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Indranil Ghosh* (ghoshi@uncw.edu), 601 S College Road, Wilmington, NC 28403, and **Hon Keung Tony Ng** (ngh@mail.smu.edu), Southern Methodist University, Dallas, TX. *A class of skewed distributions with applications in environmental data.*

In environmental studies, many data are typically skewed and it is desired to have a flexible statistical model for this kind of data. In this article, we study a class of skewed distributions by invoking skewness into some known distributions. In particular, we consider using the logistic kernel to derive a class of univariate distribution called the truncated-logistic skew-symmetric (TLSS) distribution. We provide some structural properties of the proposed distribution and develop the statistical inference for the TLSS distribution. A simulation study is conducted to investigate the efficacy of the maximum likelihood method. For illustrative purposes, two real data sets from environmental studies are used to exhibit the applicability of such a model. (Received August 18, 2020)