

On the exact sampling distribution of L-statistics

CORRADO CROCETTA NICOLA LOPERFIDO

Abstract

This paper shows that linear functions of order statistics (L-statistics) based on random samples have a Fundamental Skew distribution (Arellano-Valle Genton, 2003). The paper also examines the exact distribution of L-statistics when the sampled population is Skew -Normal. Exact distributions of L-statistics from normal samples easily follows as special case.