

Atmosphere Chemistry

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May 13, 2018

Mean atmospheric water vapor The three major constituents of Earth's atmosphere, are nitrogen, oxygen, and argon. Water vapor accounts for roughly 0.25% of the atmosphere by mass. The concentration of water vapor varies significantly from around 10 ppm by volume in the coldest portions of the atmosphere to as much as 5% by volume in hot, humid air masses, and concentrations of other atmospheric gases are typically quoted in terms of dry air (without water vapor).As is shown at table 1.

Table 1: Major constituents of dry air, by volume

Gas		Volume	
Name	Formular	in $ppmv^B$	in %
Nitrogen	N_2	780840	78.084
Oxygen	O_2	209460	20.946
Argon	Ar	9340	0.9340
Carbon dioxide	CO_2	400	0.04
Neon	Ne	18.18	0.001818