'Round Weather Forecasts

This activity is designed to assess student's knowledge of reading weather maps, including those with various weather symbols. Students will also be evaluated on interpretation of information and prediction of future weather patterns.

There are eight weather maps that focus on various topics that include –

US Current Surface Map w/ front symbols & precipitation (1)
US Current Temperatures w/ conditions (2)
US Precipitation Forecast (1)
US Surface Analysis w/ front symbols & isobars (3)
US Palmer Drought Severity (3)
US Dewpoints (1)
US Map w/ Hurricane Alex (3)
Southeast Doppler Radar w/ precipitation and watches/warnings (1)

Each map is a color map, and includes 3 -5 questions for each. (Suggest laminating the maps with questions for one time printing and reuse.)

Set each map with questions out in "stations". Each group of 2-3 students should be given 5-7 minutes to review each map and answer the questions. (Change the time if desired – it all relates to how comfortable your students are to the material.)

Also, you may choose to make 1-2 questions per map mandatory, and allow the students to pick the other questions they would like to answer.

Maps can be switched out with updated maps. Establish that the new map coordinates with the questions.
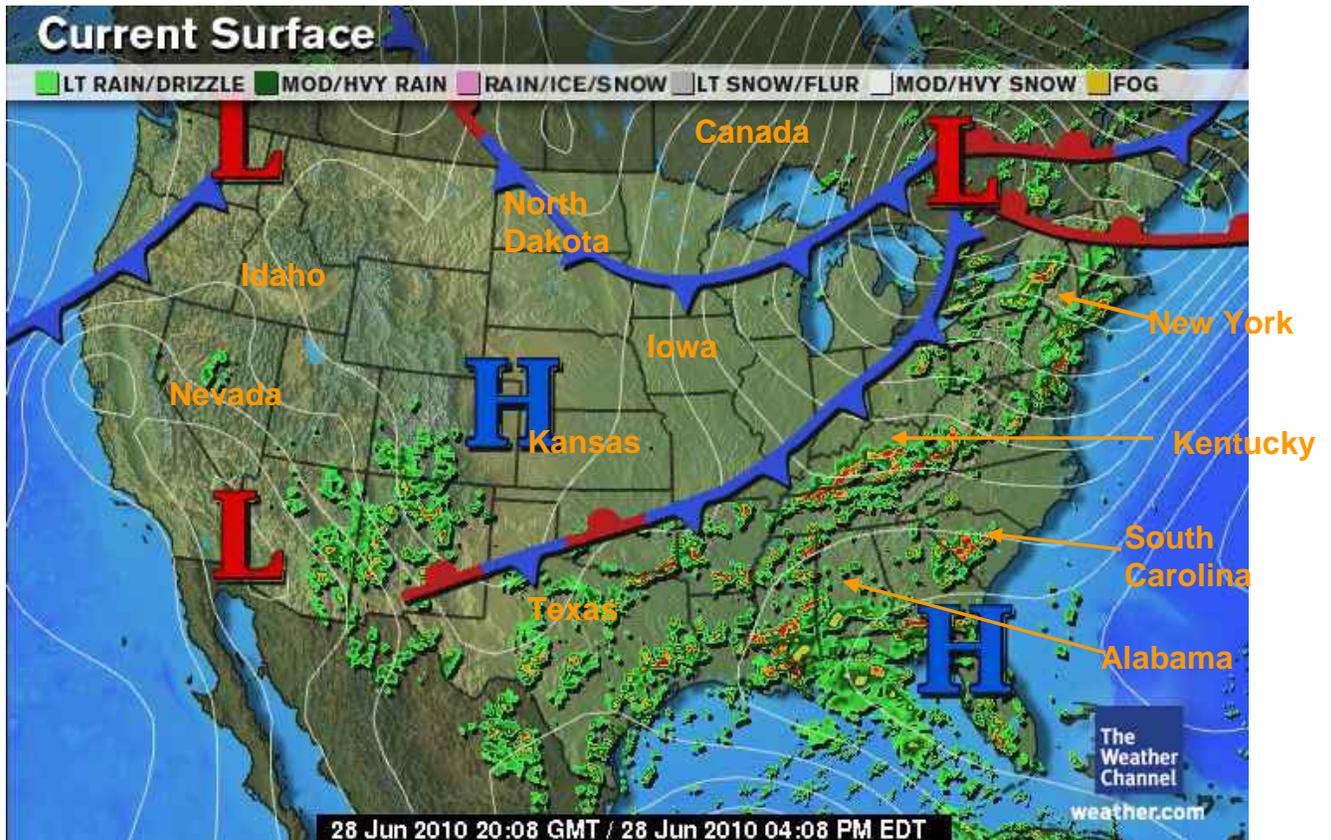
Georgia Performance Standards
S4E4. Students will analyze weather charts/maps and collect weather data to
    predict weather events and infer patterns and seasonal changes.
b. Using a weather map, identify the fronts, temperature, and precipitation and use the information to interpret the weather conditions.
c. Use observations and records of weather conditions to predict weather patterns throughout the year.
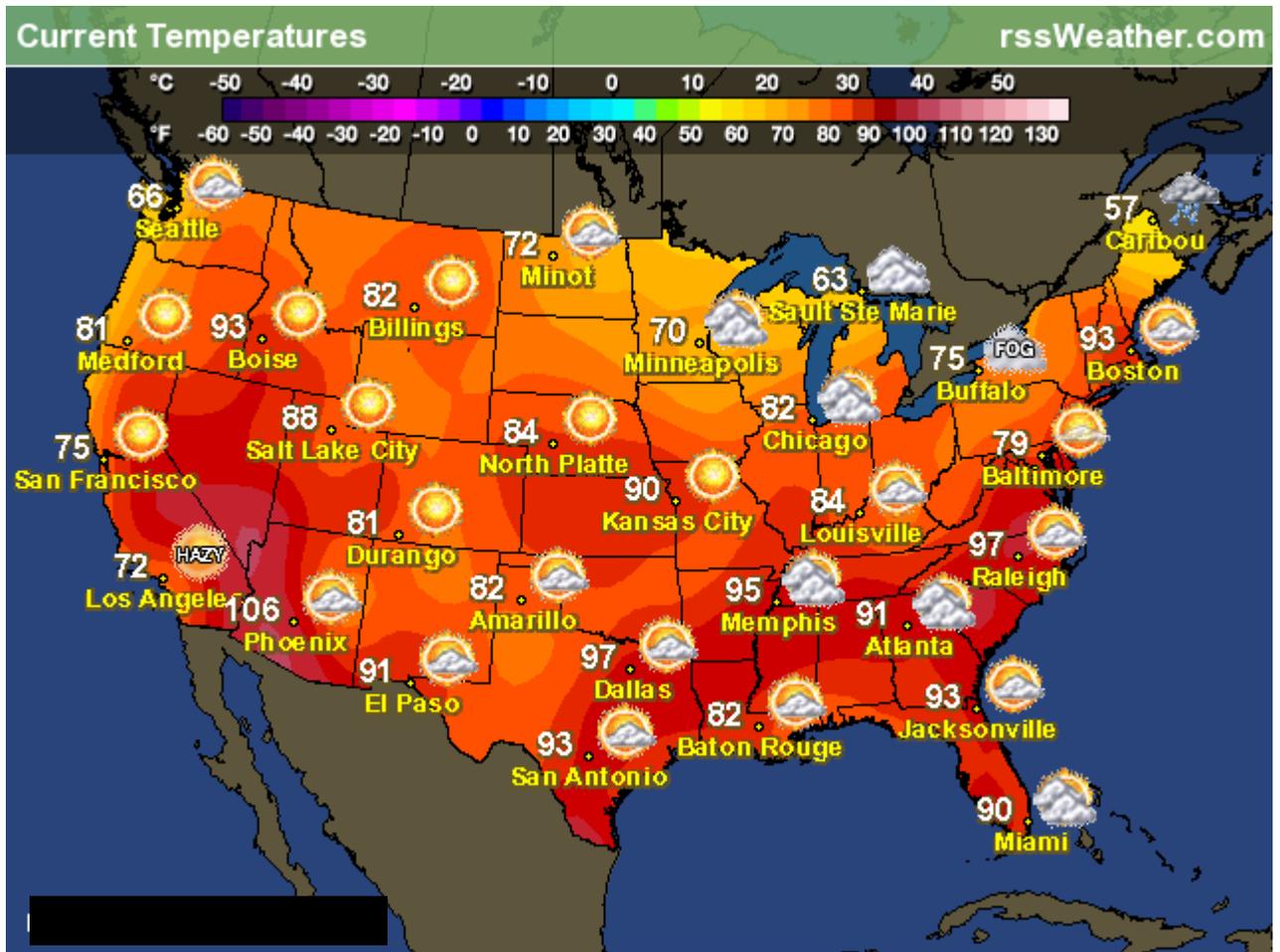
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Resources
  (1) **The Weather Channel**   **www.weather.com**
  (2) **rssWeather.com**   **www.rssweather.com**
  (3) **National Oceanic and Atmospheric Administration**   **www.noaa.gov**

US Current Surface Map w/ front symbols & precipitation

Current Surface

LT RAIN/DRIZZLE MOD/HVY RAIN RAIN/ICE/SNOW LT SNOW/FLUR MOD/HVY SNOW FOG

Canada
North Dakota
Idaho
Nevada
Iowa
New York
Kansas
Kentucky
Texas
South Carolina
Alabama

The Weather Channel
weather.com

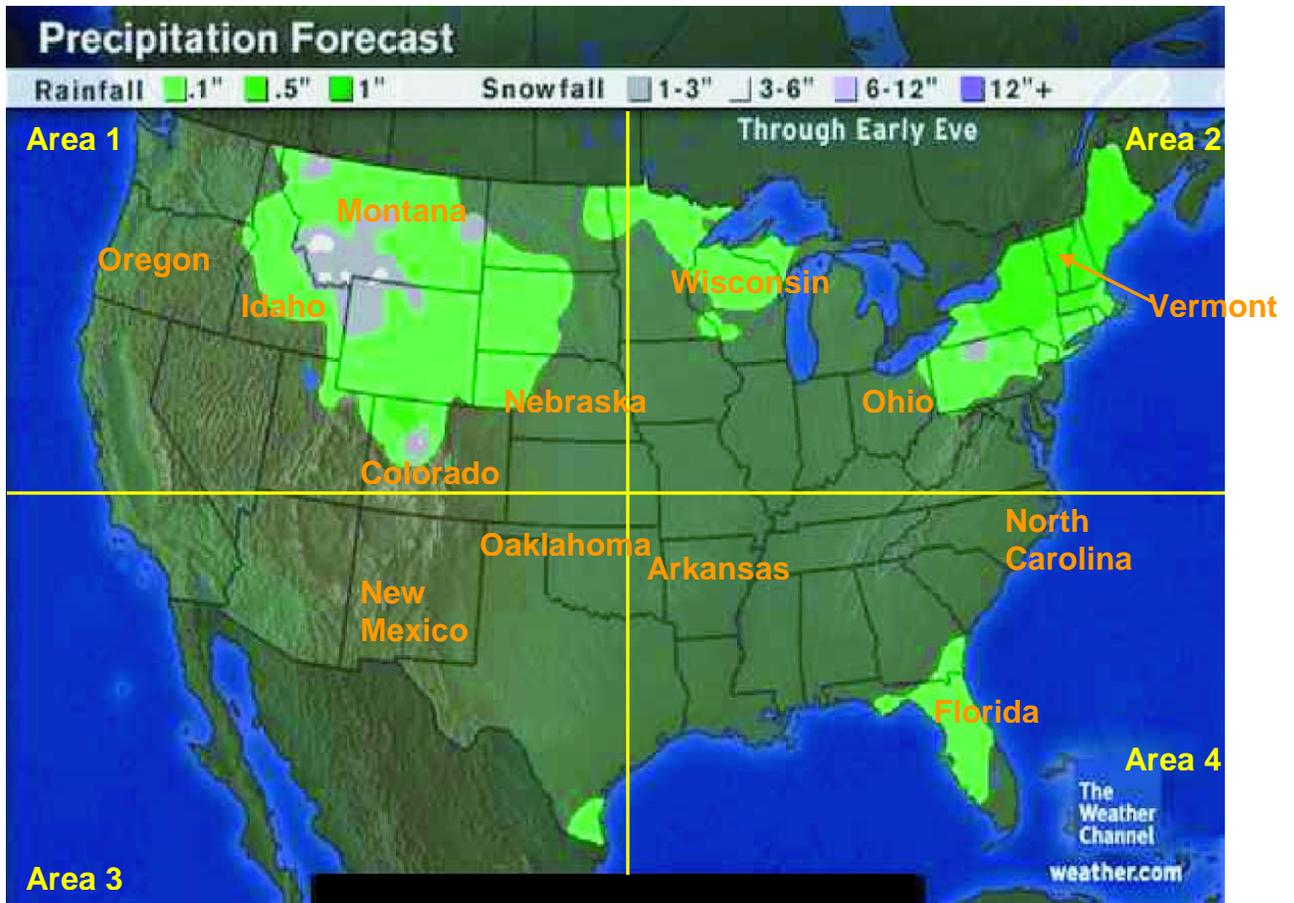28 Jun 2010 20:08 GMT / 28 Jun 2010 04:08 PM EDT

1. Identify the front that is moving into the northwestern part of Texas.

2. When the white bars (isobars) are close together, it is very windy. Is it windy in New York? Explain.

3. Describe the weather in Iowa. Explain.

4. Describe the type of pressure system over Canada.

5. Identify two states experiencing moderate/heavy rain.
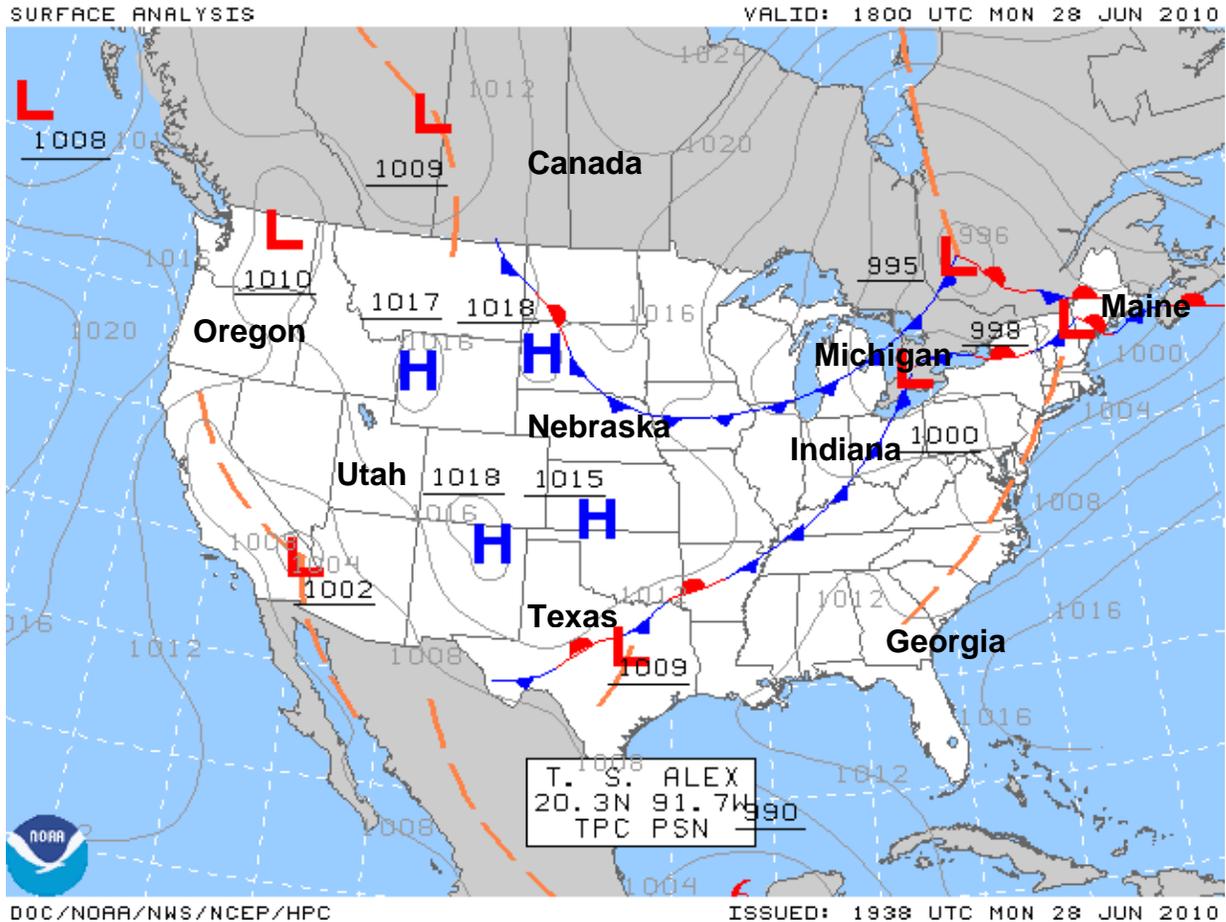
US Current Temperatures w/ conditions

1. What is the current temperature and conditions in Atlanta?

2. Identify a city experiencing haze.

3. Identify a city that is experiencing a storm.

4. According to this map, which region is the hottest?

5. Looking at the temperatures, what season would you infer it to be?

US Precipitation Forecast

Precipitation Forecast

Rainfall ▪.1" ▪.5" ▪1"   Snowfall ▪1-3" ▪3-6" ▪6-12" ▪12"+

Through Early Eve

Area 1 · Area 2 · Area 3 · Area 4

Oregon · Montana · Idaho · Wisconsin · Vermont · Nebraska · Ohio · Colorado · Oaklahoma · Arkansas · North Carolina · New Mexico · Florida
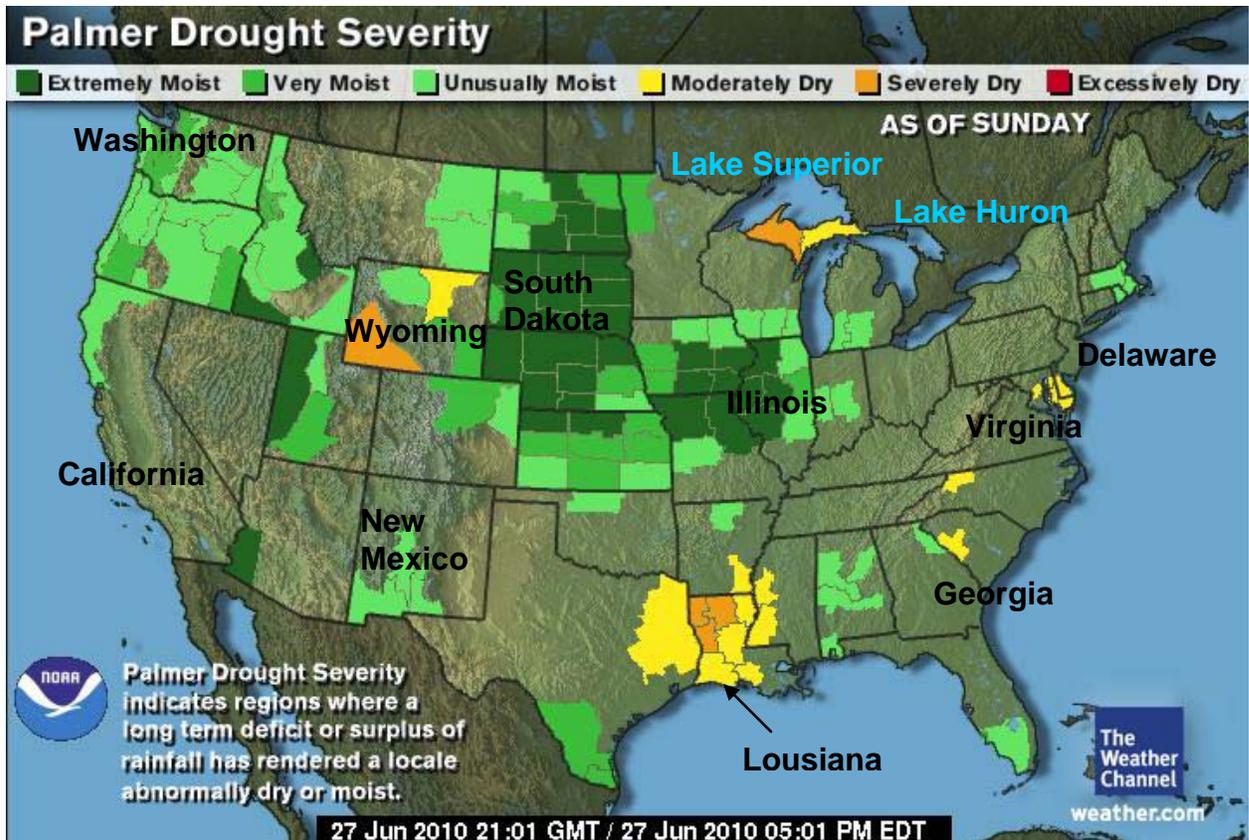
The Weather Channel · weather.com

1. Which area is forecasted to receive the most amount of precipitation?

2. Name a state that is forecasted to receive 3-6" of snow.

3. Describe your outfit if you were living in Florida. Explain.

4. Looking at the type of forecasted precipitation, what season would you infer it to be?

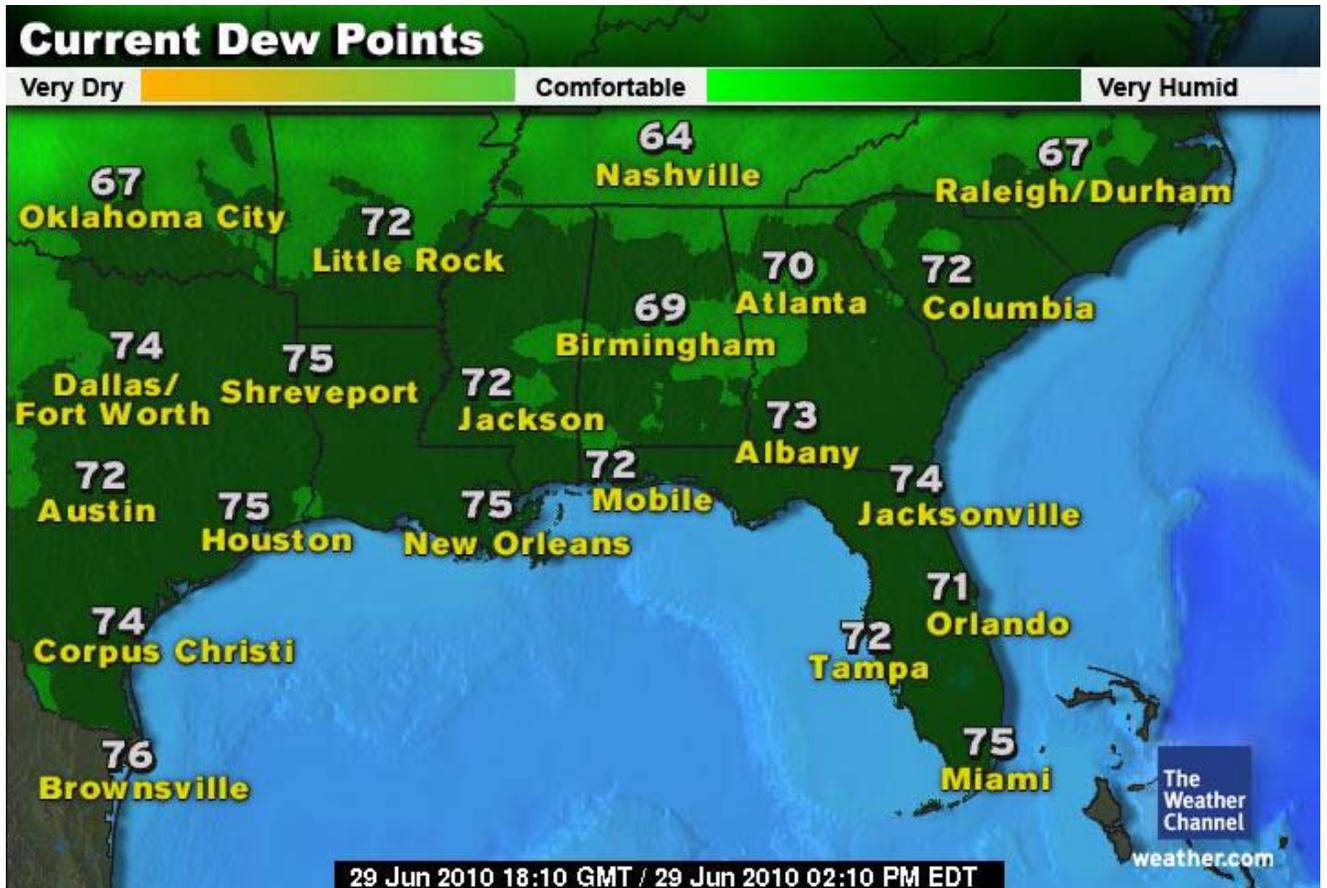# US Surface Analysis w/ front symbols & isobars

1. Identify the front moving through Texas.

2. Describe the air moving towards Georgia – cold or warm. Explain.

3. Describe the weather in the Midwest.

4. Notice the numbers near the lines. How does the value of the number compare to how thick the space of the lines are?

5. How does the value of the number compare to high and low pressure areas?
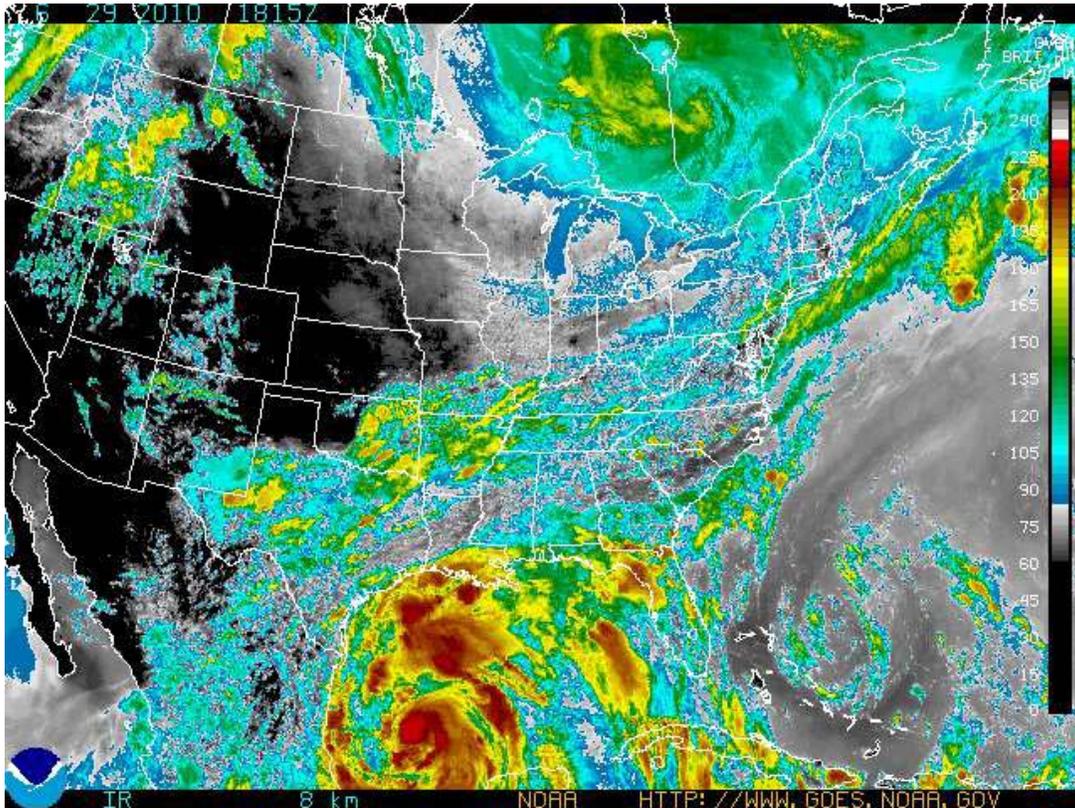
US Palmer Drought Severity

1. Which state is suffering from moderately dry to severely dry drought conditions?

2. Identify the state that has experienced a great deal of precipitation.

3. From this map, infer the condition of Lake Superior. Explain.

4. According to this map, is Georgia under a drought? Explain.

5. Name the state that has contrasting areas of drought and moist soils.

US Dewpoints

Current Dew Points

Very Dry — Comfortable — Very Humid

64 Nashville
67 Raleigh/Durham
67 Oklahoma City
72 Little Rock
70 Atlanta
72 Columbia
69 Birmingham
74 Dallas/Fort Worth
75 Shreveport
72 Jackson
73 Albany
72 Austin
75 Houston
75 New Orleans
72 Mobile
74 Jacksonville
74 Corpus Christi
71 Orlando
72 Tampa
76 Brownsville
75 Miami

The Weather Channel
weather.com

29 Jun 2010 18:10 GMT / 29 Jun 2010 02:10 PM EDT

1. Describe conditions in Atlanta.

2. Considering the time of year, would you expect the humidity to decrease or increase? Explain.

3. Which city is closest to the most "comfortable" area?

4. Infer the weather conditions for Miami. Explain.

5. Explain why New Orleans would be more humid than Nashville.

US Map w/ Hurricane Alex

1. If Alex continues this path, which location would be in his course?

2. Hurricanes lose strength as they move away from the ocean. Forecast Hurricane Alex's existence in the next few days.

3. The blue of the key represents cloud cover, green represents rain, and yellow represents sever storms. What is the forecast for Georgia?

4. Describe your plans for the next few days if you lived on the southeastern coast of Texas.

Southeast Doppler Radar w/ precipitation and watches/warnings

Watch **Warning**

1. There is a sever weather condition occurring to the east of Charlotte. Describe.

2. Would you make outdoor plans in Atlanta for the next few hours? Why or why not?

3. The storm systems seem to be in a curved shape that is spreading out from a certain point. Identify the weather condition that often appears in this area.

4. Describe the type of pressure area you would most likely find in this zone at this particular time.