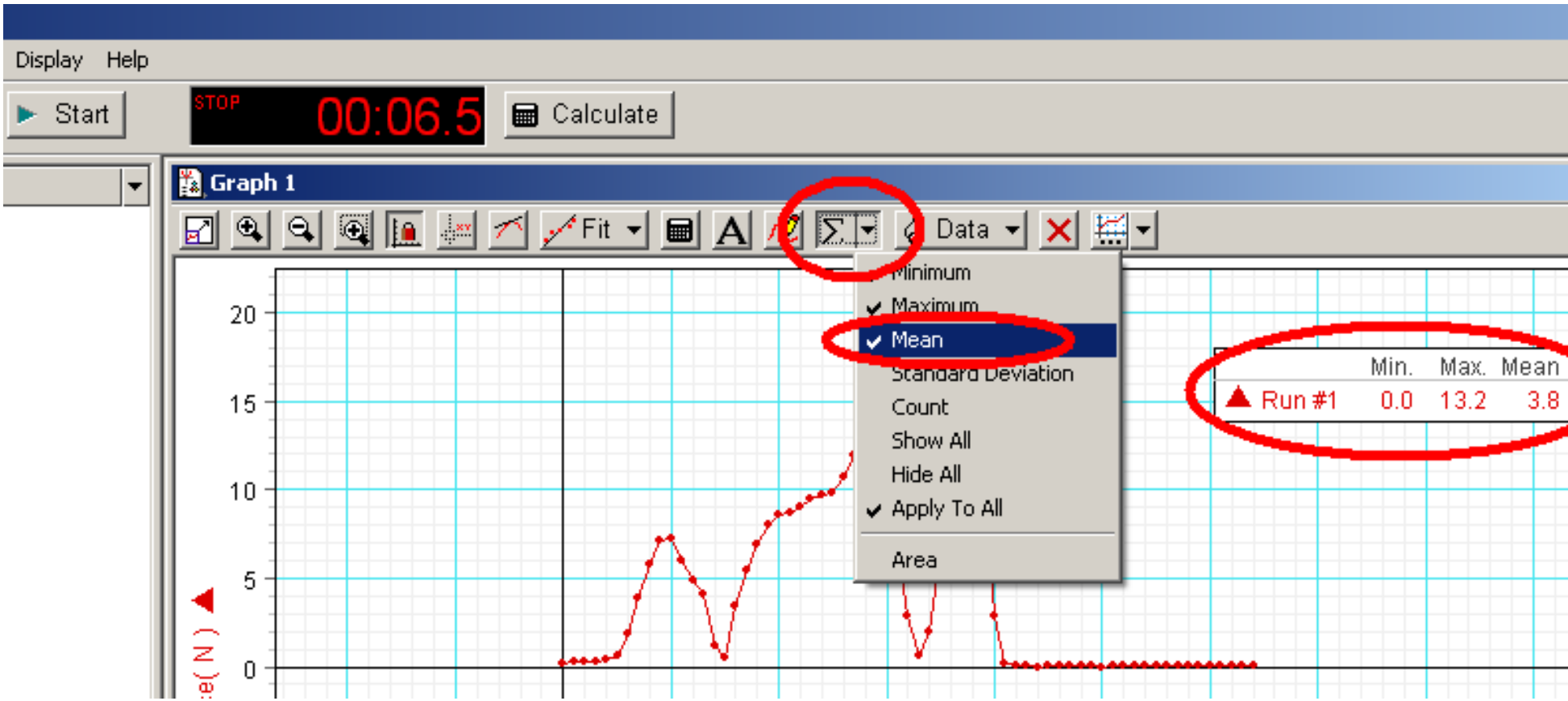
Graph


DataStudio
File Edit Experiment Window Help
Summary
Setup
Start
STOP
00:00.0
Calculate
Data
Force, Ch A (N)
Displays
Digits
Graph
Experiment Setup
Add Sensor or Instrument...
Setup Timers...
Calibrate
ScienceWorkshop 750
Force Sensor (Student)
Measurements
Visibility, Name
Unit of Measu
Voltage, ChA
V
Force, Ch A
N

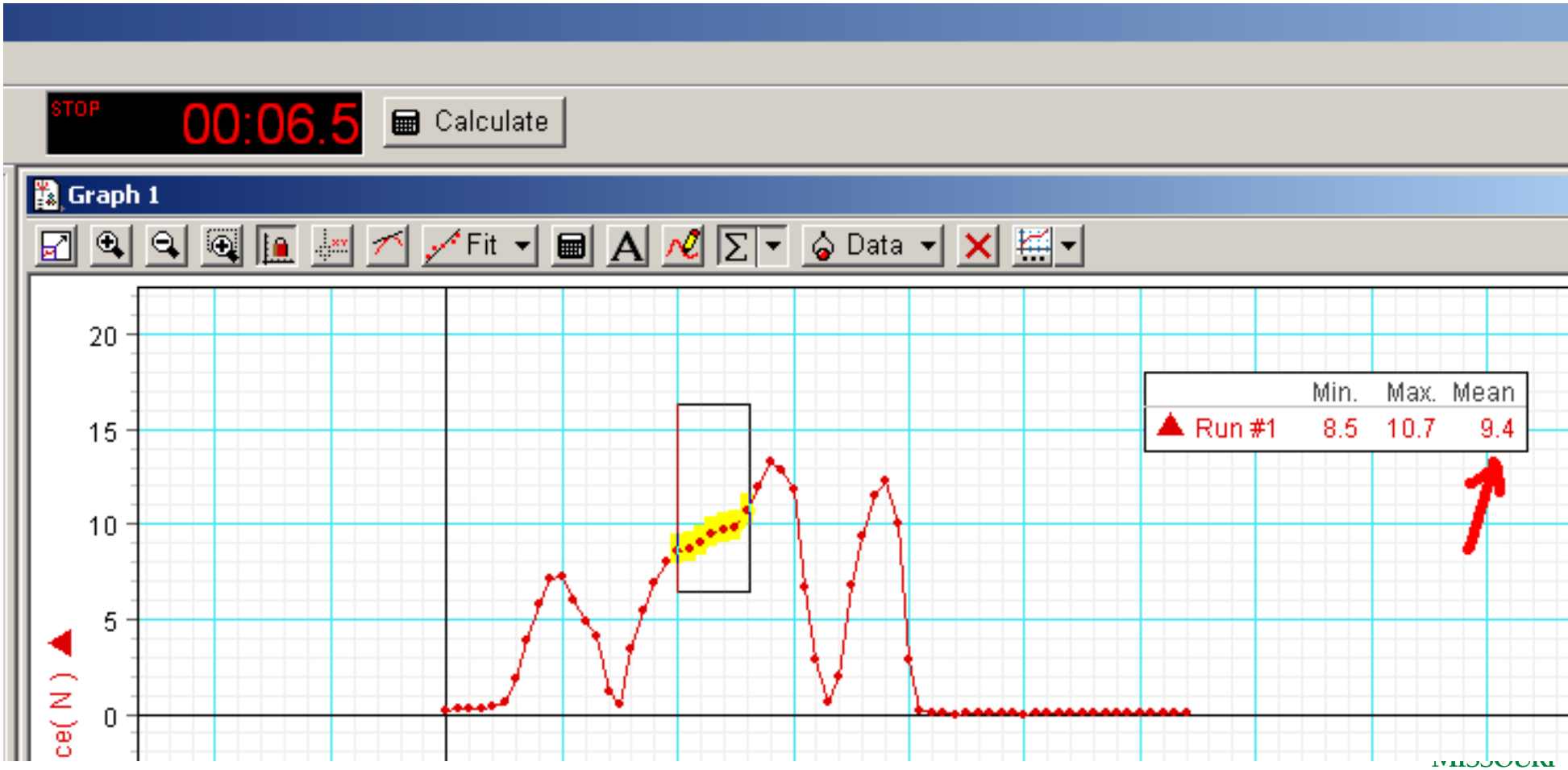
Start


DataStudio
File Edit Experiment Window Display Help
Summary
Setup
Start
STOP
00:00.0
Calc
Data
Force, Ch A (N)
Graph 1
Align matching X Scale
20
10
0

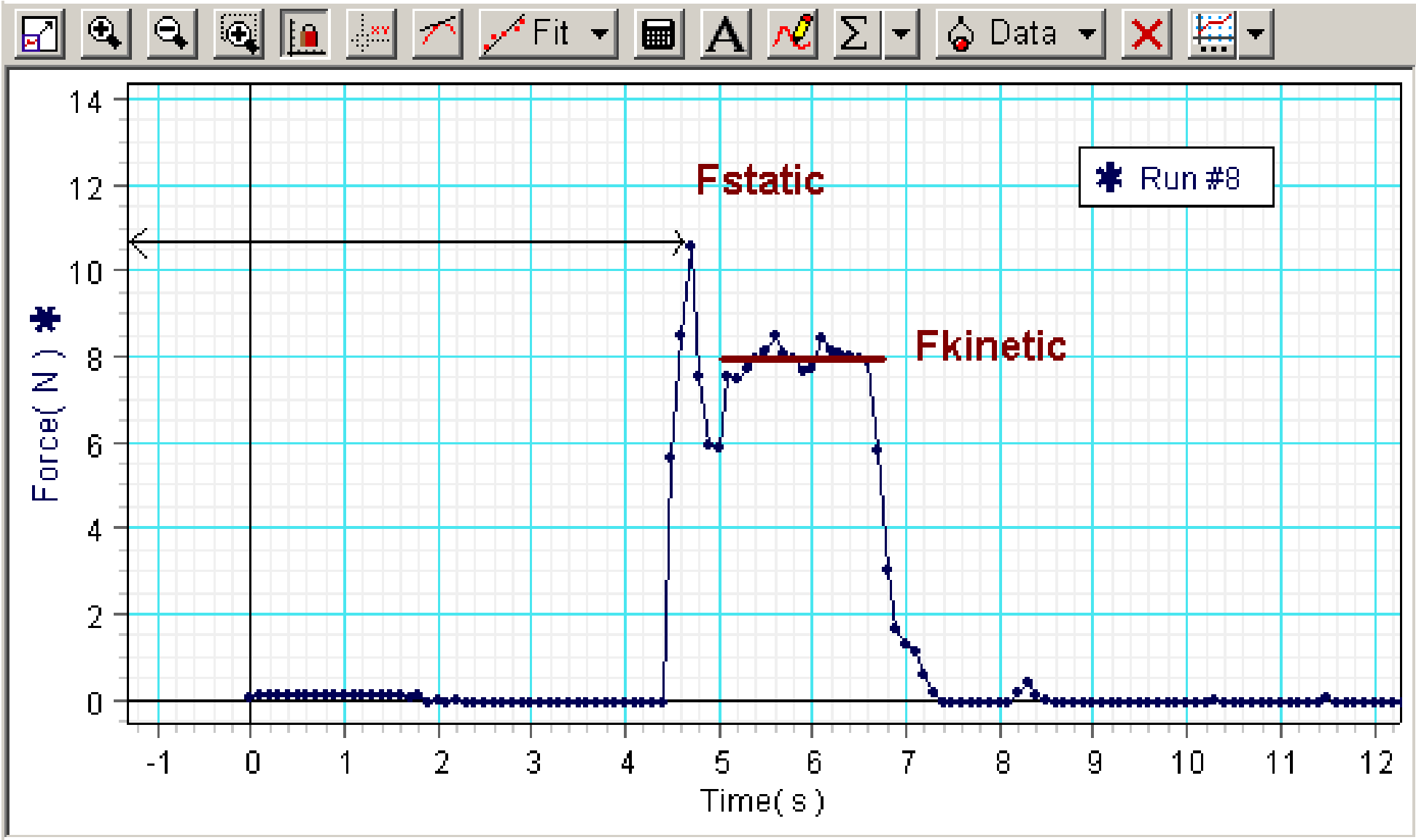
Display “mean”



Select data points to get mean



F_{static} and $F_{kinetic}$: good data



Example of useless data