

Reading Guide for October 20

from Henson, *Rough Guide to Weather*

Chapter 2: The wild stuff

pp. 84–85. *Hurricanes and tropical cyclones.* This introduces the most destructive storms Earth has to offer: tropical cyclones. These storms are given different names depending on where they originate: “hurricane” in the Atlantic and eastern Pacific Oceans, “cyclone” in the Indian Ocean, and “typhoon” in the western Pacific Ocean. All are the same basic phenomenon, distinct from other storms that occur.

For some perspective, find in this section the damage caused by some recent tropical cyclones.

pp. 86–87. *“Ingredients of a hurricane.”* This section summarizes the conditions necessary for a hurricane to form. Read this entire section once through before reading it again to find the answers to these questions.

- Where do hurricanes form?
- What is a hurricane’s energy source?
- What is the peak season for Atlantic hurricanes?
- What is the role of upper winds in hurricane formation?
- At what latitudes do hurricanes form?
- How does the formation of a “closed low” promote the development of a tropical storm?

pp. 88–89. *“Charting its course.”* This section describes some of the methods used to track, study, and predict hurricanes. Hidden in there is a bit more information about hurricanes themselves.

- Under what conditions is a hurricane’s path most difficult to predict?
- What weakens slow-moving hurricanes?
- What effect do strong upper-level winds have on hurricanes?
- What condition is suspected to contribute to rapid intensification of hurricanes?

pp. 90–91. *“Landfall and beyond.”* This describes how hurricanes cause their great damage.

- Why does calm weather often immediately precede a hurricane?

- Where in a hurricane are the most damaging winds found?
- What are the weather conditions in a hurricane's **eye**?
- What is a **storm surge**?
- What features help a house resist hurricane damage?