

Storm _____ Date named _____

Data for Storm Event in Atlantic Ocean, September

Date	Latitude °N	Longitude °W	Wind Speed (mph)	Classification
03	8.0	35.0	35	<i>Tropical Depression.</i>
04	8.5	36.0	40	<i>Tropical Storm (name the storm now)</i>
05	9.3	41.4	69	<i>Tropical Storm</i>
05	9.5	43.4	74	<i>Category 1 (hurricane)</i>
05	9.8	45.1	98	2
05	10.2	46.8	127	3
06	10.6	48.5	132	4
06	11.0	52.5	127	3
07	11.3	57.8	109	2
07	11.6	59.4	115	3
08	12.0	62.6	132	4
08	13.0	67.0	138	4
09	13.3	68.3	150	4
09	13.7	69.5	161	5
09	14.2	70.8	161	5
10	15.7	73.8	144	4
10	16.8	75.8	138	4
11	17.7	78.4	144	4
11	18.0	79.0	167	5
12	18.2	79.6	167	5
12	19.1	82.1	150	4
13	20.4	84.1	161	5
13	20.9	84.7	161	5
14	21.6	85.1	161	5
15	24.7	87.0	138	4
15	26.6	87.4	138	4
16	28.9	88.2	127	3
16	30.0	87.9	121	3
16	31.4	87.7	81	1
16	32.5	87.4	58	<i>Tropical Storm</i>
17	33.8	86.5	35	<i>Tropical Depression</i>
18	37.0	80.5	23	"
18	38.4	76.7	17	"
18	38.0	75.5	29	"
19	32.8	75.8	40	"
20	31.0	77.5	40	"
20	26.4	79.1	29	"
21	25.8	81.7	29	"
22	25.1	86.1	29	"
22	26.5	88.6	35	"
23	27.1	89.5	40	<i>Tropical Storm</i>
23	29.2	92.7	46	"
24	30.1	94.2	29	<i>Tropical Depression</i>
24	9.7	27.6	inland	<i>Dissipated inland</i>

Checking for Understanding

1. Was it necessary to name the storm? On what date did you name the storm?

Yes. On Sept. 4.

2. Why did you name the storm on that particular date?

Storms are not named until they have achieved at least the minimum tropical storm wind speed—39 mph. This storm did not achieve that wind speed until Sept. 4.

3. Estimate how long it took for the storm to strengthen from a tropical depression to hurricane strength. Name the dates involved with your estimate.

Approximately three days. On Sept. 3 the storm was a tropical depression. On Sept. 5 it was a Category 1 hurricane.

4. Estimate how long it took for the storm to strengthen from a Category 1 on Sept. 5 to a Category 5.

Approximately 4-5 days. The storm strengthened to a Category 5 on Sept. 9.

What do you think this means for the people that might be affected by hurricanes?

A hurricane can strengthen very quickly and give little time to prepare your property or allow you to evacuate.

5. Many people think that after a hurricane's strength starts to decrease, the hurricane is "dying out" What does the data about this hurricane tell you about that idea? Explain.

That idea is wrong. This hurricane achieved Category 5 strength THREE times. Its winds increased and decreased and increased repeatedly.

6. Many people think that after a hurricane passes them, the danger is over. What does the data about this hurricane tell you about that idea? Explain.

That idea is wrong. The path of this hurricane affected many people more than once as it more or less made a circuitous path in the Southeast United States. The people in many of the Southeastern states, particularly Georgia, North Carolina, Virginia, and Florida, had to deal with the storm first on their western sides and then, as it circled around, on their eastern sides.

7. Which cities or towns do you think should receive advisories, storm watches, or storm warnings on September 15? (See the Vocabulary section for definitions of tropical storm watch and tropical storm warning)?

Coastal areas in the Gulf of Mexico, including New Orleans, Apalachicola, Pensacola, Mobile, and Gulfport.

8. Which cities or towns do you think should receive advisories, storm watches, or storm warnings on September 22, a week later?

Students should list most of the same cities or towns as in Question 7.

9. Why would the storm still be a threat to these areas on Sept. 22 even though it lessened to tropical depression status?

Tropical depressions can still be damaging. The area was just hit by the storm and would still be recovering from the effects of the first landfall. Resources would not be as plentiful, and structures would be more vulnerable to additional wind damage.