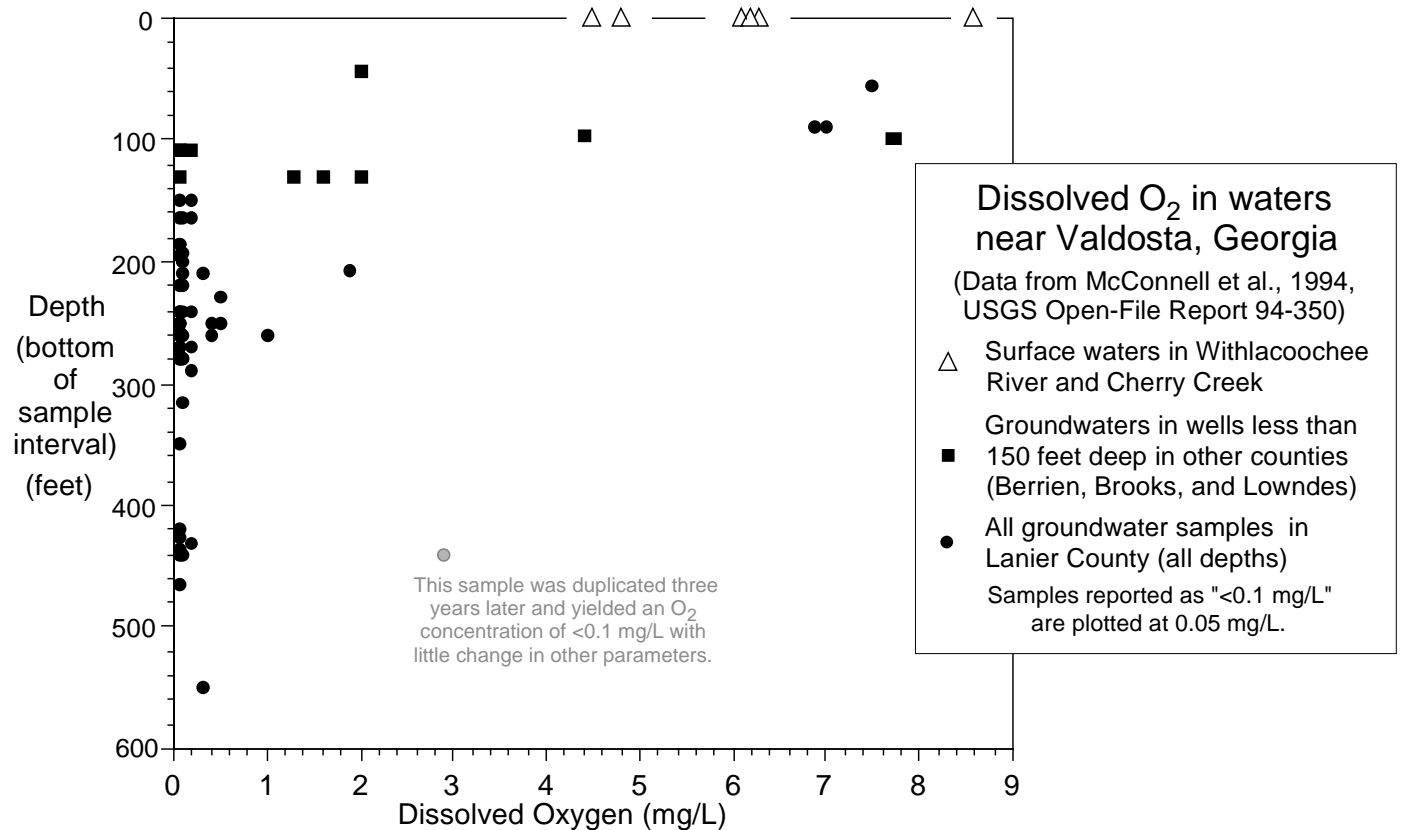


Variation in dissolved O₂ with depth in groundwater

Surface waters can reach equilibrium in their exchange of gases with the atmosphere and so can be expected to have high concentrations of dissolved O₂. Waters at depth, in contrast, lose O₂ to redox reactions, commonly with organic matter, and so have less dissolved O₂. The plot below is just one example of variation in dissolved O₂ concentration with depth in groundwater, in this case from a karstic aquifer in the Coastal Plain of the state of Georgia in the south-eastern United States.



Data are from McConnell, J.B., Busenberg, E., and Plummer, L.N., 1994, Water-Resources data for the Valdosta area, south-central Georgia, 1961-93: U.S. Geological Survey Open-File Report 94-350, 58p.