Atmospheric Sounding Visualization

Sancho McCann
Outline

• Domain description
• Current presentation formats
• Proposed Solution
• Progress
Soundings

Pressure
Altitude
Temperature
Dewpoint
### Soundings

72694 SLE Salem Observations at 12Z 08 Oct 2006

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Current Presentation Methods

Emagram
Current Presentation Methods

Skew-T Log-P
Critique

- Much training required
- Difficult to compare quickly
- Difficult to use for presentation to novice students
- Easy to distribute
- Complexity might aid understanding
Previous Work

- Only modifications to Skew-T
- Haeger: Vertical ocean profiles
Proposed Solution

- Derive variables
- Display on an annotated bar plot
Use

• 14-17 year olds that have just completed an introduction to meteorology class
Implementation Details

• Data source: http://weather.uwyo.edu/upperair/sounding.html

• Java/swing in Eclipse
Outstanding Issues

• Interaction with sounding plot
• Small multiple layout for comparisons by location or time
• How to force a visual link

Slope of temperature ↔ Stability