



Figure 8-11. Aluminum Solubility as a Function of pH for selected Sulfate and Clay Minerals. Aluminum activity (y-axis) on log scale.

Weathering Rates

Chemical Concentration

Time series plots of chemical concentrations in the columns often exhibited curvilinear behavior. This behavior, which is observed in many chemical and biological systems, has been described using an exponential decay function of the general form:

$$C_t = C_0 \times e^{-kt}$$

where:

- C_t = concentration at time t
- C_0 = concentration at time zero
- e = base e , approximate value of 2.718
- k = decay constant, rate of concentration change per unit time
- t = time