# Comparisons of GOF Tests for Models with Continuous or Discrete Degradation Measurements

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## Abstract

In this study we provide comparisons of goodness-of-fit (GOF) tests for several models with continuous or discrete degradation measurements. The considered GOF test methods include Anderson-Darling (AD), Cramér–von Mises (CM), Kolmogorov–Smirnov (KS), and Watson test. The degradation models used here are the random coefficient model, Wiener process model and discrete compound Poisson model. We conduct several simulation studies based on the scenarios of two real examples. The power comparisons demonstrate that none of the tests is uniformly more powerful than other tests.