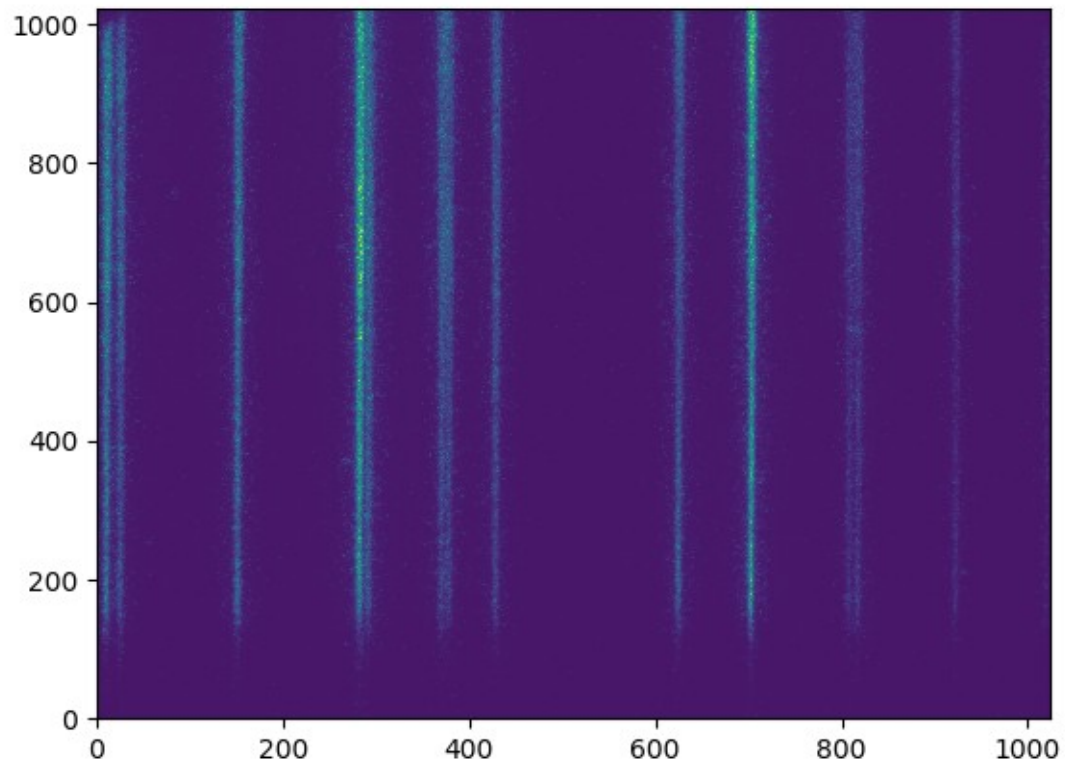


Spectrum Calibration  
Valentina  
03/13/18

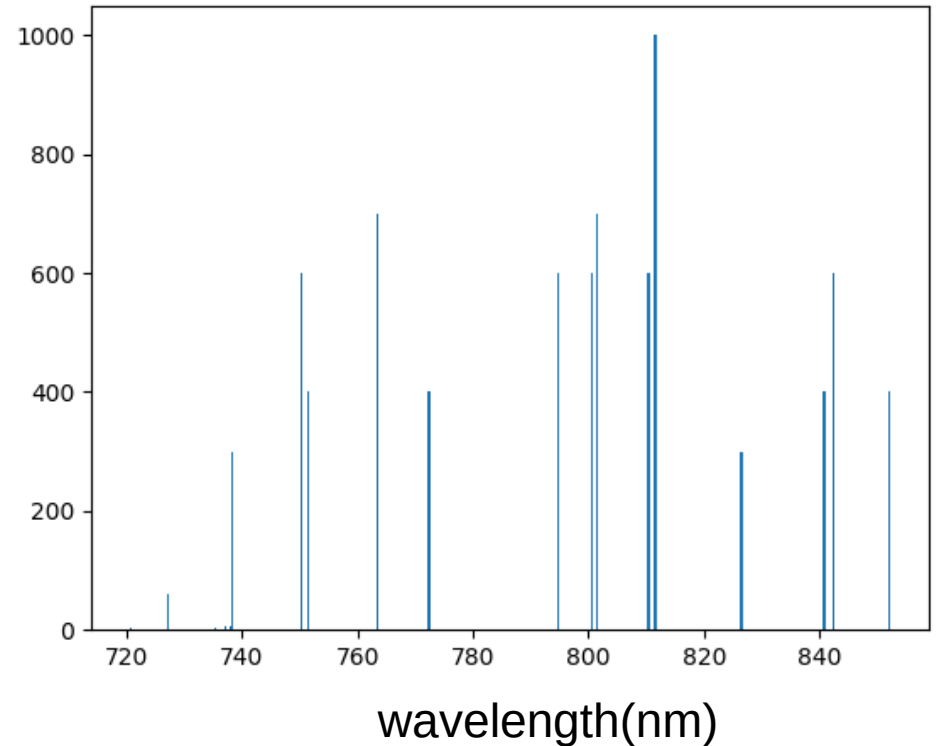
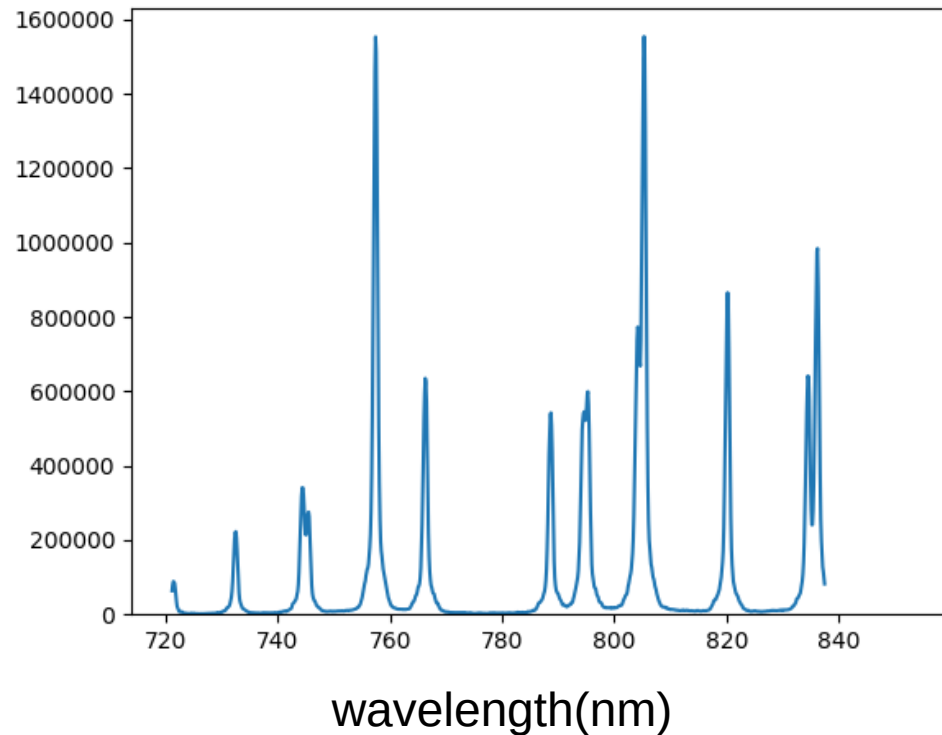
# Spec Data Reading

- .sif reader from Josh
- Raw data is a 2d matrix
  - X: wavelength
  - Y: Space (from grating)
- From calibration data:
  - $\text{lambda}[X] = \text{arrCal}[0] + \text{arrCal}[1]*X + \text{arrCal}[2]*X**2 + \text{arrCal}[3]*X**3$
- Note that 0<sup>th</sup> array would have the highest wavelength, so the image should be flipped

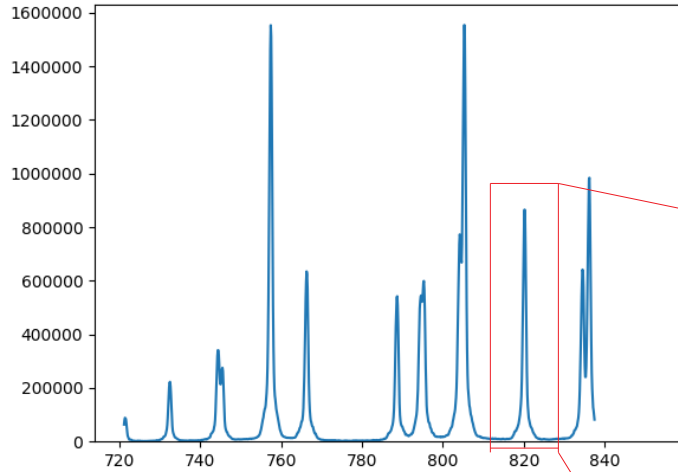
# 2D Matrix



# Exp Data vs. NIST Data

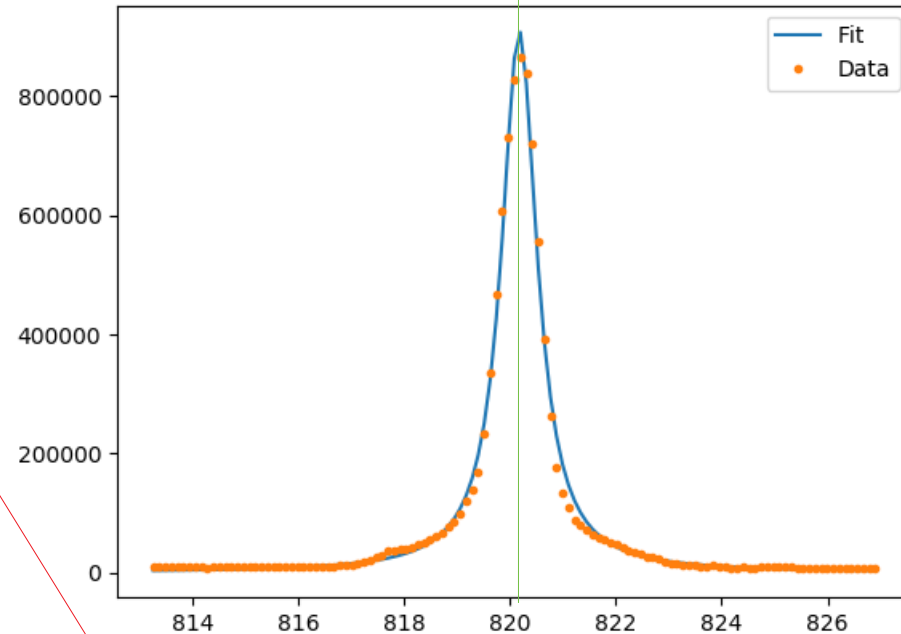


# Line 826.4522



820.177

Shift= 6.2747 nm



# Shift Exp Data and overlap with NIST Data

