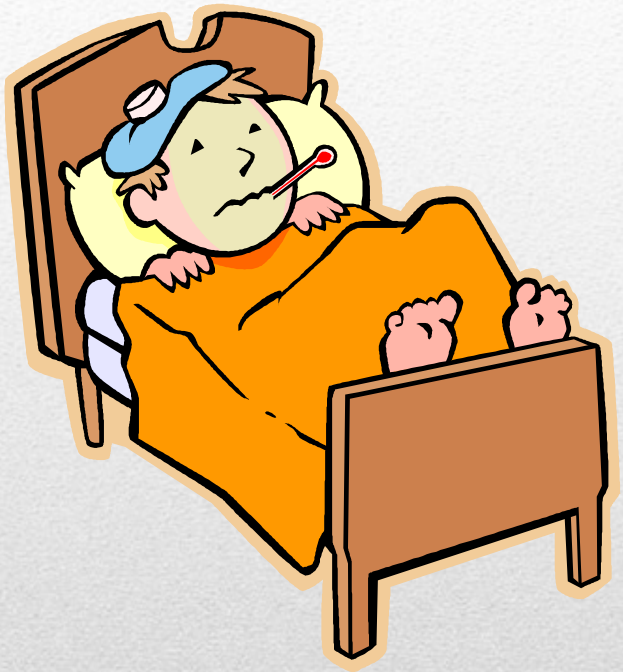
Metrics

what are metrics?

why are metrics important?

standard of measurement

98.6°F



familiar standards


How Tall Are You.
Katie
Alex
Michael

collections

people

money

balance needs

Measure of the motion of molecules in a material expressed in degrees Fahrenheit or Celsius

temperature

- for paper based collections, 65°F - 68°F
- colder is better

temperature standards

- Heat accelerates deterioration: the rate of most chemical reactions, including deterioration, is approximately doubled with each increase in temperature of 18°F (10°C).
- In the case of cellulose, each 9°F increase in temperature doubles the rate of deterioration.

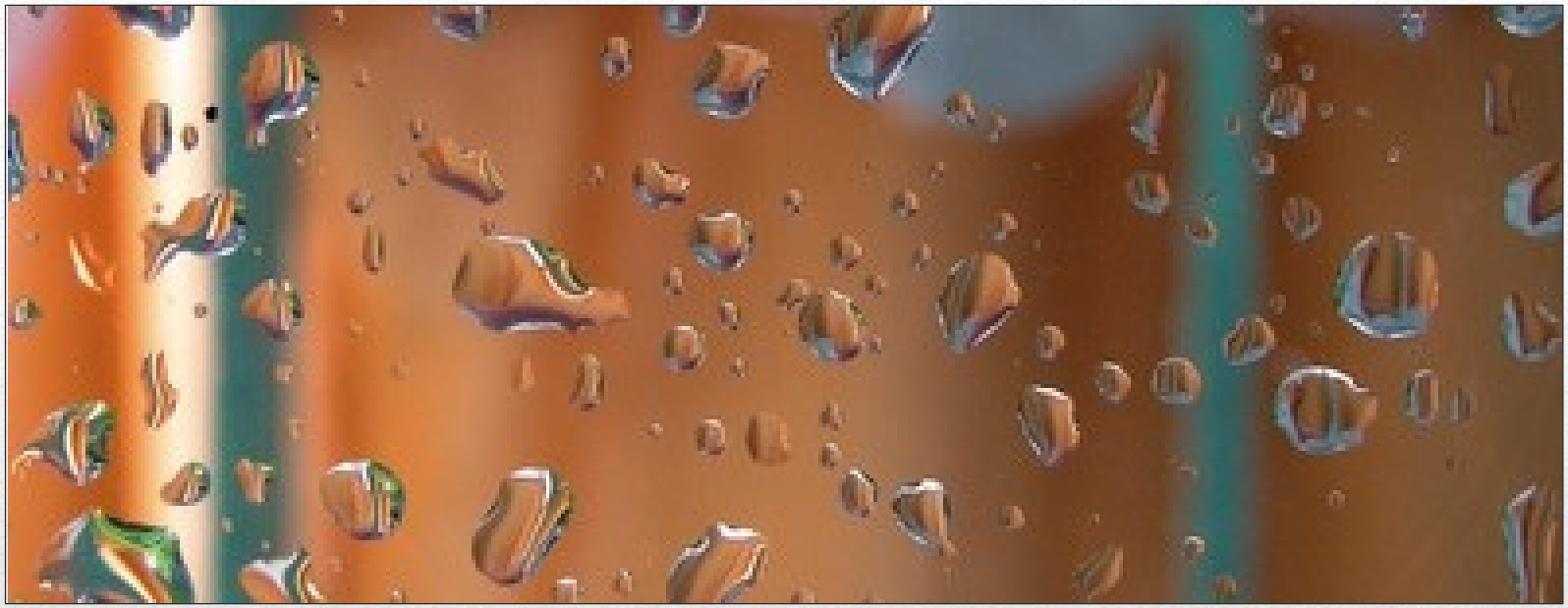
heat warning

relationship between volume of air and amount of water it holds at a given temperature, expressed as a percentage

relative humidity (RH)

RH standards

- Paper - - 30% RH to 50% RH
- Parchment/vellum - - 30% RH to 50% RH
- Photographs - - 30% to 50% RH



Temperature at which water begins to condense out of the air, expressed in degrees Fahrenheit or Celsius

dew point

difference

RH

- relative saturation of the air (percentage)

dew point

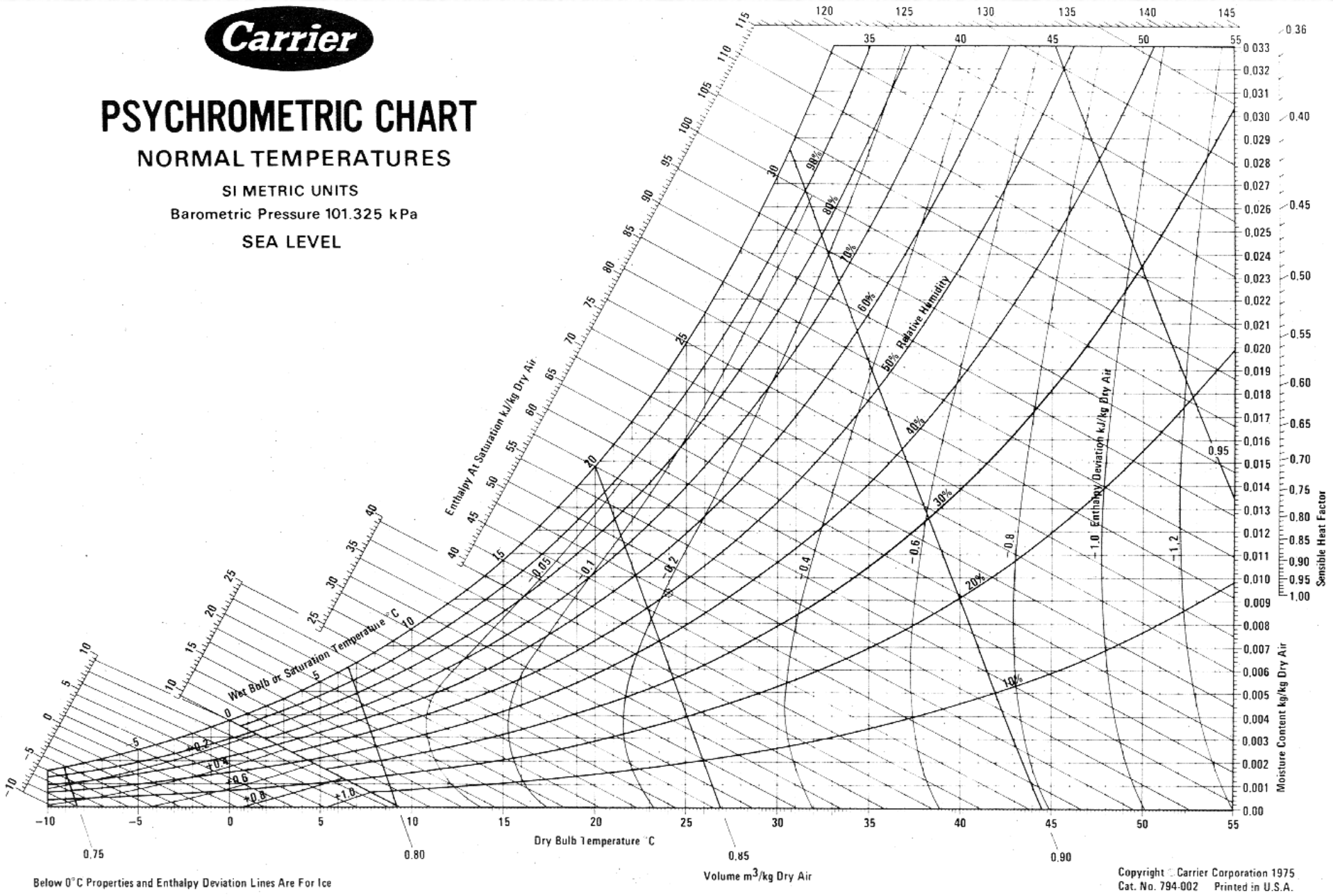
- absolute moisture content of the air

temperature

RH

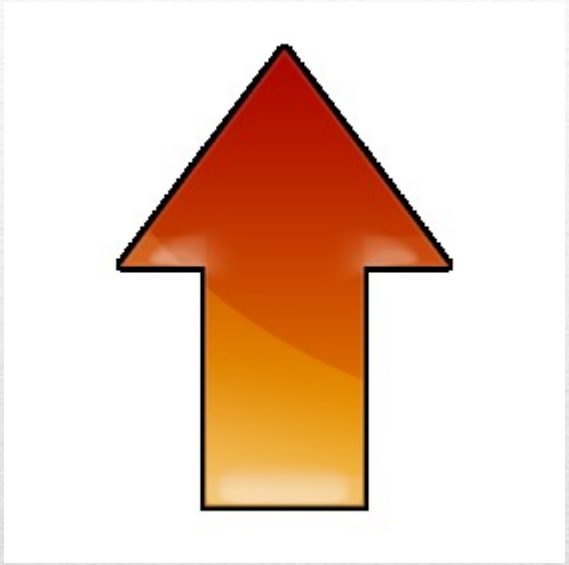
dew point

relationship?

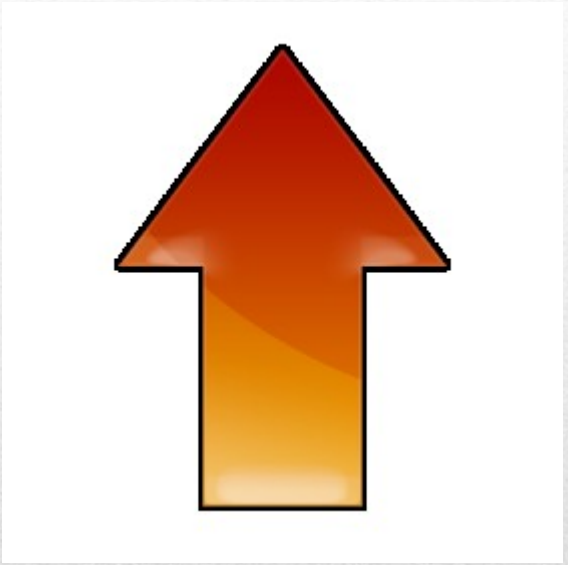


Reproduced courtesy of Carrier Corporation

RH



dew point



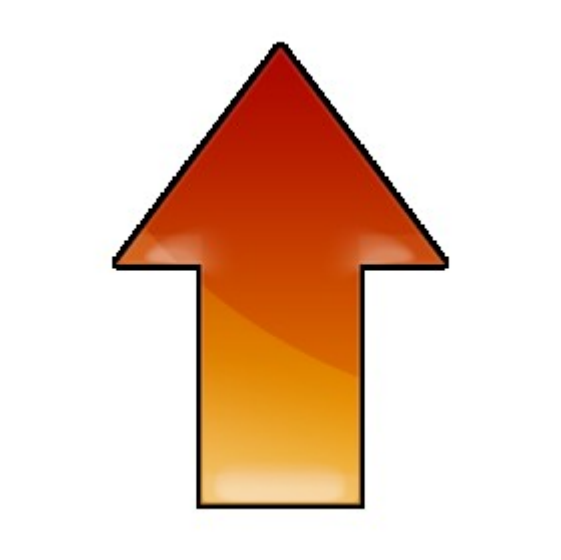
constant temperature

RH

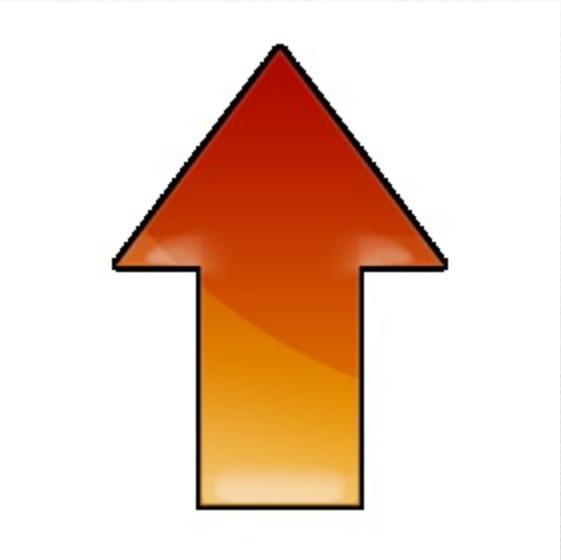
dew point

constant temperature

temperature



dew point



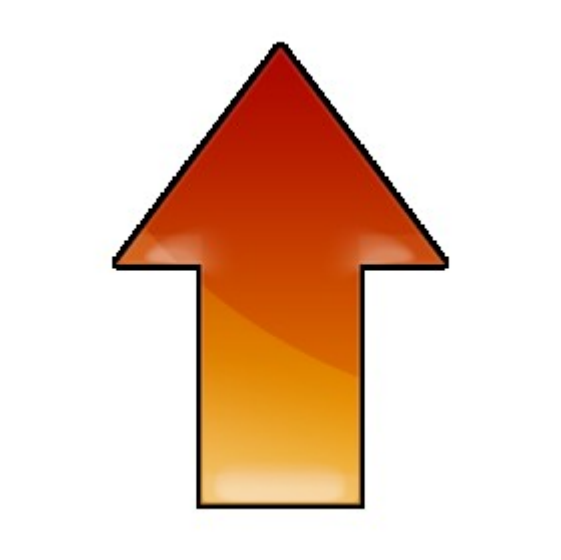
constant RH

temperature

dew point

constant RH

temperature

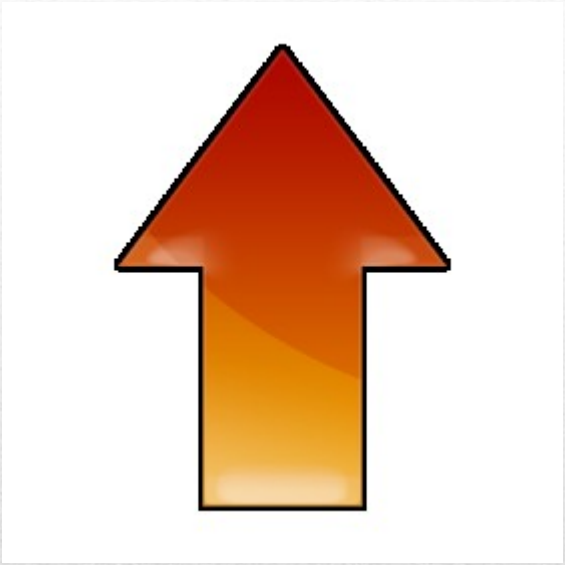


RH

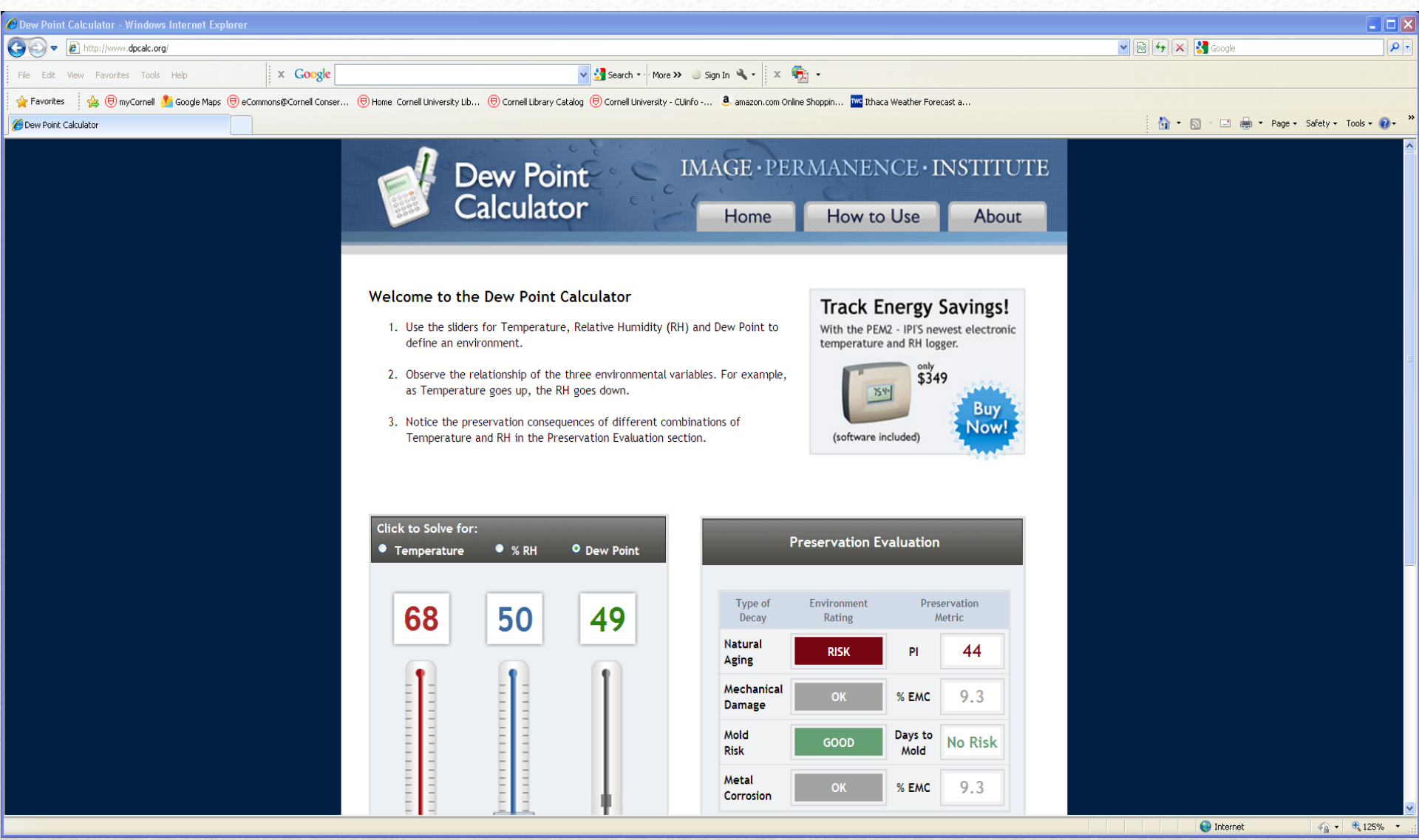
constant dew point

temperature

RH



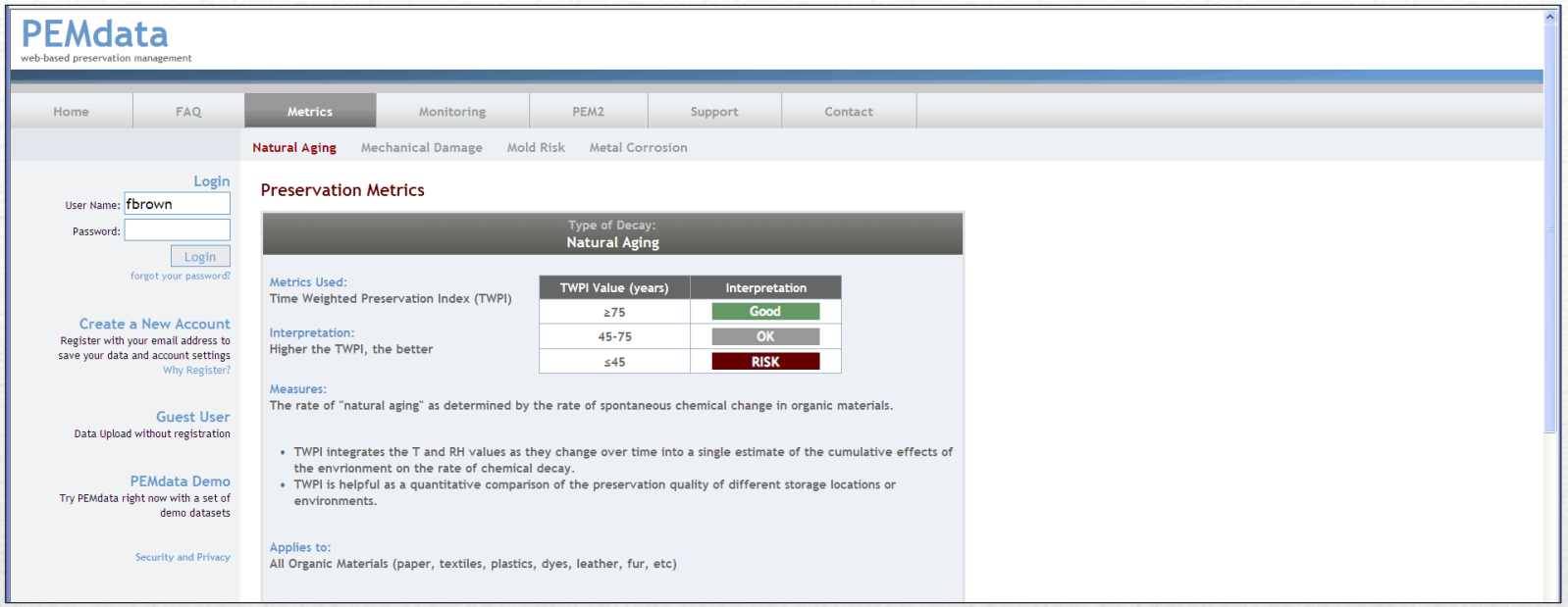
constant dew point



IPI dew point calculator

Image Permanence Institute | Environmental Monitoring, Image Stability Evaluation and Sustainable Preservation Practices

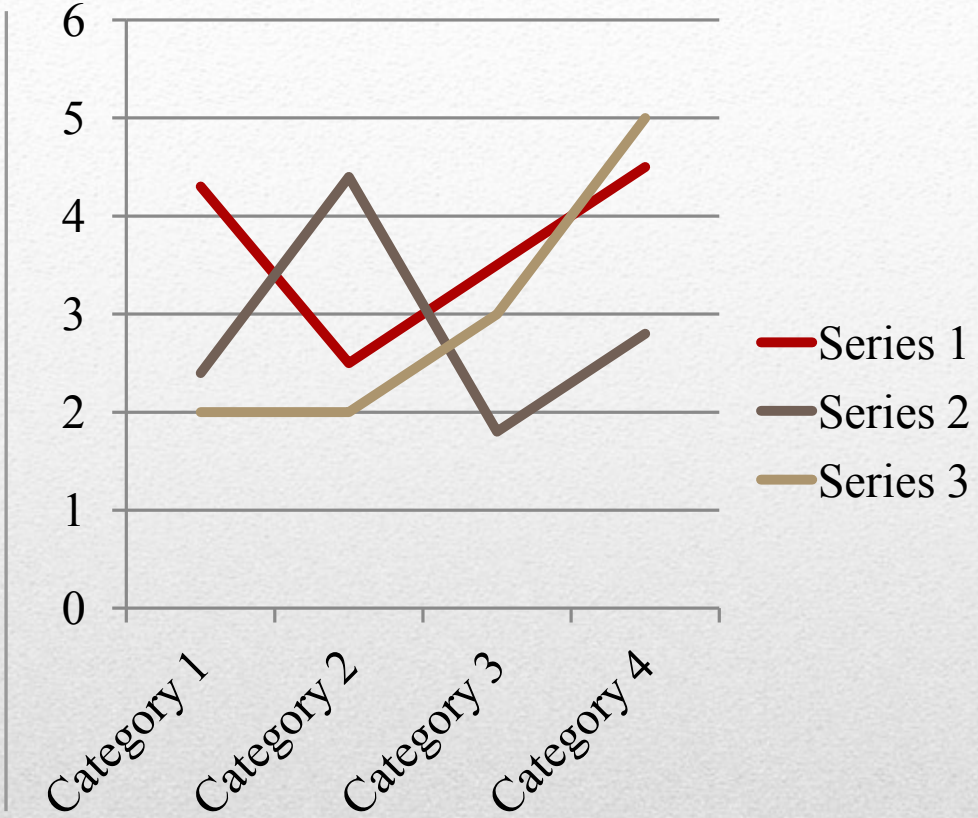
journey



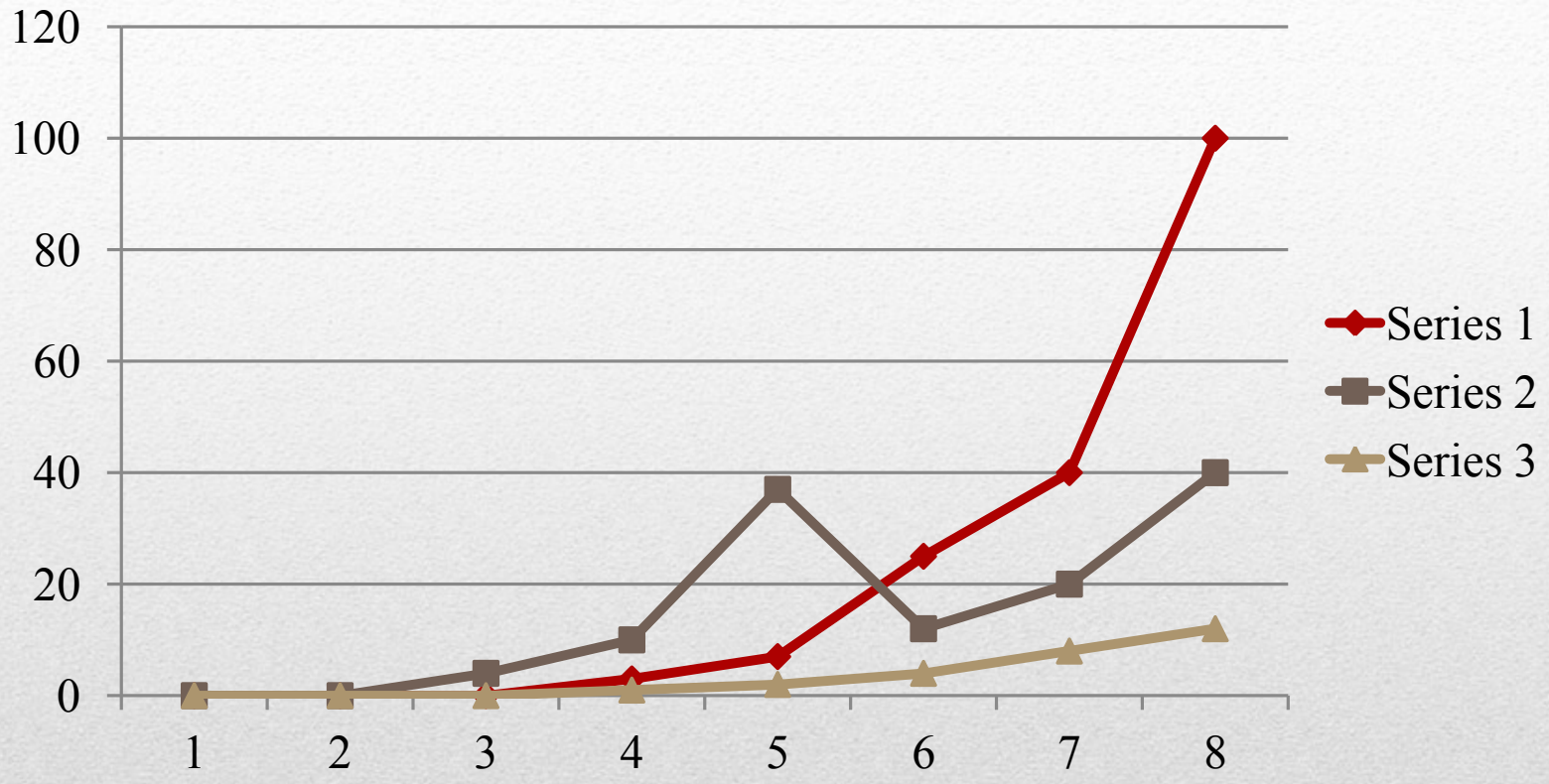
Time Weighted Preservation Index integrates the T and RH values as they change over time into a single estimate of the cumulative effects of the environment on the rate of chemical decay.

TWPI

graphs represent data in a visual format that is easy to read and to interpret



graph basics



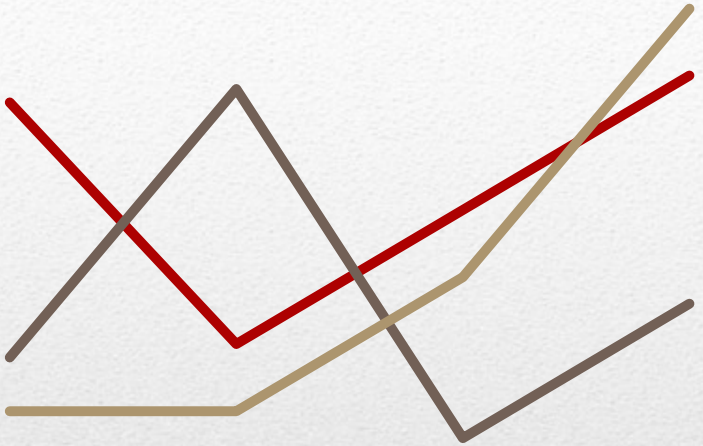
what does it mean?

title

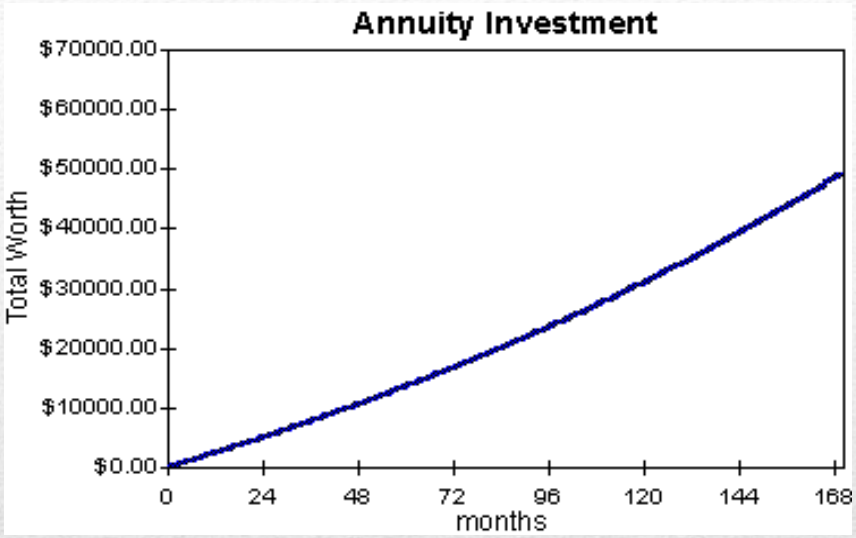
axes

units of measurement

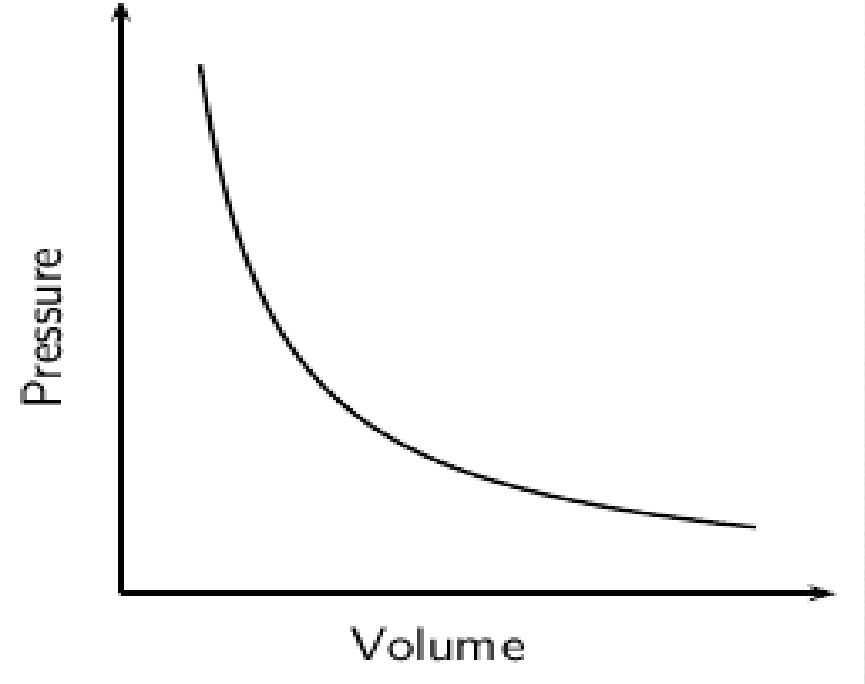
scale



clues for interpretation

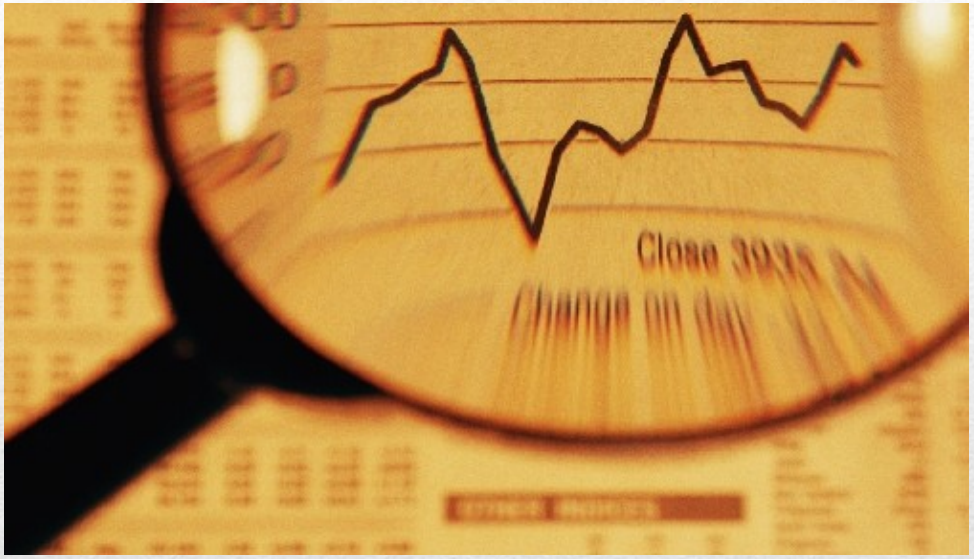


direct relationship



indirect relationship

PEMdata



investigate the data

Temperature equilibrium in 24 hours

Moisture content in weeks or months

sustainability