

Illinois State Science Olympiad

Meteorology

2005

Answer Sheet

1) C

2) Food A Can with a Lid Matches and Candle

 Blankets Shovel Cell Phone

3) C

4) A

Tornado – Myth or Fact?

a) MYTH

b) MYTH

c) MYTH

d) MYTH

e) MYTH

f) FACT

g) MYTH

h) FACT

i) MYTH

j) FACT

To Leave or Not to Leave Your Car... THAT is the Question

Scenario 1: Stay in Car Get the Heck Out!

Scenario 2: Stay in Car Get the Heck Out!

Scenario 3: Stay in Car Get the Heck Out!

Scenario 4: Stay in Car Get the Heck Out!

Scenario 5: Stay in Car Get the Heck Out!

Soundings:

Which sounding shows the highest relative humidity at the surface? (Check one)

(A) (B) (C)

Which sounding is most likely to be getting moisture from the Gulf of Mexico near the surface? (Check one)

(A) (B) (C)

Which sounding is the warmest at the surface? (Check one)

(A) (B) (C)

Which sounding has a low-level temperature inversion? (Check one)

(A) (B) (C)

Which two soundings show the most low-level directional wind shear (wind changing direction with height below the dashed line)? (Check two)

(A) (B) (C)

Which two soundings have the highest low-level speed wind shear (wind speed changing with height below the dashed line)? (Check two)

(A) (B) (C)

The likelihood of severe weather increases as more of the above conditions are met. Add up the number of checkmarks for (A), (B), and (C), and write those numbers below:

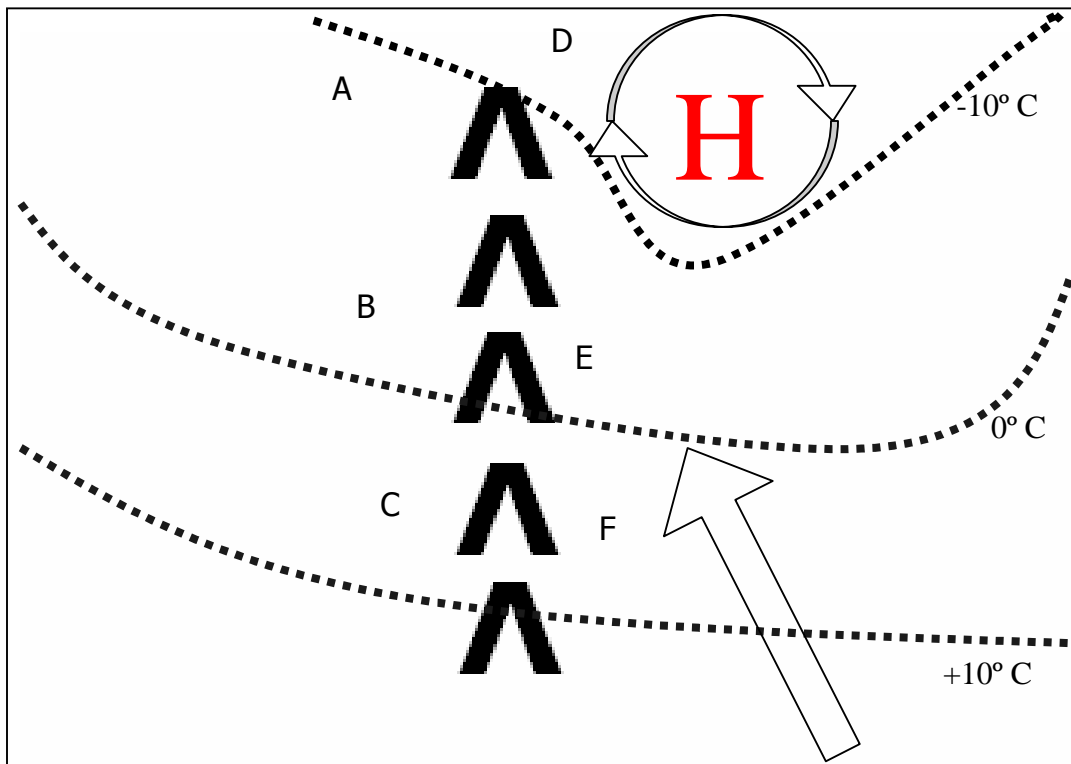
(A) 4 (B) 1 (C) 3 (Depends on previous answers)

Based on your answer above, which sounding shows the most potential for severe weather?

A (Depends on previous answer)

Hurricane in Weathervania: A

Bake an Ice Storm:



(3) Circle one:

Awfully Cold Village (denoted by 'A')

Blistery Winds (denoted by 'B')

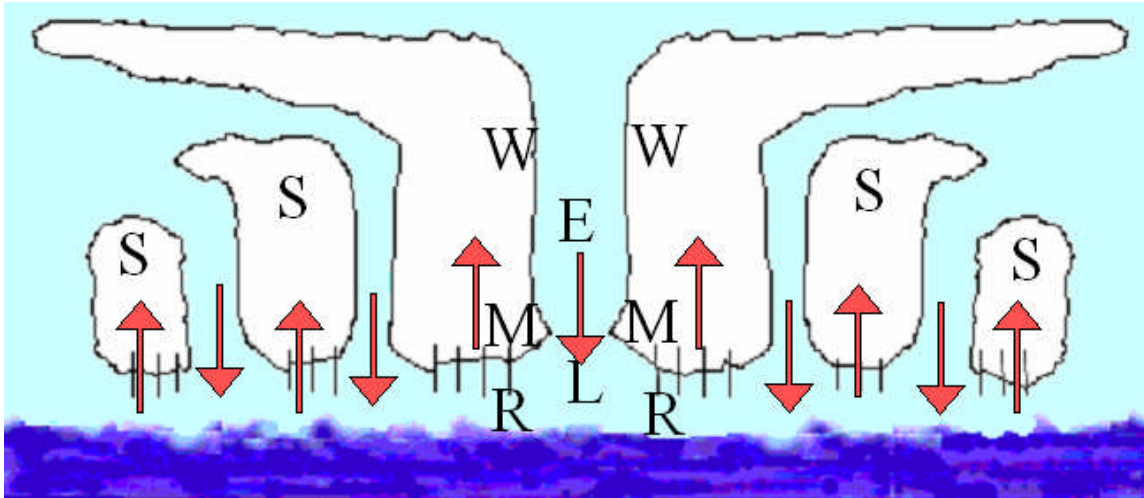
Coolsville (denoted by 'C')

Dang Chilly (denoted by 'D')

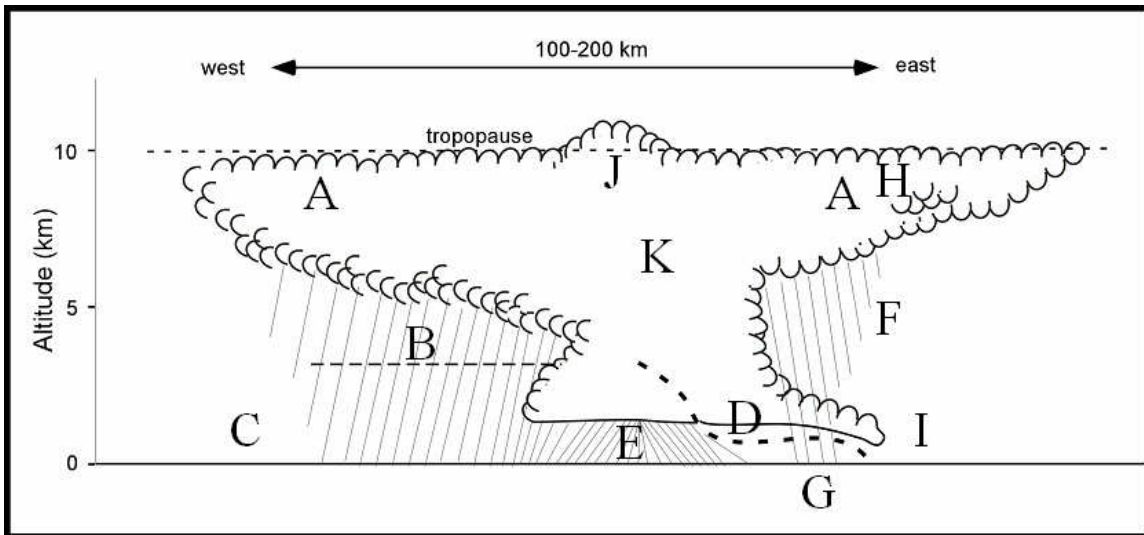
Edge of Tarnation (denoted by 'E')

Far from Anywhere (denoted by 'F')

Tie Breaker 1:



Tie Breaker 2:



Credits:

1. "Severe and Hazardous Weather" by Rauber, Walsh, and Charlevoix were used in creating the Myth/Fact questions and tie breakers.
2. Storm Prediction Center for outline maps
3. UIUC for radar and satellite images
4. Mike Wilson, Joe Brewer, Redina Herman, and Mike Spinar for writing and submitting the exam.