

### Tidal wave step 1 and 2:

Mauricio :

- Set up Jupyter notebook, downloaded tidal data file. Wrote code to read the data, convert the time values and built an oscillatory model. Using scipy to fit that model to the measurements.
- Imported this model along with the real tide data into a pdf
- Checked the code worked added the notebook, data file, and the pdf to the shared github.

### Tidal wave step 3 and 4

- Mauricio : The code shown in jupyter notebook computes the residuals by subtracting the model prediction from each measured tide height. Plotting these residuals creates a histogram to see the distribution.
- The standard deviation is calculated to the assumed 0.25ft measurement and the intrinsic scatter of the tides is estimated
- The code models the January 14th tsunami by adding a single 2ft outlier to the residuals. Calculates how many standard deviations this tsunami represents relative to normal tidal variation and plots a second histogram showing the effect of the outlier.

### Checking Tidal wave code works

Nate:

- Ensured tidal data file was set in the jupyter notebook. Drafted the code using scipy to fit the model and measurements for the height in ft and the times and days.
- Shows modal of histograms and plots below the coding.
- Helped with reviewing the code

### Adding notes next to the codings of the group, rechecking the code works

Ashley:

- Rerun the code to check the histograms and plots are shown with the correct data both for the tsunami outlier and tidal residuals.
- Adding additional notes to be clear of the steps.
- Refined notes that already were written from my group members.
- Supported my teams code review