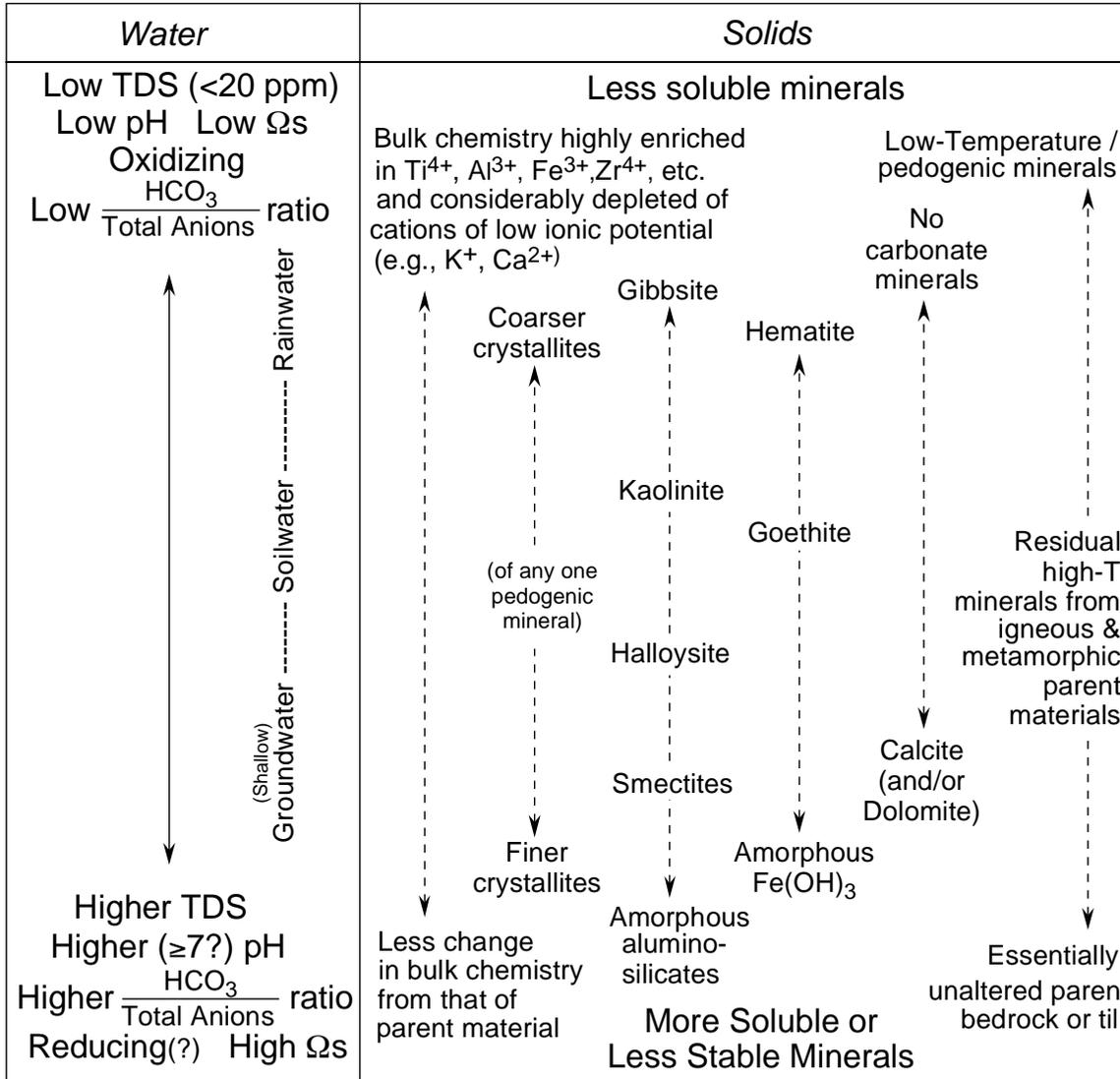


# The complementary nature of near-surface waters and minerals

This page attempts to summarize trends in the chemistry of near-Earth-surface waters and the regolithic materials (soils to bedrock) in which they are found. This is a very schematic diagram that tries to summarize all possible variability, and no one Earth-surface example will be characterized by all of these trends.

The column at right is meant to suggest the progression of materials from Earth-surface to depth. Its inadvertent similarity to the Surrealist art of Joan Miró may be appropriate to the document's attempt to summarize so many disparate phenomena.

Waters tend to be at this end with . . .  
Low-reactivity substrate  
Much rainfall

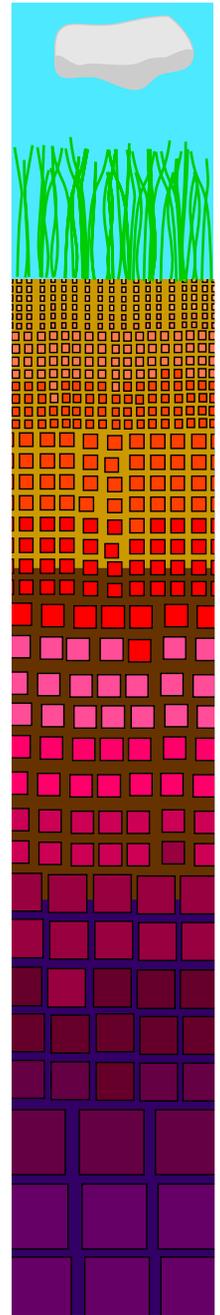


Mineral systems tend to be at this end with . . .  
Low-reactivity substrate  
Much rainfall

Increasing time of exposure to weathering

Increasing depth in regolith

Mineral systems tend to be at this end with . . .  
High-reactivity substrate  
Little rainfall



Waters tend to be at this end with . . .  
Highly-reactive substrate  
Little rainfall

In comparing *between* columns above, relative positions of words (e.g., gibbsite and hematite) is dictated as much or more by graphic convenience as by natural occurrence.