**Day 7: Challenge**

Sam Mogen and Megan TM

We will again look at pH from the JMA data product!

Please focus on answering the following questions in the challenge:

* How does pH change in the data product from 1998 to 2010? (make sure to use a colormap that shows changes clearly)
  + Hint: you can simply subtract the 1998 values from 2010 to see the change
* What regions show the largest differences in pH over time?
  + Hint: look qualitatively
* Plot seasonal maps for the dataset from the years 2000-2005 and compare.
  + Hint: use the ‘groupby’ function we discussed in class
* Pick a point or points in the global ocean and add them to your maps!
  + Start with the location of the buoy you recently looked at off the coast of New York (location: (40.251, -73.164)
  + Hint: use the ax.scatter() as discusses earlier

\*Remember to start your new notebook with markdown text explaining the goals include comments

\*\* Be sure to label the figures with titles and colorbars!