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SOME NONLINEAR DYNAMIC INEQUALITIES ON TIME SCALES

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Abstract. Our aim in this paper is to establish some explicit bounds of solutions of a certain class of nonlinear dynamic inequalities on a time scale $\mathbb{T}$ which is unbounded above. Also, we establish some sufficient conditions for global existence and an estimate of the rate of decay of the solutions. These on the one hand generalizes and on the other hand furnish a handy tool for the study of qualitative as well as quantitative properties of solutions of dynamic equations on time scales.

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