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Billy Jackson* (jacksonbi@geneseo.edu) and **John Davis** (john_m_davis@baylor.edu). *A Wholistic Solution to the Problem of Determining the Stability Region on Arbitrary Time Scales*. Preliminary report.

We consider methods for computing solutions to the integral condition

$$\limsup_{T \rightarrow \infty} \frac{1}{T - t_0} \int_{t_0}^T \frac{\log |1 + \mu\lambda|}{\mu} \Delta t < 0$$

given by Pötzche, Siegmund, and Wirth in 2001 for necessity and sufficiency of solutions to $x^\Delta = \lambda x$ to be asymptotically stable . In particular, we expound upon earlier work by the authors in the purely discrete case to include examination of continuous intervals by looking at the embedded sequence of intervals and discrete points as they appear in the arbitrary time scale \mathbb{T} . In contrast with other work in this direction, our results make no commutativity assumptions arising from the system matrix. (Received September 06, 2017)