

## MET 101 Video Questions

**Instructions:** The answers to the following questions will be contained in the videos we will be viewing. The material in these videos will be tested on the lecture final exam. These answers will be due and collected on the day of your **lecture** final exam and it will count as a HW grade. Some of the answers to these questions may also be found in your textbook. We may not have time to watch all of these videos, but it would be wise to look up answers to all of the questions on this sheet. If we don't watch all of the videos, some of the questions may be on the lecture final exam as extra credit.

### Thunderstorms - 23 Minutes

1. How many thunderstorms form a day on the earth?
2. What part of a dying thunderstorm helps in the formation of a new thunderstorm?
3. How long can a mesoscale convective complex last?
4. Thunderstorms are more likely to occur at what time of day?
5. How many tons of water can accumulate in a thunderstorm cloud?
6. How is thunder caused?
7. What is the main factor in determining how large a hail stone can get?
8. How long did the 1917 tornado stay on the ground?
9. Which country of the world usually experiences the most tornadoes?
10. On average how many tornadoes does the United States get in a given year?
11. What is the sudden rush of air (wind shear) crashing directly into the ground called?
12. How can one tell the difference between a down burst and tornado damage (describe both)?
13. What was the cause of the 1985 plane crash in Dallas, TX?
14. How many minutes ahead can doppler radar begin to detect a possible tornado?
15. What has TOTO taught us about tornadoes?
16. What is doppler radar called when it is pointed in the vertical (upwards) position?

**Downtown Miami Tornado- May 1997 - 9 Minutes**

1. What does a tornado sound like?
2. What did this tornado rate on the Fujita scale?
3. What were its wind speeds?
4. What speed did this storm move through Miami?
5. Where should one go (if in a house or an apartment) during a tornado warning?
6. What did the tornado turn into when it finally moved over the open waters?

**Weather Classroom - Hurricanes - Episode 7A # 19 - 8 minutes**

1. Many of the hurricanes which strike the United States form off of the coast of which continent:
2. What causes the low level winds, at the center of a developing disturbance, to begin to spiral in a counterclockwise direction?
3. What weather conditions occur in the eye of a hurricane?
4. What is the fuel supply of a hurricane?
5. What is released into the atmosphere when warm moist air rises and condenses?
6. What happens to the air pressure as more and more heat is released?
7. Why does a hurricane die out once it comes on shore?
8. When a hurricane comes on shore, what are the three aspects of the hurricane that cause the most damage?

**Weather Classroom - Hurricane Prediction - Episode 7B # 20 - 8 Minutes**

1. When does the Atlantic hurricane season officially begin? When does it officially end?
2. What is a tropical depression?
3. What are the sustained winds of a tropical storm?
4. When does a tropical storm become a hurricane?

5. Using the Saffir Simpson Scale, what wind speeds and storm surge heights can be expected in a Category 3 hurricane?

6. How many Category 5 hurricanes have made landfall in the United States since 1900?

**Answer: The video says 2, but the correct/revised answer is 4:**

- **1935 Florida Keys Hurricane**
- **1969 Hurricane Camille**
- **1992 Hurricane Andrew**
- **2018 Hurricane Michael**

7. When is the name of a particular hurricane retired, never to be used again?

### **Dangers Edge - 26 minutes**

1. How many people died in the 1900 Galveston, TX hurricane?

2. How is Galveston, TX protected today?

3. Where do most of the hurricanes form that effect the waters of the Atlantic ocean?

4. What is the fuel for a hurricane?

5. Which part of the hurricane contains its most destructive power?

6. How have satellites helped in hurricane detection?

7. What did meteorologists do before the invention of satellites?

8. How many houses were damaged by Hurricane Camille in 1969?

9. What is the most destructive/life destroying part of a hurricane?

10. What does the SLOSH computer model predict?

11. What new method is being used when rebuilding homes in South Carolina?

12. What weather conditions occur in the eye of the hurricane (not the eye wall)?

13. What was the original link from mainland Florida out to Key West?

14. What happened to this link?

15. Where did the 1938 hurricane strike?

16. How many people died in this storm?

17. How populated was Long Island at the time?