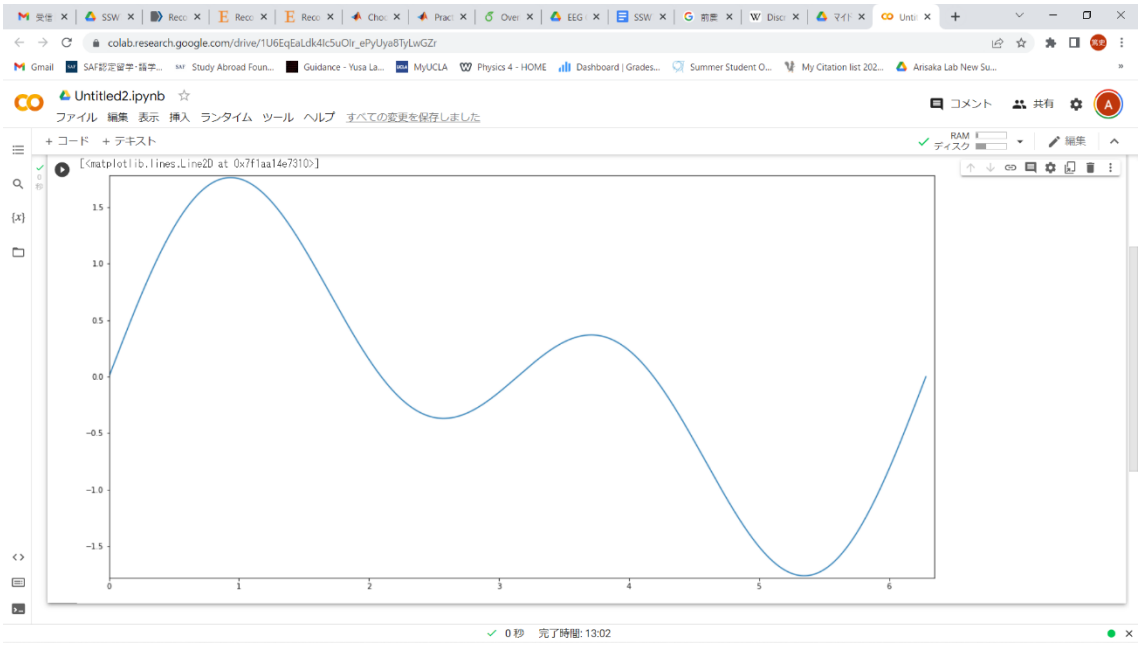
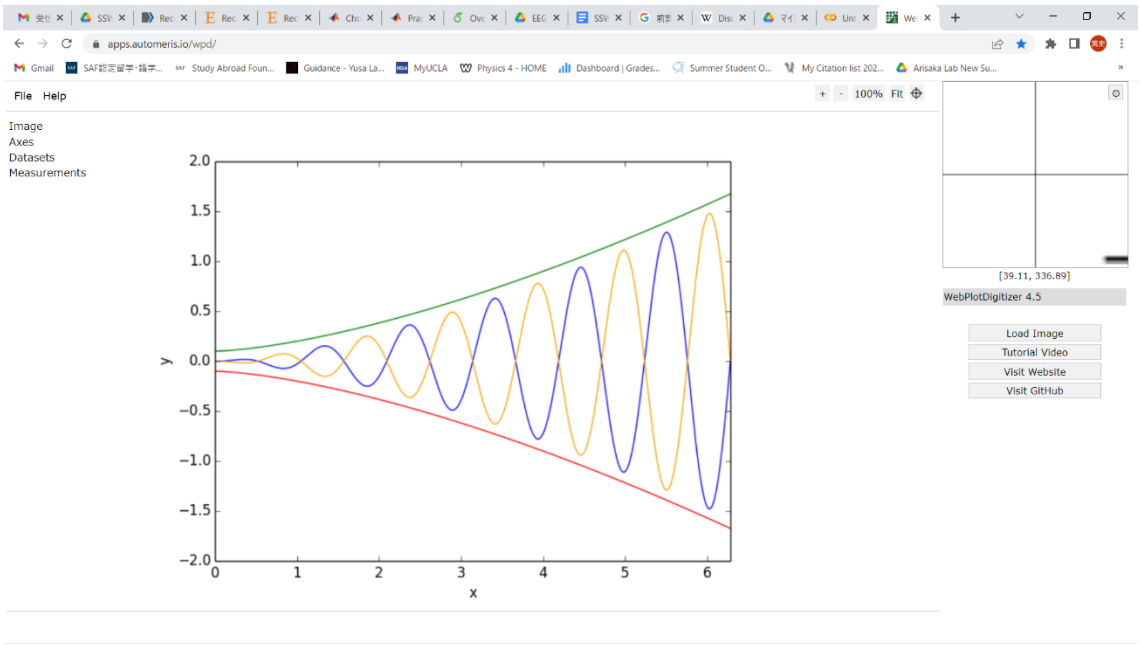
Last edit by Atsushi K., 2022/9/2

1. Take a screenshot of the graph

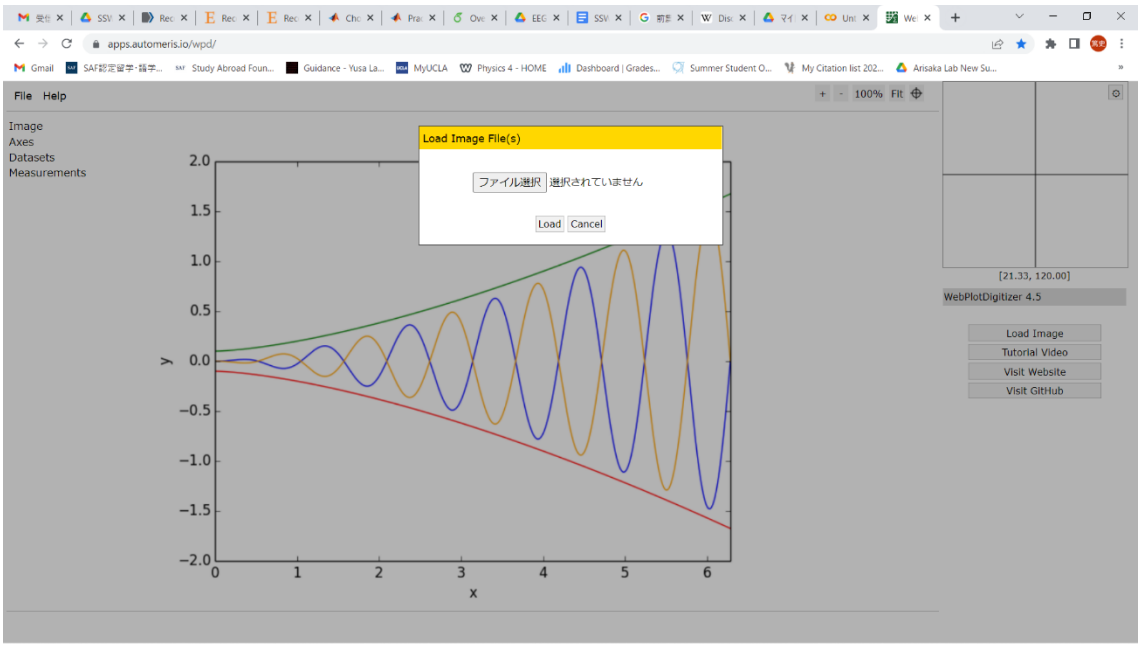


2. Go to https://apps.automeris.io/wpd/

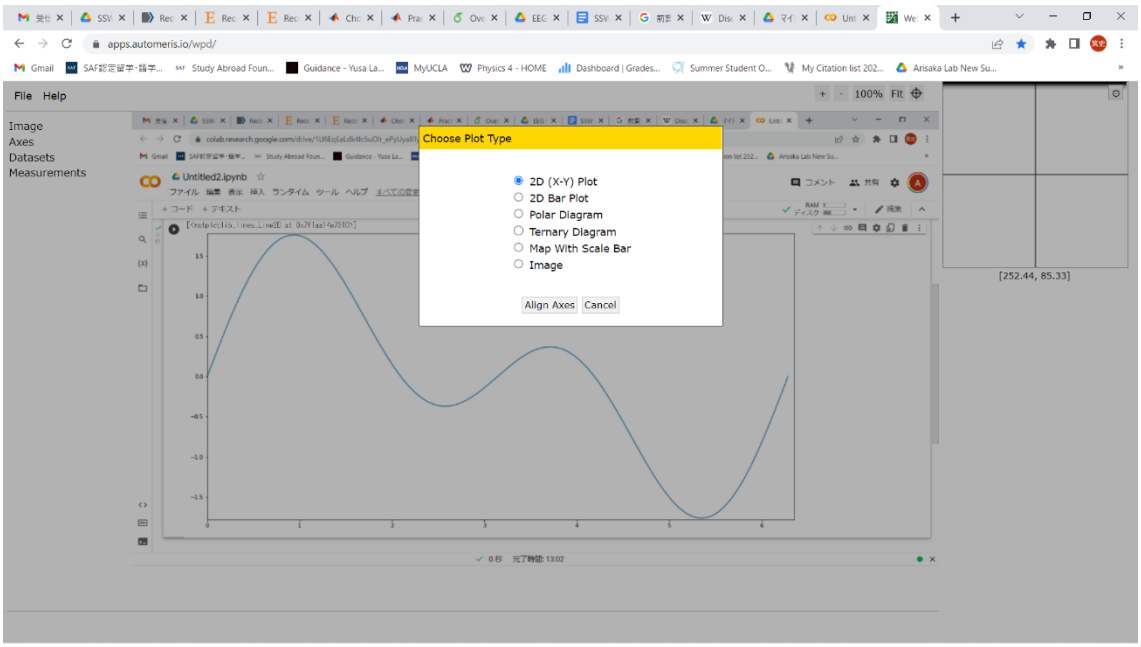
3. On the upper left-hand side corner, go to File->Load Image(s)



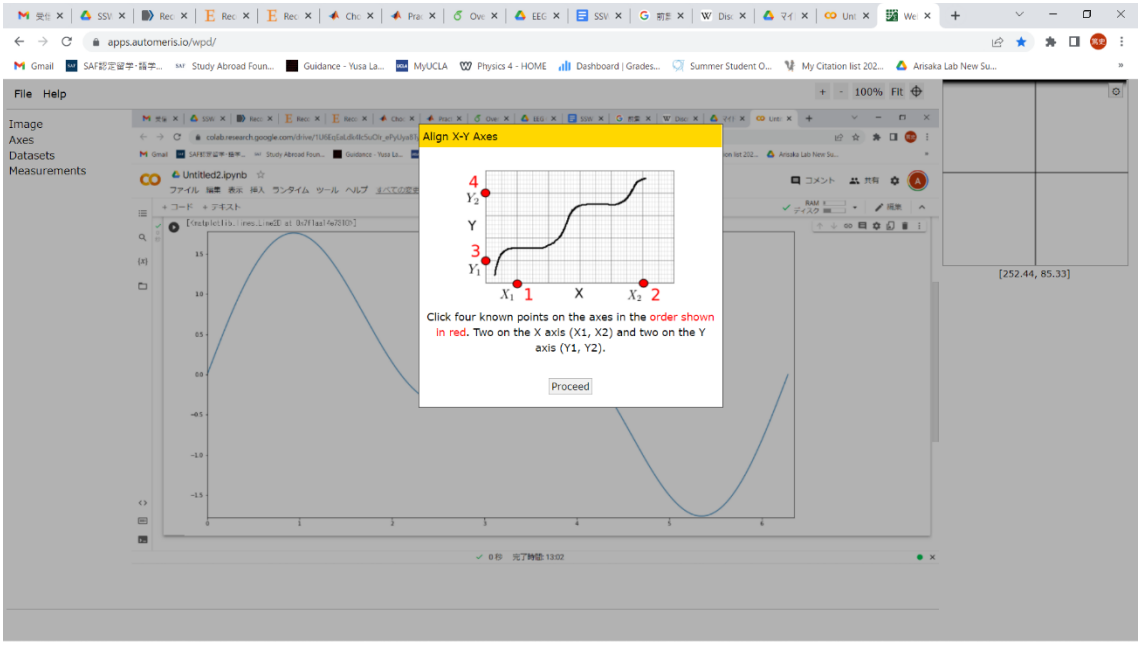
4. Choose file->load



5. 2D (X-Y) plot->Align Axes



6. Follow the instructions…

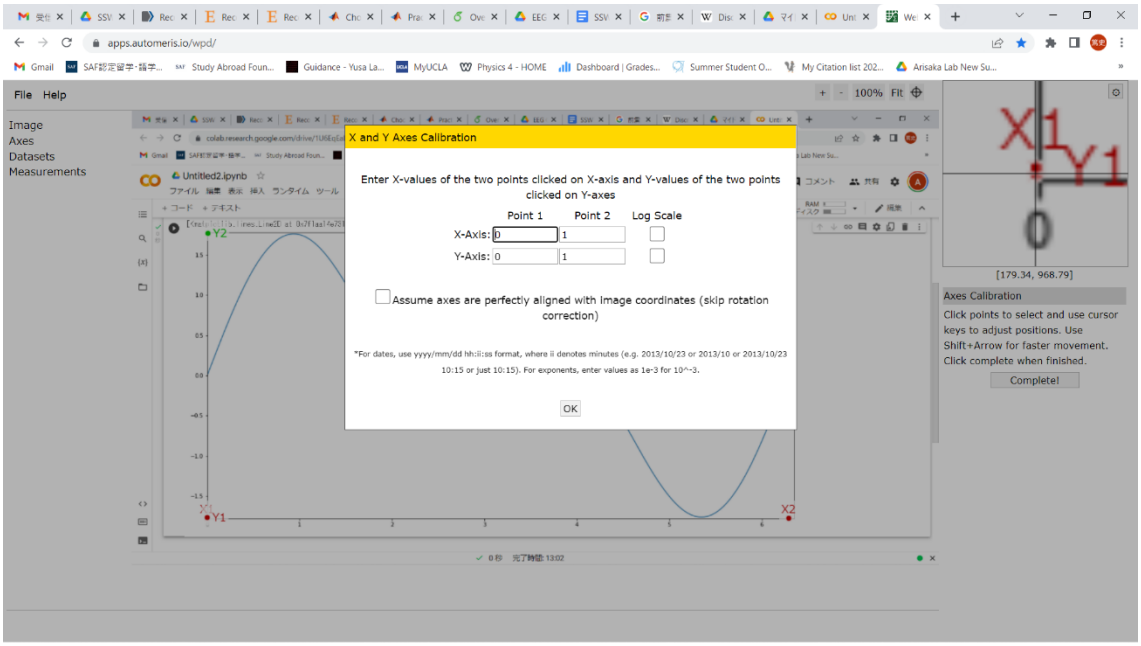


7. …until you get the “X and Y axis calibration” screen.

   For the X axis, put the time of the original paper.

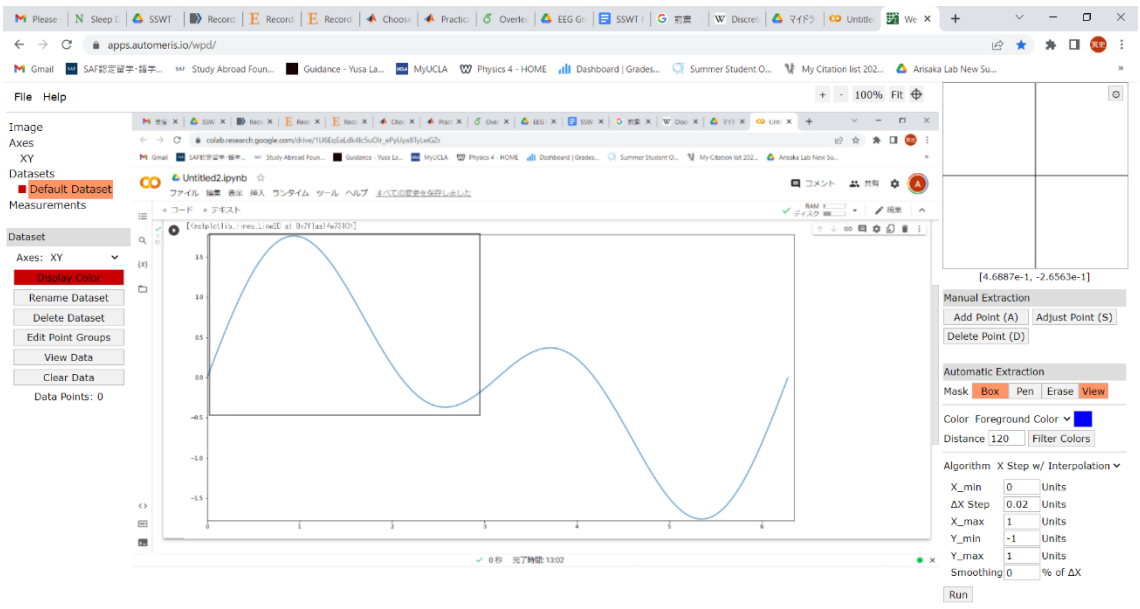
   Y axis can be random, but try using the same value as the original paper.

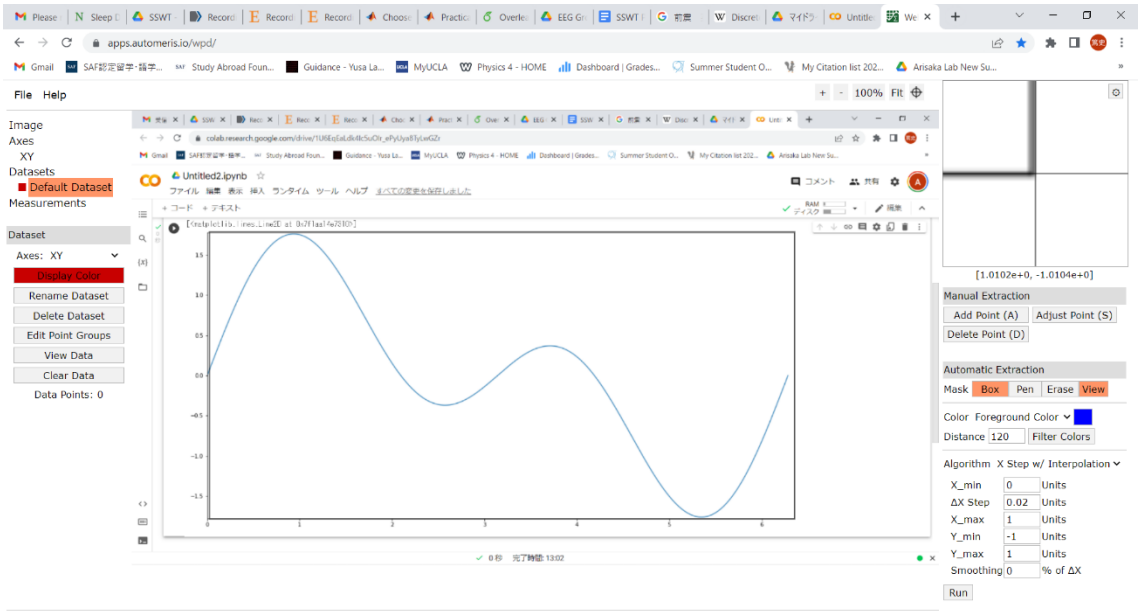
8. Check the “Assume axes are perfectly aligned with image coordinates (skip rotation correction)” and press OK.

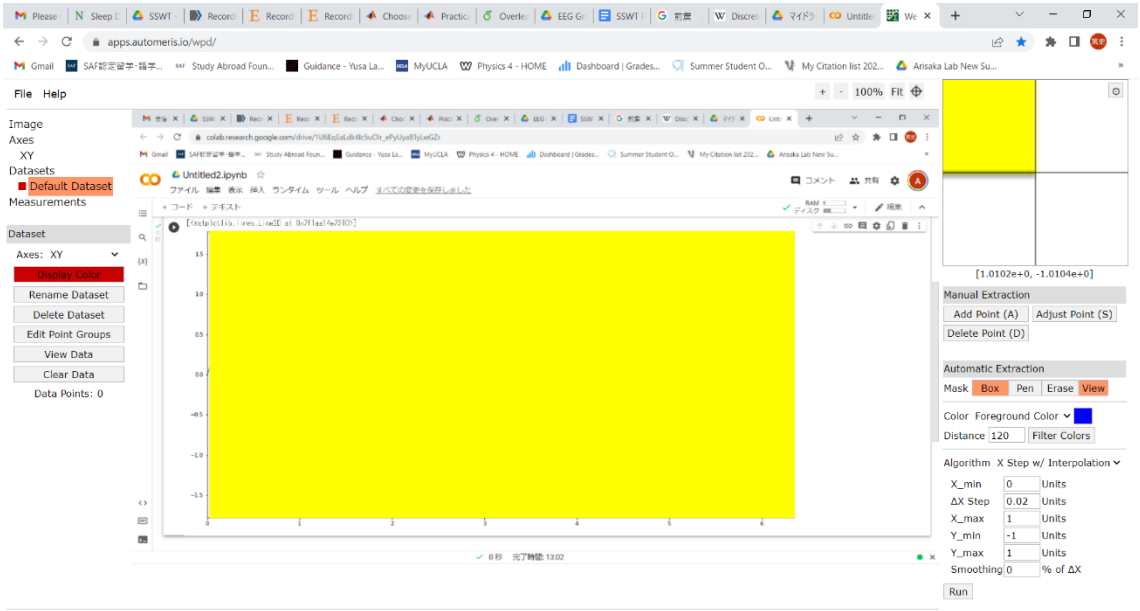


9. Look at the right hand side. All the functions you are going to use at this stage are the “box”, “pen”, and “Erase”.

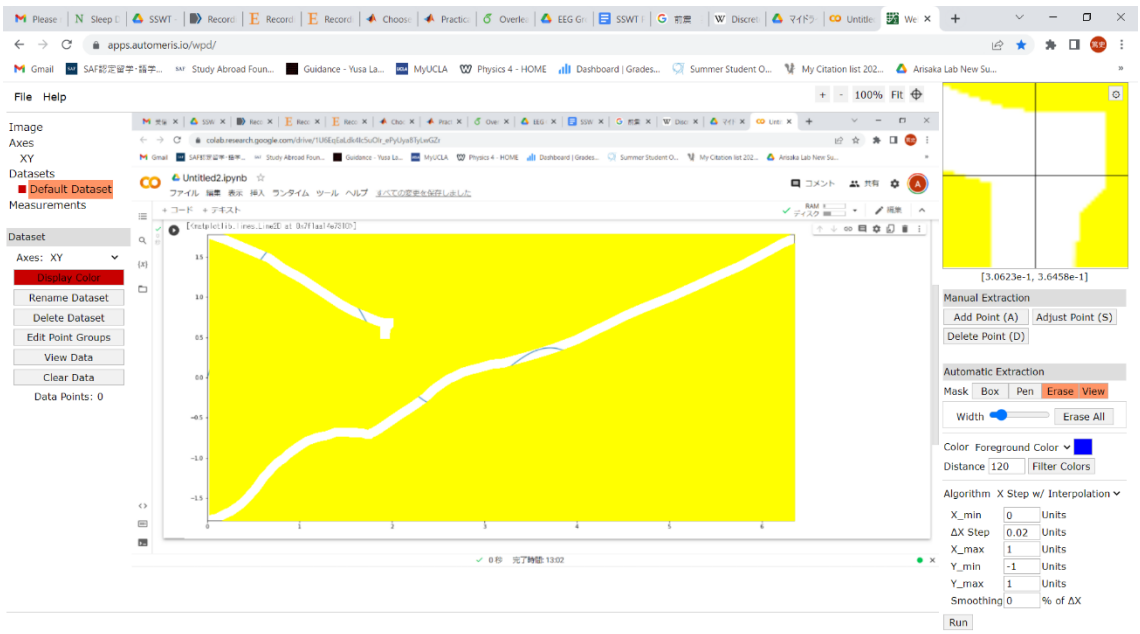
9.1. “Box”

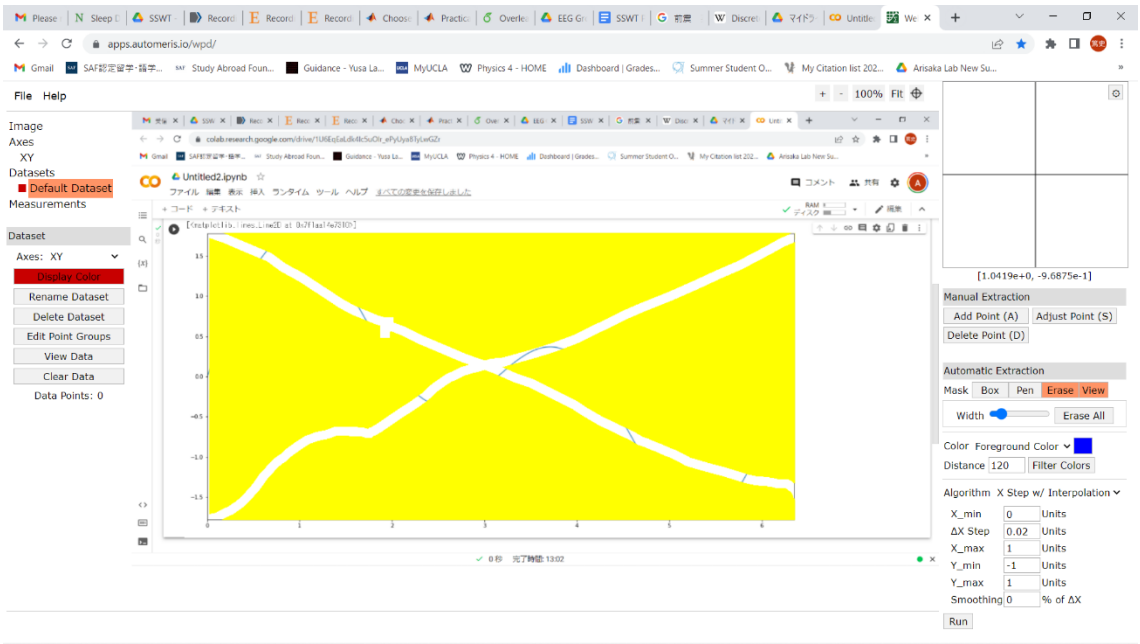





apps.autoneris.io/wpd/
File Help
100% Fit
Image
Axes
XY
Datasets
Default Dataset
Measurements
Dataset
Axes: XY
Display Color
Rename Dataset
Delete Dataset
Edit Point Groups
View Data
Clear Data
Data Points: 0
Untitled2.ipynb
[1.0102e+0, -1.0104e+0]
Manual Extraction
Add Point (A)
Adjust Point (S)
Delete Point (D)
Automatic Extraction
Mask Box Pen Erase View
Color Foreground Color
Distance 120 Filter Colors
Algorithm X Step w/ Interpolation
X_min 0 Units
ΔX Step 0.02 Units
X_max 1 Units
Y_min -1 Units
Y_max 1 Units
Smoothing 0 % of ΔX
Run

9.2. “Erase”

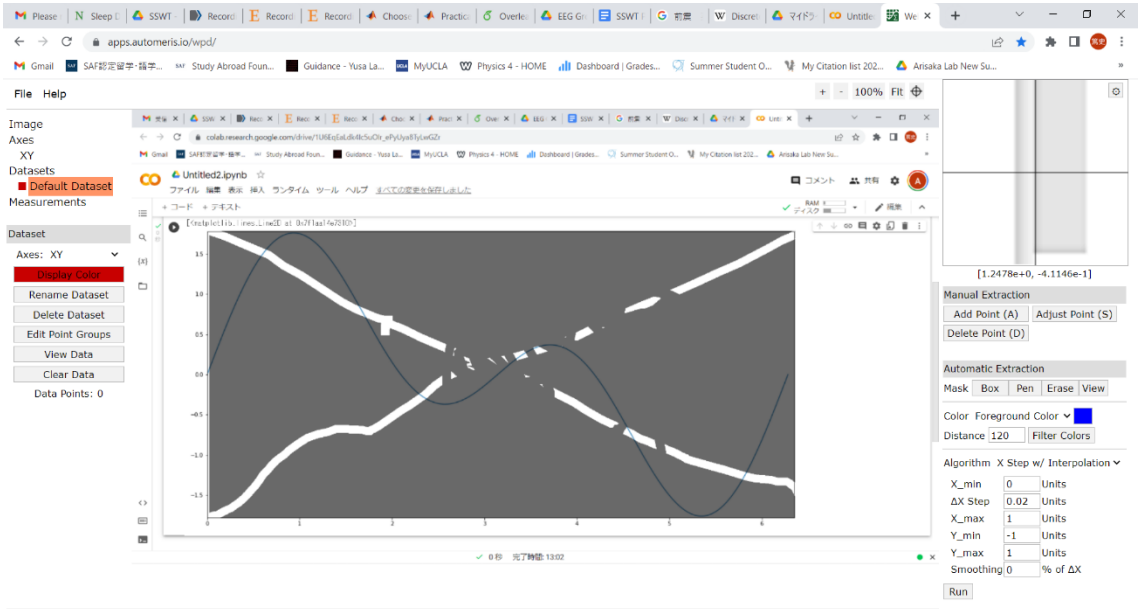

apps.autoneris.io/wpd/
File Help
100% Fit
Image
Axes
XY
Datasets
Default Dataset
Measurements
Dataset
Axes: XY
Display Color
Rename Dataset
Delete Dataset
Edit Point Groups
View Data
Clear Data
Data Points: 0
Untitled2.ipynb
[3.0623e-1, 3.6458e-1]
Manual Extraction
Add Point (A)
Adjust Point (S)
Delete Point (D)
Automatic Extraction
Mask Box Pen Erase View
Width
Erase All
Color Foreground Color
Distance 120 Filter Colors
Algorithm X Step w/ Interpolation
X_min 0 Units
ΔX Step 0.02 Units
X_max 1 Units
Y_min -1 Units
Y_max 1 Units
Smoothing 0 % of ΔX
Run

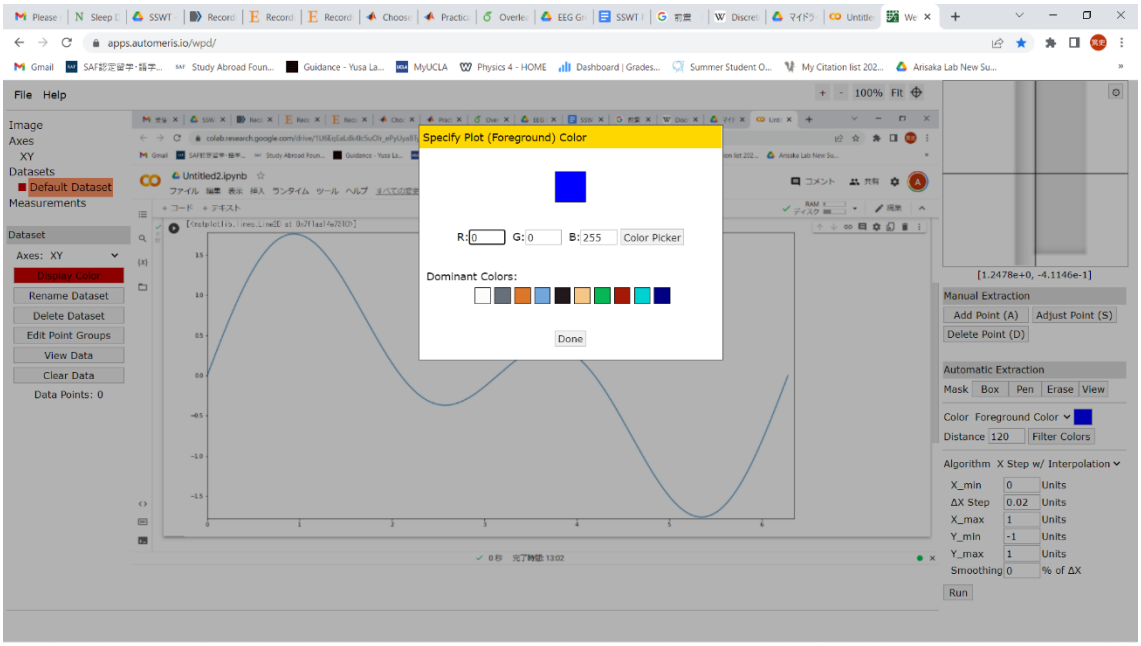


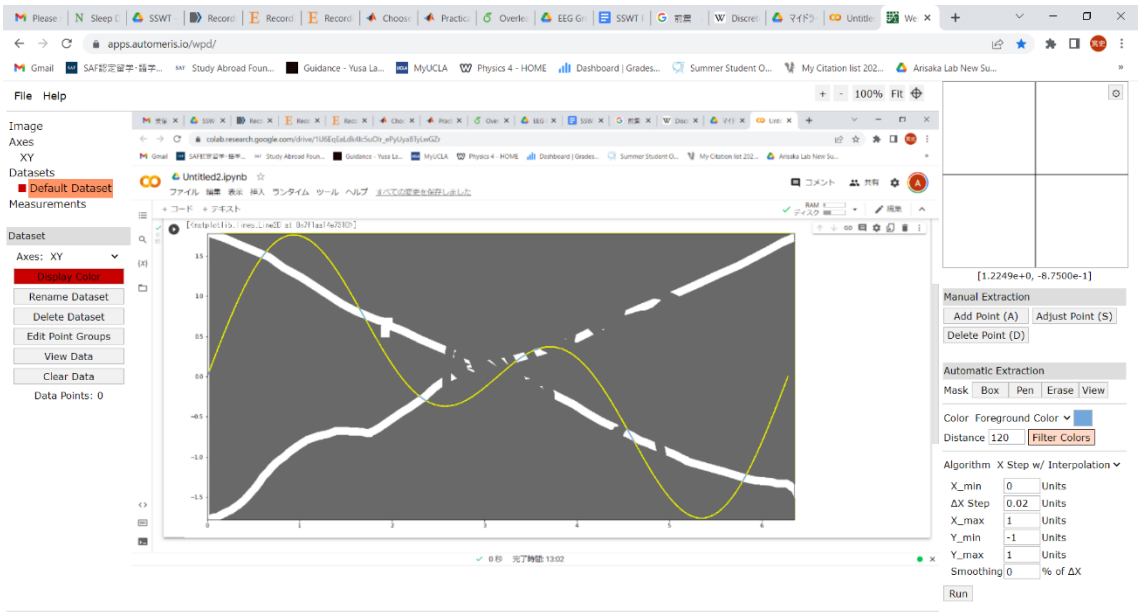
9.3. “Pen”

10. Change colors. You can use filter colors to see if you are taking a correct wave form.

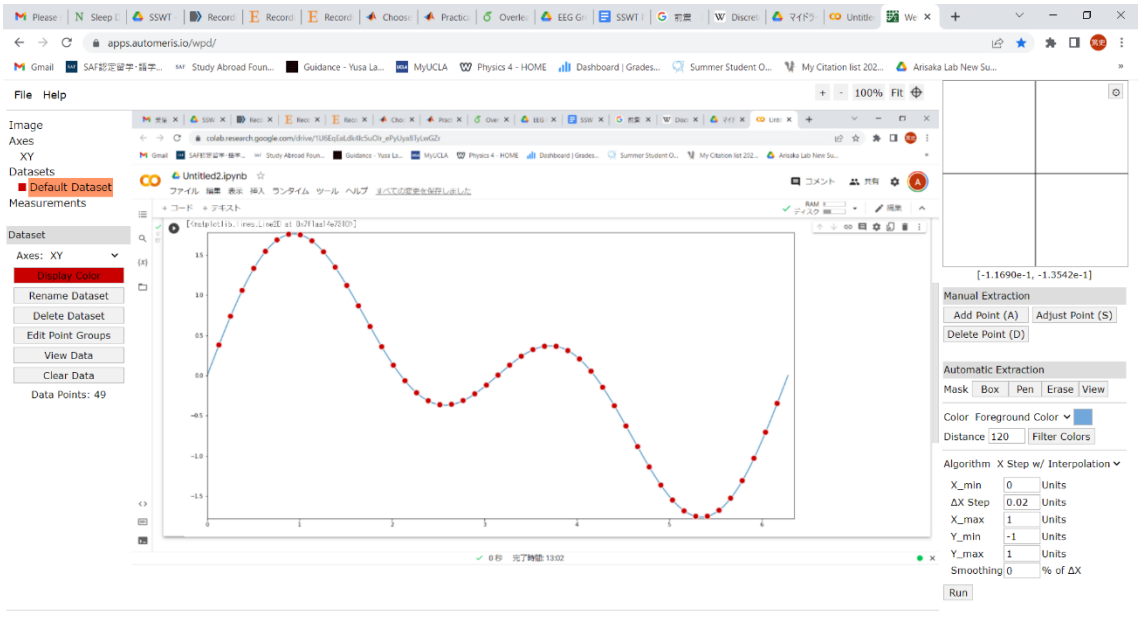
10.1. “Filter colors”


apps.automeris.io/wpd/
File Help
Image
Axes
XY
Datasets
Default Dataset
Measurements
Dataset
Axes: XY
Display Color
Rename Dataset
Delete Dataset
Edit Point Groups
View Data
Clear Data
Data Points: 0
Untitled2.ipynb
[1.2478e+0, -4.1146e-1]
Manual Extraction
Add Point (A)
Adjust Point (S)
Delete Point (D)
Automatic Extraction
Mask
Box
Pen
Erase
View
Color Foreground Color
Distance 120
Filter Colors
Algorithm X Step w/ Interpolation
X_min 0 Units
ΔX Step 0.02 Units
X_max 1 Units
Y_min -1 Units
Y_max 1 Units
Smoothing 0 % of ΔX
Run


apps.automeris.io/wpd/
File Help
Specify Plot (Foreground) Color
R: 0 G: 0 B: 255 Color Picker
Dominant Colors:
Done
Image
Axes
XY
Datasets
Default Dataset
Measurements
Dataset
Axes: XY
Display Color
Rename Dataset
Delete Dataset
Edit Point Groups
View Data
Clear Data
Data Points: 0
Untitled2.ipynb
[1.2478e+0, -4.1146e-1]
Manual Extraction
Add Point (A)
Adjust Point (S)
Delete Point (D)
Automatic Extraction
Mask
Box
Pen
Erase
View
Color Foreground Color
Distance 120
Filter Colors
Algorithm X Step w/ Interpolation
X_min 0 Units
ΔX Step 0.02 Units
X_max 1 Units
Y_min -1 Units
Y_max 1 Units
Smoothing 0 % of ΔX
Run

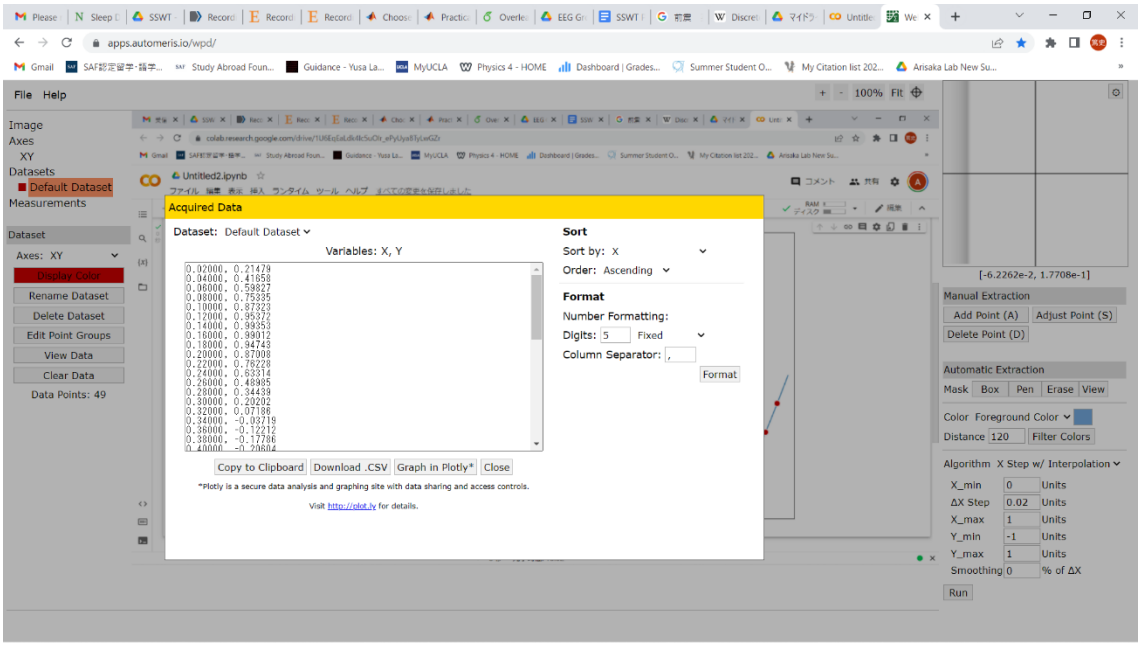


11. Click on the arrow pointing downwards next to the “Averaging Window”. Choose “X-step w/ Interpolation”. Change “ΔX Step”. Usually, this number should be around 0.001. Click “Run”.



12. The data points are shown on the left hand side. Repeat 11 until you get the data points you need. Usually “time” times “1000” is about the number of points you need.

13. “View Data”->Sort by: “X”->Digits: “5”->”Fixed” (not “Ignore”)->Format->”Download .CSV”



14. Done!