DERIV2D - 1st Project Progress Report

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So far, I have started my program in C# .net Core using Visual Studio 2018.

My algorithm currently does the following parts of the algorithm:

* Loads the DERIV2D\_functionA\_XY.csv data into two lists from the supplied dataset
* Computes the derivative of the X and Y and creates a separate list of the derivative values at each interval. (e.g. Between points 1-2, 2-3, 3-4, etc)
* Outputs the derivative values into a .csv file determined by the user input

Next steps to complete:

I want to try two different methods of computing the derivative. I’ve done one way so far, but I want to at least try another way like interpolating and then finding the derivative like that.

I also want to at least try to interpolate my derivative from my original code and interpolate the derivative from Function B and compare those two interpolations.

After finding the derivative on my original code, I want to load and normalize function B such that It approximately has the same amount of points as function A’s derivative. Then I will be able to use that to compare my results as it is now one to one.

If I am able to complete these steps with ease, I also want to try and do DERIV3D as it seems like my code should be able to handle any number of dimensions.

If you have any comments or tips on how I’m proceeding with my project, please let me know!