

**Smith, M. (2010). Warnings: The true story of how science tamed the weather (1st ed.).
Austin: Greenleaf Book Group Press.**

A. Chapter One: The Ruskin Heights Tornado

1. Describe the weather conditions associated with the tornado in this chapter.

B. Chapter Two: No One Ever Knew it Was Coming

1. Explain in your own words what “just right” conditions were in the formation of the tornado in chapter two. Compare and contrast the two events.
2. Explain in your own words a *supercell* thunderstorm.

C. Chapter Three: “ Nice People, But Odd”

1. Describe the chain of events that led to the development of the forecasting/warning systems for tornado. Specify the details of who was involved, their premise for developing the system, and the success/failures associated with the development of such a system.

D. Chapter Four: The Government Gets in Gear-No Questions

E. Chapter Five: The “Town” That Died in its Sleep

1. Describe the function of weather radar. What effects did the development of this tool have in studying tornadoes?

F. Chapter Six: The Paul Revere of Grandview Junior High

1. Explain how spotters were designated (explain the nomenclature associated with spotters)

G. Chapter Seven: The End of the Beginning-No Questions

H. Chapter Eight: Storm Chasers

1. Explain the significance of the Chase program.

I. Chapter Nine: Tragedy

1. What pattern did you notice associated with a particular time of year (season/month) and increased tornado activity? Why?
2. What reason is often cited for the misreading of weather radar?

J. Chapter Ten: Fujita

1. Who is Ted Fujita? What significant contribution has he made to the meteorological discipline?

K. Chapter Eleven: The Day TV Weather Grew Up

1. This chapter introduced the development of color radar images. Give an overview of what colors are associated with the varying types of weather.

L. Chapter Twelve: St. Louis and the Holiday Weather Hotline-No Questions

M. Chapter Thirteen: The Microburst Mystery

1. What is the name and function of the two recorders aboard airliners? What role did these devices play in explaining the accounts of Delta Flight 191? (Explain the concept of the microburst phenomenon.)

N. Chapter Fourteen: Delta 191: Why Weren't They Warned

1. Explain *downburst* phenomenon as described by Fujita and Beyers.
2. What are some advantages associated with flying a propeller driven plane through a *microburst*?

O. Chapter Fifteen: The Delta Trial-No Questions

P. Chapter Sixteen: Weatherdata

1. List the companies mentioned in this chapter and how the advancement in weather data collection proved to be beneficial to each.

Q. Chapter Seventeen: America gets Dopplerized

1. Explain how doppler radars work.

R. Chapter Eighteen: Hurricane Andrew

1. According to the text, what lack of attention played a crucial role in the devastation of Hurricane Andrew? What effects did Hurricane Andrew have on the business economy?

S. Chapter Nineteen: Katrina: Part One

1. Describe the development of Hurricane Katrina and how it became the *perfect* storm.

T. Chapter Twenty: Katrina Part Two- Inaction in Action

1. What information is entered into the National Hurricane Center's data base and how does the analysis of this data lead to developing model weather forecasts?

U. Chapter Twenty-One: Katrina Part Three- Murder by Bureaucracy

1. Explain why the conditions of Katrina caused devastating effects for the Gulf Coast area.

V. Chapter Twenty-Two: Greensburg: Capstone of the Modern Warning System

1. Compared to the other storms/tornadoes that are described throughout this book, what was significantly different about the Greensburg incident. Explain the effects/conditions experienced by the city residents and other weather conditions that contributed to this disaster.

W. Chapter Twenty-Three: Where There's Life, There's Hope

1. Chapter twenty-two gives insight into the devastation caused by a series of tornadoes that wreaked havoc in Greensburg, Kansas. What technological advances would you say contributed to the diminishing casualty rate compared to the Udall tornado?