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Senada Kalabusic* (senadak@yahoo.com), Department of Mathematics, University of Rhode Island, Kingston, RI 02881. *Global Attractivity for Difference Equations in Partially Ordered Metric Spaces*. Preliminary report.

Let X be a partially ordered set and d be a metric on X such that $(X; d)$ is a complete metric space. We prove a convergence result for difference equation $x_{n+1} = F(x_n, x_{n-1})$, $n = 2, 3, \dots$ where the map $F : X \times X \rightarrow X$ satisfies certain monotonicity conditions. Our results have some applications to difference equations in \mathbb{R}^n . (Received August 04, 2008)