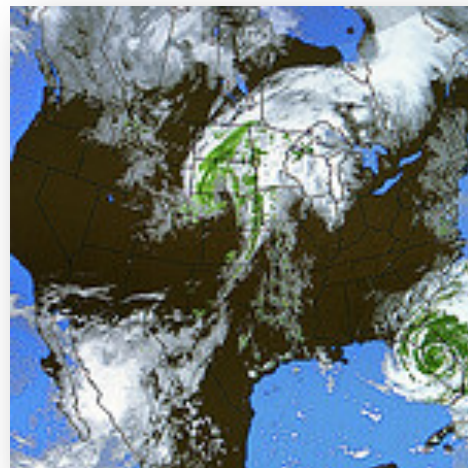




Storm Tracker

Activity

On September 20, 2005, Hurricane Rita began to threaten the Texas Gulf Coast. Forming only 3 weeks after the devastating and deadly Hurricane Katrina, fear of the approaching storm caused the largest evacuation in U. S. history. Estimates indicate between 2.5 to 3.7 million people fled the Galveston and Houston area to escape the storm. The poorly planned evacuation resulted in at least 90 deaths. Officials responded by developing a better communicated and well thought out plan with specific instructions for an orderly evacuation.



You are a meteorologist for the National Weather Service. Your job is to track hurricanes in the Atlantic and issue weather alerts in the appropriate areas. You have been assigned to watch a tropical disturbance that has come off the western coast of North Africa.

Procedure

1. As a group, read the Student Reference Sheet: Hurricane Weather Alerts to familiarize yourself with the warning system..
2. Use the Student Reference Sheet: Storm Data, Days 1 to 8 to plot the track of the hurricane on the hurricane tracking chart.
3. Color code the points to indicate the strength of the storm. Include a key on your tracking chart.

Tropical Depression – Blue	Category 2 – Orange
Tropical Storm – Black	Category 3 – Red
Category 1 Hurricane – Yellow	Category 4 – Purple

4. Connect the data points on your tracking chart to show the path of the storm.
5. Part of a successful evacuation plan is to have time to prepare. Use your tracking chart to determine if any alerts should be issued. (Is the storm likely to reach the coastline of the U.S. in the next 48 hours?)

Discuss the following questions with your classmates and record each answer in your Lab Journal.

1. Where is the hurricane located at Day 8?
2. What caused the strength of the hurricane to decrease from a Category 3 to a Category 1 on Day 8?
3. Should an area of the United States be issued an alert? Why or why not?

Storm Tracker

Procedure, continued

6. Draw a chart similar to the following in your lab journal:

Day	Prediction	Alerts
9		
10		
11		
12		
13		
14		

- Look at the U. S. weather map for the next day, Day 9. Plot the next data points for the storm. Predict where the storm will make landfall (touch the coastline) of the United States. Send an alert if appropriate.
- Look at the U. S. weather map for the next day, Day 10. Plot the next data points for the storm. Predict where the storm will make landfall (touch the coastline) of the United States. Send an alert if appropriate.
- Look at the U. S. weather map for the next day, Day 11. Plot the next data points for the storm. Predict where the storm will make landfall (touch the coastline) of the United States. Send an alert if appropriate.
- Look at the U. S. weather map for the next day, Day 12. Plot the next data points for the storm. Predict where the storm will make landfall (touch the coastline) of the United States. Send an alert if appropriate.
- Look at the U. S. weather map for the next day, Day 13. Plot the next data points for the storm. Predict where the storm will make landfall (touch the coastline) of the United States. Send an alert if appropriate.
- In your "After Event Report", it is important to calculate various statistics about the storm. Use a calculator to determine the mean, median, mode and the variability of the wind speed of the storm from Day 1-8. Be ready to share with your classmates.