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We investigate the monotonic and periodic character of the nonnegative solutions of the rational difference equation

$$x_{n+1} = \frac{A_n X_{n-1}}{1 + X_n + X_{n-1}}, \quad n = 0, 1, \dots,$$

where  $\{A_n\}_{n=0}^{\infty}$  is a periodic sequence of positive real numbers. (Received August 19, 2009)