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**Timothy Sauer\*** (tsauer@gmu.edu), Department of Mathematics, George Mason University,  
Fairfax, VA 22030. *Global convergence of max-type equations.*

Consider a multivariable difference equation whose evolution rule is defined as the maximum of several difference equations in one variable. It is shown that if the individual equations are each contractive, then the aggregated max-type equation converges to a fixed point. A corresponding result holds for local convergence. Similar results hold for generalizations of these equations, called k-rank equations. (Received August 17, 2009)