Aim: Relative Humidity/Moisture in the Atmosphere

Current Surface Map

Isobars measure pressure.

H = High Pressure: Cool, clear sky
L = Low Pressure: Cloudy, lousy, rainy

Today = 30.0 inches of pressure.
Low pressure system is moving in. Check the pressure tomorrow!

Moisture - Enters atmosphere through evaporation: liquid → gas, 2260/g

Air ALWAYS contains moisture

Factors that Affect Evaporation: Ex. Hair Dryer

- Heat ↑ hotter
- Wind ↑ windy
- Surface Area ↑ spread out

Two containers are filled up 50% with water.
Which contains more water?
Large holds more water; it's bigger, higher capacity.
1. Air at 10°C can hold 10ml of water. It contains 5ml.
   What % is full of water? \( \frac{5\text{ml water}}{10\text{ml container}} = 50\% \text{ full} \)

2. Air at 10°C can hold 10ml water. It contains 10ml.
   What % is full of water? \( \frac{10\text{ml}}{10\text{ml}} = 100\% \text{ full} \)

Humidity - Moisture in the Air

Relative Humidity - % of moisture in the air. 0-100%

100% Relative Humidity = Saturated. Full of Water. At capacity.

Capacity - The amount something can hold.

Lower Capacity  \( \begin{array}{c}
\text{v.}
\end{array} \)  Bigger Capacity

Higher CAPACITY

Warm Air  
Spread Out  
More room for Water Vapor  
HUMID

Cold Air  
Tightly Packed  
Not much room for Water Vapor  
DRY

Relative Humidity (Moisture) is measured with a Sling Psychrometer.