particle concentration

in atmospheric chemistry

Commonly expressed in several ways: mass concentration (usually as $\mu g\, m^{-3}$) or number concentration (number of particles cm^{-3}); modern instrumentation allows measurement of the number of particles as a function of size as well as the total number present in a given air volume. For atmospheric aerosols, this is a complex distribution for which diameters range from below 0.01 to above 100 µm; the particles making the highest contribution to the total number density are in the size range below 0.1 µm, those contributing most to the total surface area are in the 0.1 to 1.0 µm range, while those with the highest contribution to the volume or mass of the aerosol come from both the 0.1 to 1.0 µm and 1.0 to 100 µm ranges.

Source:

PAC, 1990, *62*, 2167 *(Glossary of atmospheric chemistry terms (Recommendations 1990))* on page 2181