

Reliability Prediction of Tires Using Linear Mixed-Effects Model

Authors : Myung Hwan Na, Ho- Chun Song, EunHee Hong

Abstract : We widely use normal linear mixed-effects model to analysis data in repeated measurement. In case of detecting heteroscedasticity and the non-normality of the population distribution at the same time, normal linear mixed-effects model can give improper result of analysis. To achieve more robust estimation, we use heavy tailed linear mixed-effects model which gives more exact and reliable analysis conclusion than standard normal linear mixed-effects model.

Keywords : reliability, tires, field data, linear mixed-effects model

Conference Title : ICMCSSE 2015 : International Conference on Mathematical, Computational and Statistical Sciences and Engineering

Conference Location : Melbourne, Australia

Conference Dates : December 13-14, 2015