

Take a Ride on the Gulf Stream

Introduction

- If you could sail away, where would you go?
- Where is the best place to catch a swordfish?
- Is it a good time to go to the beach at Tybee Island, Georgia?
- Would a great white shark be a threat to swimmers or surfers off the coast of Georgia?

Examining various aspects of the Gulf Stream can help us answer these questions. This activity is a guided web exploration of the Gulf Stream. Students will

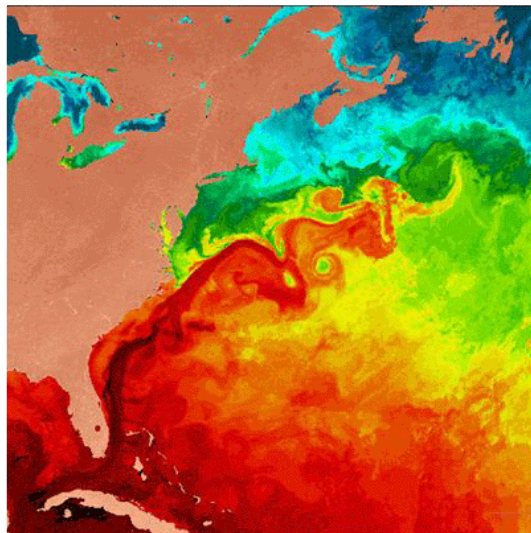


Image: SeaWiFS

- Define the Gulf Stream.
- Locate the Gulf Stream using surface sea temperatures over the past year.
- Determine from the data when you can swim and surf off the Georgia coast.
- Find when fishing is best and for what type of fish.
- Decide if this would be a good time to go to the beach.
- Determine where a message in a bottle would go at different times of the year.

You can either have students run through this activity following the links and answering the questions on this web page or download the student worksheet containing the same information.

Procedure

1. Describe what the Gulf Stream is and where it is located using the [Cooperative Institute for Marine and Atmospheric Studies \(CIMAS\) website](#). Include how fast it moves.
2. Use the [Johns Hopkins Ocean Remote Sensing website](#) to locate the Gulf Stream for the month of October of last year using surface sea temperatures and draw the location of the Gulf Stream on the [NOAA hurricane tracking map](#) using colored pencils.
3. Repeat Step 2 but use the months of January, April, and July. Afterward, answer these questions in complete sentences:
 - How does the Gulf Stream vary during different seasons of the year?
 - How does the Gulf Stream vary in the Gulf of Mexico during different seasons of the year?
 - Is satellite imagery a good way to track the Gulf Stream? Why?
 - Is the Gulf Stream a warm or cold water stream?
 - Does the Gulf Stream follow a definite route? Explain.

- During the different months you observed where do you think your message in a bottle would land on shore?

4. Go to http://www.ndbc.noaa.gov/station_page.php?station=41008 off the coast of Georgia and record the current sea temperature at this location. From this information answer these questions in complete sentences:

- Is this a good time to swim? Explain your answer.
- Would this be a good time to go to the beach? Explain your answer.
- From this information, is this a good time to go surfing? Explain your answer

5. Go to <http://animals.nationalgeographic.com/animal/fish/great-white-shark-html> and <http://www.tybee.com/fishingancrabbing.html#OFISH> scroll to the bottom and click on Fish Species caught on Tybee. From this information answer these questions in complete sentences.

- Is it likely you would encounter a great white shark? Explain your answer.
- What are some common fish caught off-shore from Tybee Island?