

### Generating fluorescence vs. concentration plots example

This file describes an example of how to move from generating fluorescence vs. time plots for a single concentration to fluorescence vs. concentration plots.

Note that the code below is not complete and WILL NOT WORK if you copy and paste it into your code, but is meant to give you a brief idea of how to use this piece of code.

```
%%
```

SensorInput is an array with 10 entries. The for loop below references the 'ith' position within this array and uses that as the sensor input. Then you store the desired output for that given iteration with sensorInput.

```
sensorInput = [.1:.1:1.0];
for i = 1:10
[output,outputTime,input,inputTime] = sensorODE_solver(@sensorODE,...
    sensorInput(i),chatter,stochasticity,maxInputAmpl,initCond);
Fluorescence (i)=output(end,3)
end
```

```
%%
```

Fluorescence(i) takes the last point in the 3<sup>rd</sup> column (whatever species you are tracking) and stores it in the ith position. Then you are able to plot Fluorescence vs. sensorInput to generate your curve.

Pay attention to matching the size of your arrays/matrices and selecting the correct positions.

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