

NERR Environmental data scavenger hunt

II. Comparing water temperatures at two NERR Reserves

From the CDMO webpage (<http://cdmo.baruch.sc.edu/>), click “View/Download Data” then click the link to launch the Data Export System. You can also get there directly at: <http://cdmo.baruch.sc.edu/get/export.cfm>.

Data Collection: Using the interactive map, navigate to the Wells reserve in Maine. Find the “Inlet” Water Quality Station. Graph water temperature data for the past year.

1. Use your mouse to point to different locations on the graph and get specific information about the data.

- a. What is the highest recorded temperature on the graph? _____ °C
- b. What was the date this temperature was recorded? _____

2. Now go to the reserve in Jobos Bay, Puerto Rico and access data for water quality at “Station 20”.

- a. What was water temperature at Station 20 on the date that the highest temperature in Wells was recorded (see answer to “1b” above)? _____ °C

3. Finally, use the map to find one of the reserves that is close to where you live. Pick a station that is

“Active”, “Real Time”, and of data type “water quality”. Graph water temperature for the last year.

- a. What Reserve did you choose?
- b. What was water temperature at your station on the date that the highest temperature in Wells was recorded? _____ °C

4. What does your data collection tell you about changes in air and water temperature as you go north and move further away from the equator?

Going further – Graphing other parameters and time ranges:

1. Use the NERR graphing tool to view patterns in other parameters such as salinity, dissolved oxygen, turbidity, pH and/or water depth. You can even graph two different parameters at the same time to see how they change with one another.
2. Change the date range to see how your parameters change over daily, weekly, monthly and/or yearly cycles.