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George A. Anastassiou* (ganastss@memphis.edu), Department of Mathematical Sciences, University of Memphis, Memphis, TN 38152. *Representations and Ostrowski type inequalities on Time scales*. Preliminary report.

Here we give univariate and multivariate representations of Montgomery type for hybrid functions on Time scales. Based on these we establish univariate and multivariate Ostrowski type inequalities on Time scales domains. These compare the average of a function to its values. The estimates involve the higher order delta and nabla derivatives and partial derivatives. We finish with applications on the time scales \mathbb{R} and \mathbb{Z} . (Received August 25, 2011)