

1. Temperature = 29C. Dew point = 13C.

What is vapor pressure, saturation vapor pressure, relative humidity?

2. Dew point = 10 C. Relative humidity = 50%.

What is vapor pressure, saturation vapor pressure, air temperature?

3. Saturation vapor pressure is 35 mb. Dew point = 10C.

What is air temperature, vapor pressure, relative humidity?

4. Temperature is 24 C. Dew point is 12 C. Air starts at 500 meters on upslope of a mountain.

What is temperature and dew point if the air is lifted up and over a 2500 m mountain and descends to 0m on the other side?

Saturation vapor pressure as a function of air temperature	
Air temperature (degrees C)	Saturation vapor pressure (mb)
2	6.9
4	8.4
7	10.2
10	12.3
13	14.8
16	17.7
18	21
21	25
24	29.6
27	35
29	41
32	48.1
35	56.2
38	65.2
41	76.2
43	87.8
46	101.4
49	116.8
52	134.2