Mapping monthly sea surface temperature (SST) using the IRI Data Library

The objective of this lab is to produce monthly maps of global SST and to compare the regional differences between summer and winter.

INSTRUCTIONS:
1) Navigate to the IRI Data Library:
http://iridl.ldeo.columbia.edu/

2) Type 'SST' in the custom search bar near the top right.
This identifies all of the available sea surface temperature data sets.

3) Click on the first link:
data: NOAA NCEP EMC CMB GLOBAL Reyn_SmithOIv2 monthly **sst**

4) Click on the "Data Filters" tab near the top
This option allows the user to make quick calculations to the data.

5) Click on "Monthly Climatology"
This option calculates the monthly average.

6) Click on "Views"

7) Select the "Colors with land" option.

8) Map the average January SST by typing "Jan" and save the image.
Do the same for August.

9) Type "Jan-Jan" to plot an animation of monthly average SST.

10) While there is an animation, use your mouse to zoom into the Caribbean region. Do this by clicking your mouse and dragging a rectangle to select coverage of the Caribbean region.

11) Adjust the color scale to range from 25C to 31C by simply entering the values located in the text box above the word "longitude" and "colors". Push enter.

QUESTIONS
1) Attach both maps (winter and summer SST average)
2) What region appears to have the lowest range of annual SST? (Where in the world has the lowest difference between SST in winter and summer?)
3) What region has the highest range?
4) Describe the global animation. Is there a pattern? What variable do you think drives the pattern?
5) When is the SST greatest around Jamaica. Approximately, how warm is it there at that time?

Assignment due before Jan 27th class. NO EXCEPTIONS. Email responses and any related questions to tallen@cimh.edu.bb