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Shreyashi Basak* (shreyashimathematics@gmail.com), Rani Laxmibai Hall of Residence, Kharagpur, WestBengal 721302, India, and **Somesh Kumar** (sms@maths.iitkgp.ac.in), Department of Mathematics, Indian Institute of Technology, Kharagpur, Kharagpur, WestBengal 721302, India. *Estimating the mean direction in a wrapped Cauchy distribution.*

Directional data arises in various studies such as spread of disease vector, wind directions during a storm, seasonality of phenomena etc. Some distributions have been proposed in statistical literature to model directional data. In this paper, we consider estimation of parameters of a wrapped Cauchy distribution. For estimating the mean direction parameter we propose the sample mean direction, the maximum likelihood estimator and the Pitman estimator. A detailed simulation study is conducted to numerically compare the risk performance of these estimators. (Received September 24, 2018)