

III. Humidity

Humidity: The amount of water vapor in the air.

A. Saturation

- At a given temperature, air can hold a certain amount of water vapor. Once the air can hold no more water vapor, it is considered “saturated”.
- Warm air can “hold” more water vapor than cold air.

B. Relative Humidity (RH): The ratio of water vapor in the air to the amount of water vapor the air can hold.

$$\text{R.H.} = \frac{\text{Amount of Water in Air}}{\text{Amount of Water the Air can hold}} \times 100\%$$

TPS: Explain why a change in the air temperature will result in a change in the relative humidity.

Two factors can change the R.H.:

1. A change in the amount of water in the air.
2. A change in the air temperature.

C. Dew Point: The temperature at which the air becomes saturated and water vapor condenses. (ex. Fog)







