1063-34-40Donald A Lutz* (lutz@math.sdsu.edu), San Diego, CA 92182-7720, and Sigrun Bodine,
Tacoma, WA. Asymptotic equivalences for linear dynamic equations.

For systems of linear differential equations as well as for difference equations, several different concepts of asymptotic equivalence have been introduced in the literature. For each type of equivalence one can ask what perturbations leave it invariant. Several results of this type will be discussed and in particular, a generalization of a classical result of N. Levinson concerning perturbations nondiagonal differential equations will be presented. (Received July 19, 2010)