Space-Time Modeling for Circular Data Using Wrapped Distributions

Clarissa Ferrari¹, Alan Gelfand², Giovanna J. Lasinio³ and Daniela Cocchi¹

- Department of Statistics, University of Bologna, Bologna, Italy
 Department of Statistical Science, Duke University, Durham NC 27708, USA
- ³ D.S.P.S.A., University of Rome La Sapienza, Rome, Italy

Abstract: In this work we illustrate a Bayesian Measurement Error Model developed for space-time circular data and based on Gaussian wrapped distributions. Estimation is carried out through MCMC procedures.

Keywords: circular data; Bayesian space-time models; wrapped distributions; marine forecasts.