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## Employment

### Assistant Professor

Department of Earth Observation Science  
University of Twente  
1 Apr 2024 → present

### Assistant Professor

Faculty of Geo-Information Science and Earth Observation  
University of Twente  
1 Oct 2018 → present

### Assistant Professor

UT-I-ITC-ACQUAL  
1 Oct 2018 → present

### Assistant Professor

Digital Society Institute  
University of Twente  
1 Jan 2018 → present

## Research outputs

**Predicting COVID-19 hospitalizations: The importance of healthcare hotlines, test positivity rates and vaccination coverage**  
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### Comparison of the association between different ozone indicators and daily respiratory hospitalization in Guangzhou, China

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**Early ecological security warning of cultivated lands using RF-MLP integration model: A case study on China's main grain-producing areas**  
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**A zero-inflated mixture spatially varying coefficient modeling of cholera incidences**  
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**Comparison of surface water flow simulation over structured and unstructured grids**  
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**Bayesian geostatistical modelling of stunting in Rwanda: risk factors and spatially explicit residual stunting burden**  
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**Mapping Spatial Variation and Impact of the National MDA Program on Lymphatic Filariasis Elimination in Ghana: An Initial Study**  
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**A note on the propagation of positional uncertainty in environmental models**  
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**Bayesian analysis of the short-term association of NO<sub>2</sub> exposure with local burden of asthmatic symptoms in children**  
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**Mapping 123 million neonatal, infant and child deaths between 2000 and 2017**  
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Osei, F. B. & Stein, A., 13 Sept 2019, In: *Scientific reports*. 9, 12 p., 13217.

**Calibration of low-cost NO<sub>2</sub> sensors in an urban air quality network**  
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**Poisson-Gamma Mixture Spatially Varying Coefficient Modeling of Small-Area Intestinal Parasites Infection**

Osei, F. B., Stein, A. & Ofosu, A., Jan 2019, In: International journal of environmental research and public health. 16, 3, 17 p., 339.

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**Poisson-gamma mixture spatially varying coefficient modeling of small-area intestinal parasites infection**

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**Spatial and temporal heterogeneities of district-level typhoid morbidities in Ghana: A requisite insight for informed public health response**

Osei, F. B., Stein, A. & Nyadanu, S. D., 1 Nov 2018, In: PLoS ONE. 13, 11, p. 1-19 19 p.

**Modelling local areas of exposure to Schistosoma japonicum in a limited survey data environment**

Araujo Navas, A. L., Soares Magalhães, R. J., Osei, F., Fornillos, R. J. C., Leonardo, L. R. & Stein, A., 13 Aug 2018, In: Parasites & vectors. 11, 1, p. 1-15 15 p., 465.

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**Spatio-temporal analysis of small-area intestinal parasites infections in Ghana**

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**Spatial variation and hot-spots of district level diarrhea incidences in Ghana: 2010-2014**

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### **Spatial modeling of diabetes cases in Ghana**

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### **Geographic patterns of malaria in the Brong Ahafo region of Ghana**

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### **Current statistical methods for spatial epidemiology : a review**

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### **Cholera and Spatial Epidemiology**

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### **Evaluating Spatial and Space-Time Clustering of Cholera in Ashanti-Region-Ghana**

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### **Simulation of cholera diffusion to compare transmission mechanisms**

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### **Hierarchical Bayesian modeling of the space-time diffusion patterns of cholera epidemic in Kumasi, Ghana**

Osei, F. B., Duker, A. A. & Stein, A., 2011, In: Statistica Neerlandica. 65, 1, p. 84-100

### **Spatial statistics of epidemic data: the case of cholera epidemiology in Ghana**

Osei, F. B., 9 Dec 2010, Enschede: University of Twente, Faculty of Geo-Information Science and Earth Observation (ITC) . 179 p.

### **Spatial dependency of cholera prevalence on potential cholera reservoirs in an urban area, Kumasi, Ghana**

Osei, F. B., Duker, A. A., Augustijn, E-W. & Stein, A., 2010, In: International Journal of Applied Earth Observation and Geoinformation (JAG). 12, 5, p. 331-339 9 p.

### **Spatial and demographic patterns of Cholera in Ashanti region - Ghana**

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### **Spatial dependency of *V. cholera* prevalence on open space refuse dumps in Kumasi, Ghana: A spatial statistical modelling**

Osei, F. B. & Duker, A. A., 2008, In: International journal of health geographics. 7, 17 p., 62.

## **Datasets**

### **Poisson-Gamma Mixture Spatially Varying Coefficient Modeling of Small-Area Intestinal Parasites Infection**

Osei, F. B. (Creator) & Stein, A. (Contributor), DANS , 23 Oct 2019

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### **Spatial and temporal heterogeneities of district-level typhoid morbidities in Ghana: A requisite insight for informed public health response**

Osei, F. B. (Creator) & Stein, A. (Contributor), DANS , 22 Sept 2019

DOI: 10.17026/dans-x9z-q233, <https://www.persistent-identifier.nl/urn:nbn:nl:ui:13-sa-6gu7>

**Temporal trend and spatial clustering of cholera epidemic in Kumasi-Ghana : Scientific Reports 8, Article number: 17848 (2018)**

Osei, F. B. (Creator) & Stein, A. (Contributor), DANS , 20 Jun 2019

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2022	Lorem ipsum dolor sit amet
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