

Position

Postdoctorant

Home institution

Institut Tchadien de Recherche Agronomique pour le Développement (ITRAD)

Background

My strong desire to build a career in statistics and to become a scientific researcher led me to the Institut Tchadien de Recherche Agronomique pour le Développement (ITRAD) in which im a research assistant since 2013. This desire started with a Bachelor of Technology in statistics (B.Tech. hons.) from 2007-2012 at Modibbo Adama University of Technology (Mautech), Nigeria followed by a Msc in Biostatistics at Université d'Abomey -Calavi (UAC) from 2015-2017. Today I'm glad to start a PhD in Biometry at the Université d'Abomey -Calavi (UAC)

Research project

In Geostatistics, the classical method of interpolation known as Kriging (Krige, 1952) is widely used. It has the ability to minimized residual error by producing the Best Linear Unbiased Estimators (BLUE) (William, 2015; Cristiano *et al.*, 2015). Thus, it provides more reliable parameters estimates (Vihotogbé *et al.*, 2014). However, it is highly sensitive to the normality assumption (Hakan, 2017) while natural process is often non-Gaussian. In order to address the above shortcomings in the classical Geostatistics, a new Geostatistical approach, the Bayesian Maximum Entropy (BME), was proposed (Christakos 1990; 1992). The BME is a knowledge-based approach with a rigorous mathematical background and inference schemes (Christakos, 1998; He and Kolovos, 2017). However, despite the powerfulness of BME method in estimation and mapping leading to a wider application on various fields, which includes environmental geology, environmental sciences, public health, ecology, remote sensing, energy, real estate research, etc. (Yang *et al.*, 2014). Few empirical studies have been conducted to investigate numerically BME robustness. Thus, this research aims at fully investing BME robustness in spatial estimation.