This activity should be done in the classroom either alone or in groups. Students will need to have a computer available and internet access. The activity follows a step by step method for downloading, importing, and analyzing a data source. It is interspersed with discussion questions that can either be discussed in a group setting, or all together as a class. The questions also provide a chance to check-in with students and/or groups to make sure that they have followed the instructions correctly.

The first step is accessing, downloading, and importing the data into Google Sheets. Hopefully students are familiar with the basic steps to do this. They may have difficulty understanding the concept of a “license” for the data. You can ask them to open a book and turn to the copyright page and find the section that starts “All rights reserved” and think about what that means for re-use of the book. Contrast that with the Creative Commons 4.0 Attribution license and what that explicitly allows.

The next three sections ask students to manipulate the data in Google Sheets. Make sure you have run through the activity at least once so you are familiar with the different procedures. Most of it is pretty straightforward but there can be hiccups if they have missed a step. Encourage students who are more comfortable with the platform to play with the data and try things not in the lesson. For instance, they could calculate the mean or median of one of the date columns and think about what that tells us.
One way to extend this lesson into further discussion or even a written assignment would be to ask students to create a visualization or modification of the data and explain what it means, what hypothesis it might support, and importantly how they created it. This could be an oral presentation to the group or class, or written up as a report. Encourage them to think of this like a lab report, how did they get the data, what did they do to it, what does it say, and what ways could it be critiqued?