

METEOROLOGY

59 POINTS MAX

Station 1

1-1 Millibars, atmospheres, inches,
kilopascals

1-2 B

1-3 See Figure 1A on page 4

1-4 See Figure 1A on page 4

1-5 See Figure 1A on page 4

1-6 See Figure 1A on page 4

1-7 ISOBARS

1-8 1039.9 mb

1-9 No

1-10 Yes

1-11 No

1-12 1 PM EDT or 1300

Station 2

2-1 Sublimating, sublimation
changing directly from a solid to
a gas – snow and ice changes
directly to water vapor

2-2 26.0 inches

2-3 48 inches on February 8, 2007

2-4 5

2-5 27°F

2-6 The weight of the snow/
compaction - no credit for
sublimation precip. on 4/5 days

2-7 1.0 inch

2-8 0.11 inch

2-9 C

2-10 C

2-11 B

8 Points Max _____

11 Points Max _____

Station 3

3-1 Travels in the opposite
direction of normal cold fronts –
comes from the opposite
direction of normal cold fronts

3-2 A

3-3 C

3-4 C

3-5 True

Station 3

3-6 True

3-7 False

3-8 C

3-9 D

3-10 C

3-11 B

3-12 yes between 900 mb and 850 mb

3-13 C

13 Points Max _____

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Station 4

4-1 _____ D _____

4-2 _____ A _____

4-3 _____ D _____

4-4 _____ E _____

4- _____ C _____

4-6 _____ 79 or 80°F _____

4-7 15 mph, 23 or 24 mph, 275 – 285°

4-8 _____ 0 inches – none _____

4-9 The rise/maximum/high

temperature was reached in the

mid to late afternoon

4-10 _____ 10 04:52 or 10- 05:52 _____

4-11 _____ E _____

4-12 _____ G _____

12 Points Max _____

Station 5

5-1 _____ Halo _____

5-2 _____ Cirrus _____

5-3 _____ Cumulonimbus _____

5-4 aurora borealis or northern lights

5-5 _____ 48°F _____

5-6 _____ 1020.2 mb _____

5-7 _____ yes _____

5-8 _____ D _____

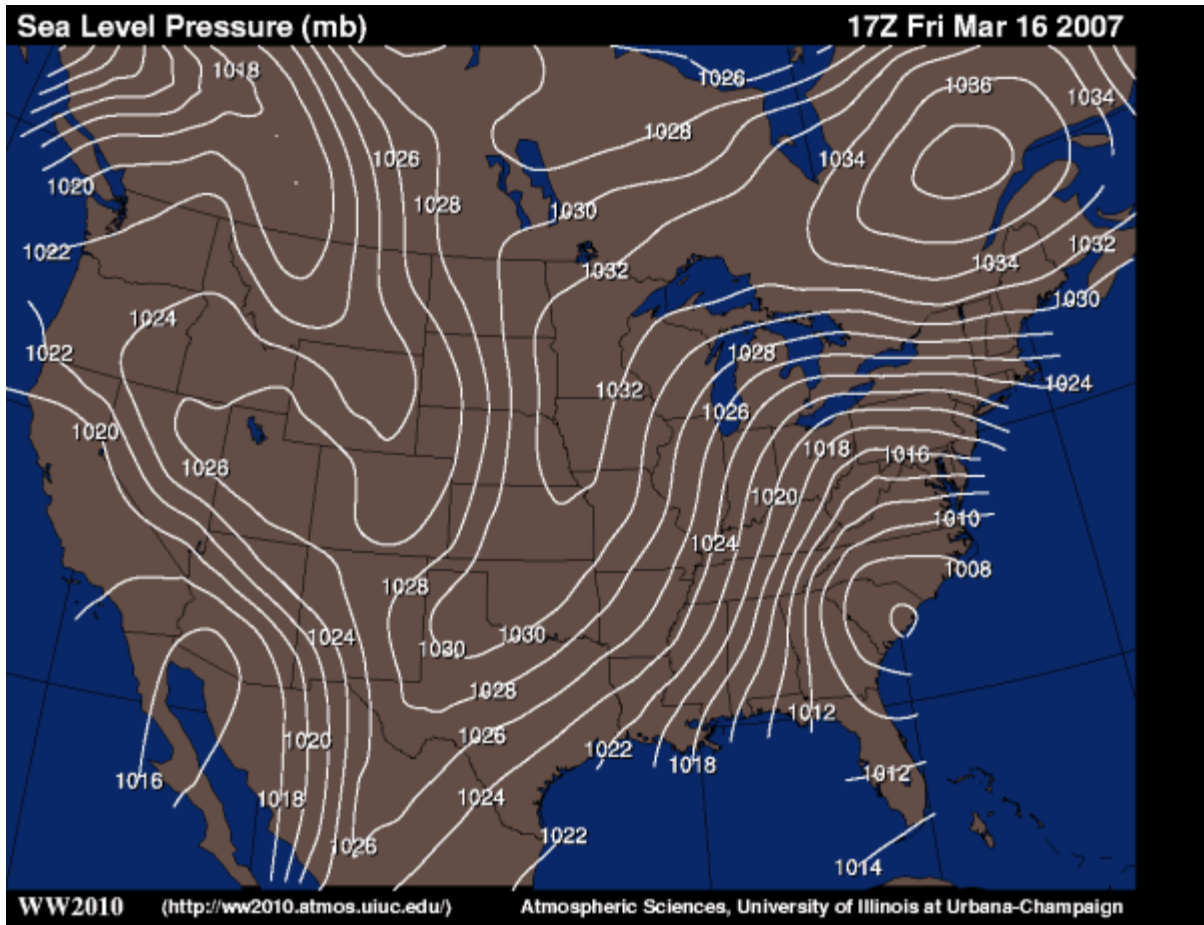
5-9 _____ cold _____

5-10 _____ A _____

5-11 _____ D _____

11 Points Max _____

Figure 1A



4 Points Max _____

1 point label High (H) and Low (L)

1 point for clockwise direction around the High (H)

1 point for counterclockwise direction around the Low (L)

1 point for circling two areas: For example, from New England to the LA/MS/AL/West. GA Western NV, AZ into Mexico or North of WA on BC coast or NW of the H over New England Where the isobars are relatively close together.

Tie Breakers Stations 4, 5, 1, 2, 3 in that order.

Please note that the Highs and Lows were not drawn in with H and L on this computerized answer key. Additional answers may have been accepted.

We wish to express our thanks to Mark Kramer, New York Science Olympiad, for submitting this exam for publication on The Wright Center Website.