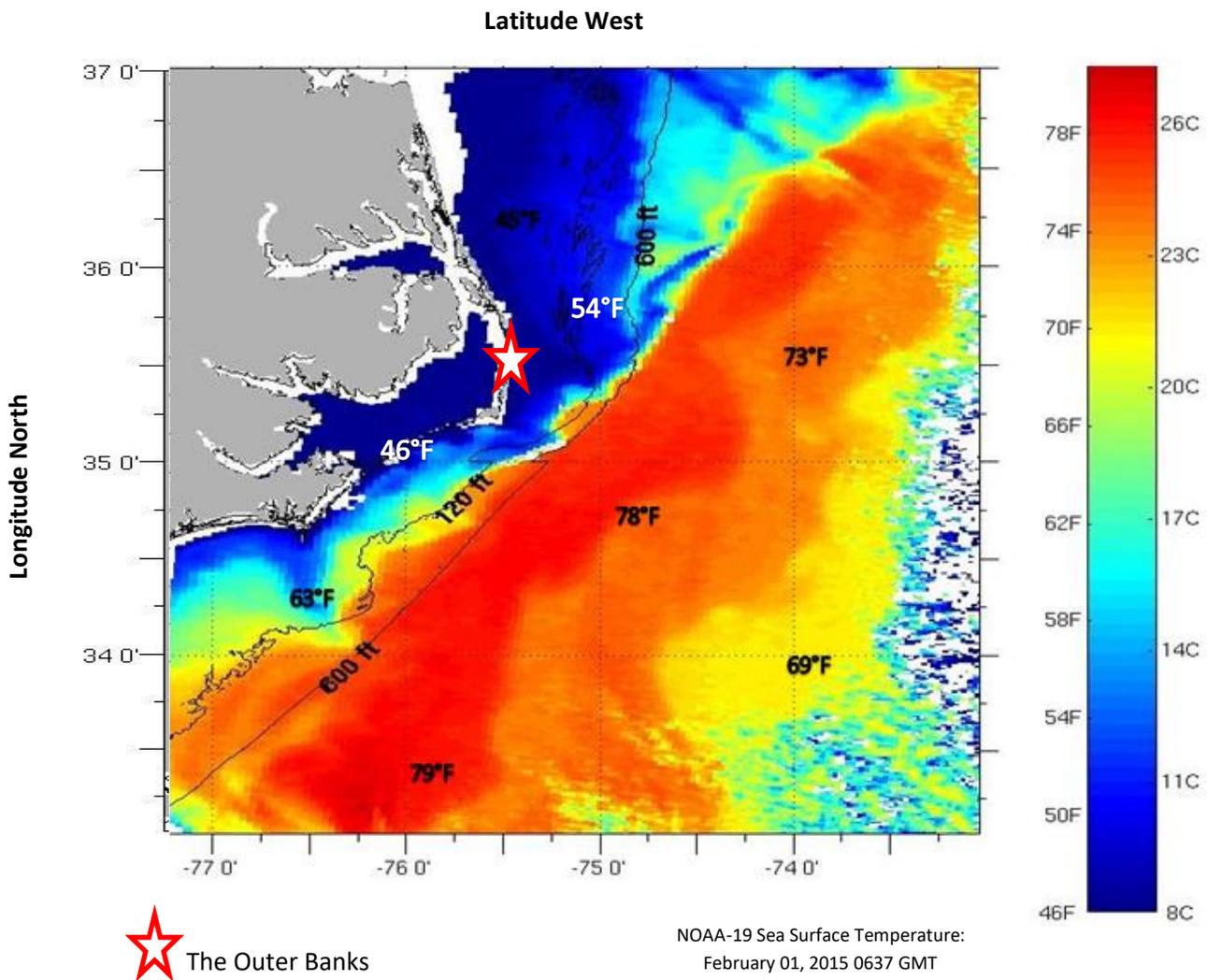


The Gulf Stream is a warm water current that is being studied as a potential source of alternative energy. To understand the Gulf Stream we need to know how it flows. Use the following graphs to answer the questions after you have watched : <https://www.youtube.com/watch?v=xD-aqPKV94U>

Gulf Stream Map



1. At what degree Longitude North is the star?
2. What's the temperature at (75°W, 34°N)?
3. Where is the temperature 46°F?
4. Why is there a change in temperature in questions 2 and 3?

72°F

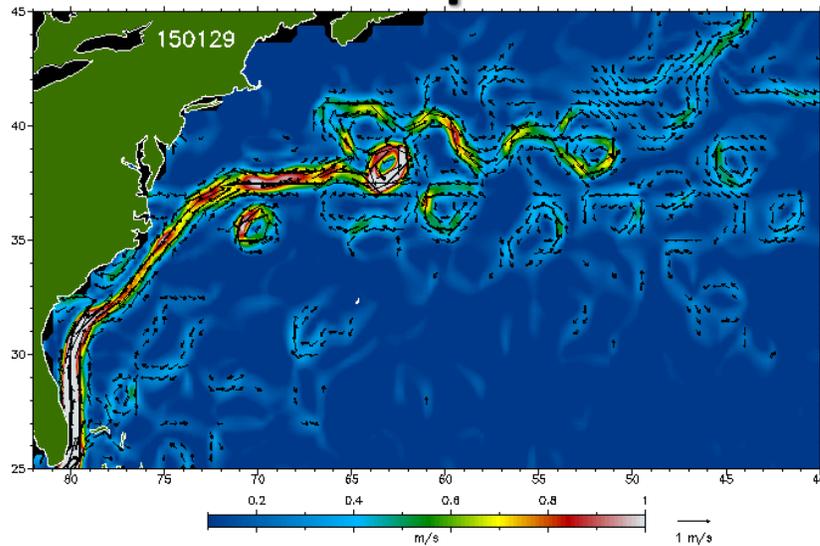
- Plot the latitude and longitude of the warmest spot.

Distance/time = Speed

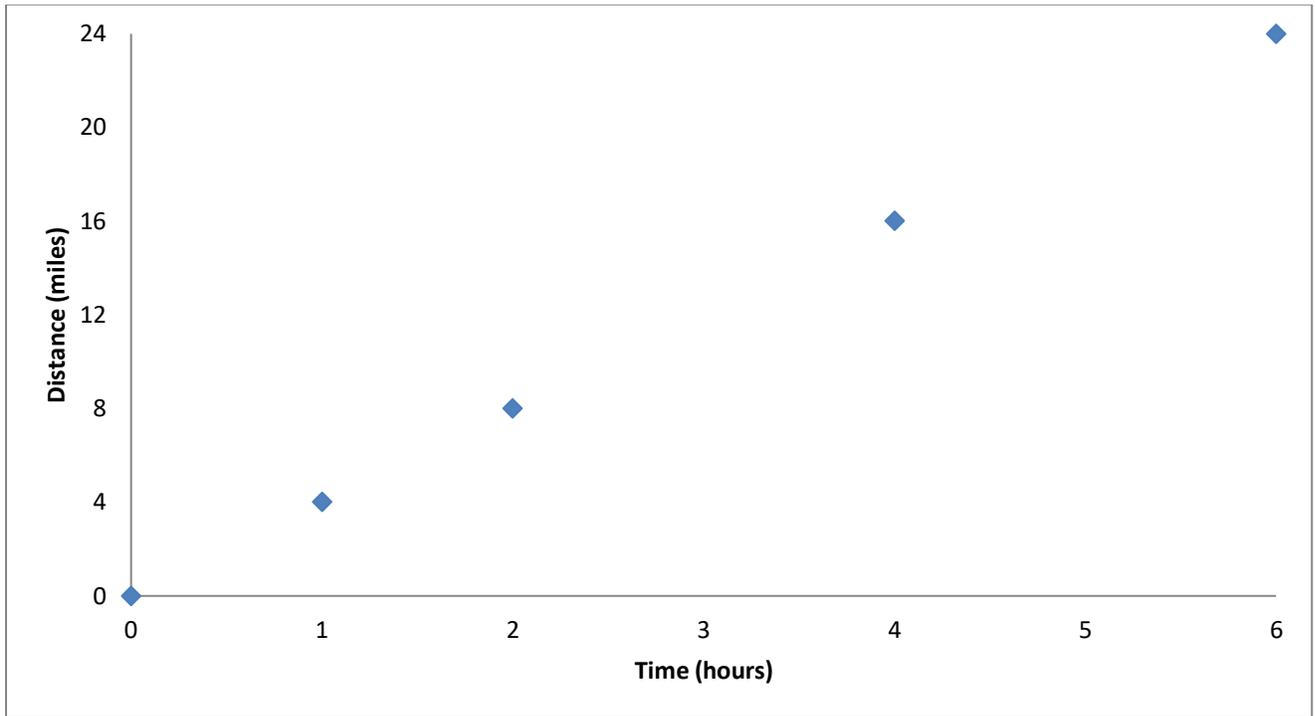
- The water flow of the Gulf Stream is 4 miles per hour where Dave is boating. Dave throws a coconut in the water and it floats for 8 miles. How long has it been in the water?
- Blackbeard is sailing across the Gulf Stream when his sail is torn by cannon balls from another pirate ship. It takes Blackbeard and his crew 4 hours to put up a new sail, while they are repairing the sail the ship drifts at 3 miles per hour. How far have they drifted?
- A sea turtle swims into the Gulf Stream and takes a nap. He sleeps for 3 hours. When he wakes up he has drifted 15 miles. How fast was the Gulf Stream moving while the turtle was asleep?

Gulf Stream Distance vs Time

Graph



<http://rads.tudelft.nl/gulfstream/>



1. Draw a line that connects the data points
2. Plot a point at 3 hours and 5 hours
3. The line on the graph demonstrates how far an object has traveled in the Gulf Stream over a certain period of time. Scientists use these kind of graphs to predict how far something will travel or how far it has come. How far would something travel in 5 hours?

Answers:

1. 36 degrees
2. 72 degrees Fahrenheit
3. (76, 35)
4. It is warmer in the Gulf Stream
5. About (76,33)

1. 2 hours
2. 12 miles
3. 5 mph