

Marcos Oliveira Prates

CONTACT INFORMATION

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GOOGLE SCHOLAR:	https://scholar.google.com.br/citations?user=Ujun714AAAAJ
LATTES ID:	7893235207392165

SHORT BIOGRAPHY

Marcos Prates is an Associate Professor at the Universidade Federal de Minas Gerais (UFMG) and a CNPq Research Productivity Scholar (Level 1D). He obtained his bachelor's degree in Computational Mathematics in 2006 and a master's in Statistics in 2008, both from UFMG. He received his Ph.D. in Statistics from the University of Connecticut in 2011 and was a Visiting Professor at the same university from 2019 to 2020. His main research areas include Bayesian Statistics, Generalized Linear Mixed Models, Machine Learning, and Spatial Statistics. He has held several leadership positions, including Director of the Graduate Program in Statistics at UFMG (2016-2018), President of the Brazilian Statistical Association (2020-2022), and has served as Secretary (2015-2016) and Treasurer (2023-2024) for ISBRA, the Brazilian chapter of the International Society for Bayesian Analysis (ISBA). Currently, he is the Director of the Undergraduate program in Data Science at UFMG (2025-present).

EDUCATIONAL HISTORY

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1. **Postdoctorate**, Universidade Estadual de Campinas (UNICAMP), Brazil, 2011-2012.
Advisor: Victor Hugo Lachos.
 2. **Ph.D. in Statistics**, University of Connecticut, USA, 2011.
Advisor: Jun Yan and Dipak K. Dey.
 3. **Master in Statistics**, Universidade Federal de Minas Gerais (UFMG), Brazil, 2008.
Advisor: Renato Martins Assunção.
 4. **B.S. in Computational Mathematics**, Universidade Federal de Minas Gerais (UFMG), Brazil, 2006.

EMPLOYMENT

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1. 2020–Present: **Associate Professor**, Universidade Federal de Minas Gerais, Brazil.
 2. 2019–2020: **Visiting Professor**, University of Connecticut, USA.

3. 2012–2020: **Adjunct Professor**, Universidade Federal de Minas Gerais, Brazil.
4. 2012–2012: **Visiting Professor (Technical Visit)**, Norwegian University of Science and Technology, Norway.
5. 2009–2011: **Researcher (Collaborator)**, University of Connecticut Health Center, USA.
6. 2007–2011: **Teaching Assistant**, University of Connecticut, USA.
7. 2008–2008: **Researcher (Collaborator)**, University of Connecticut Center for Environmental Sciences and Engineering, USA.
8. 2002–2003: **Intern**, Universidade Federal de Minas Gerais, Brazil.

AWARDS AND HONORS

1. **Research Productivity Scholarship**, CNPq - Level 1D.
2. **Best Paper Award**, 5th Latin American Conference on Statistical Computing (LACSC), 2021.
3. **Best Poster Award**, Encontro Brasileiro de Estatística Bayesiana (EBEB), 2020.
4. **Best Poster Award**, GEOMED, 2017.
5. **Doctoral Dissertation Award**, University of Connecticut, 2011.
6. **Multidisciplinary Environmental Research Award for Graduate Students**, Center for Environmental Sciences and Engineering, University of Connecticut, 2010.
7. **Appreciation for the 2010 Best Performance in Teaching Assistant**, Department of Statistics, University of Connecticut, 2010.

ADMINISTRATIVE AND PROFESSIONAL SERVICE

- **Director**, Undergraduate Program in Data Science, Universidade Federal de Minas Gerais, 2025–Present.
- **Treasurer**, ISBRA (Brazilian Chapter of ISBA), 2023–2024.
- **Council Member**, Brazilian Statistical Association (ABE), 2022–2024.
- **President**, Brazilian Statistical Association (ABE), 2020–2022.
- **Elected Member**, University Council, Universidade Federal de Minas Gerais, 2020–2024.
- **Director**, Graduate Program in Statistics, Universidade Federal de Minas Gerais, 2016–2018.
- **Secretary**, ISBRA (Brazilian Chapter of ISBA), 2015–2016.
- **Deputy Director**, Graduate Program in Statistics, Universidade Federal de Minas Gerais, 2014–2016.
- **Member**, Graduate Program Committee in Statistics, Universidade Federal de Minas Gerais, 2013–Present.

EDITORIAL ACTIVITIES

Member of Editorial Board

- *Bayesian Analysis*, 2025–Present.
- *Brazilian Journal of Probability and Statistics*, 2024–Present.
- *Journal of Agricultural, Biological and Environmental Statistics*, 2015–2018, 2022–Present.
- *Sankhya B*, 2021–Present.
- *Journal of Data Science*, 2020–Present.
- *Statistical Methods in Medical Research*, 2017–2020.

Scientific Journal Referee

Referee for over 30 journals including: *Computational Statistics & Data Analysis*, *Communications in Statistics. Theory and Methods*, *Revista Brasileira de Estatística*, *Statistics and its Interface*, *Journal of Statistical Software*, *Journal of Statistical Computation and Simulation*, *Brazilian Journal of Probability and Statistics*, *Environmental and Ecological Statistics*, *Spatial Statistics*, *Statistics in Medicine*, *Biometrics*, *Journal of Agricultural, Biological and Environmental Statistics*, *Journal of Multivariate Analysis*, *Applied Statistics*, *The R Journal*, *Sankhya (Series A & B)*, *Plos One*, *Bayesian Analysis*, and *Biostatistics*.

Funding Project Reviewer

- Fondo Nacional de Desarrollo Científico y Tecnológico, 2024–Present.
- Coordenação de Aperfeiçoamento de Pessoal de Nível Superior (CAPES), 2021–Present.
- Fundação de Amparo à Pesquisa do Estado de São Paulo (FAPESP), 2021–Present.
- Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq), 2016–Present.

GRANTS RECEIVED

- **New Bayesian and Spatial Modeling.** Financier: CNPq. 2022–Current. (Coordinator)
- **Exact Bayesian Inference in Infinite-dimensional Processes.** Financier: FAPEMIG. 2022–Current. (Coordinator)
- **Advances in Spatial Modeling.** Financier: CNPq. 2019–2023. (Coordinator)
- **Advances in Spatial Statistics in the Big Data Era.** Financier: CNPq. 2019–2021. (Coordinator)
- **New Modeling: Bayesian, Spatial Processes and Hierarchical Models.** Financiers: CNPq, FAPEMIG. 2016–2022. (Coordinator)
- **Development of Models, Method and Computational System for Wind Speed Prediction in Short and Long Term Horizons.** Financier: Companhia Energética de Minas Gerais (Cemig). 2015–2018. (Coordinator)
- **Robust Extensions for Spatial Processes and Generalized Linear Models.** Financier: FAPEMIG. 2014–2016. (Coordinator)
- **InfoSAS: A System for Controlling SUS Production using Machine Learning and Data Mining Techniques.** 2013–2016. (Member)
- **Transformed Gaussian Random Fields.** Financier: UFMG. 2012–2013. (Coordinator)
- **Asymmetric Spatial Processes.** 2012–2013. (Coordinator)
- **Asymmetric Spatial Models using Skew-Normal Scale Mixtures.** Financier: UFMG. 2012–2013. (Coordinator)
- **Integrated Management for Traffic Safety - GISTRAN.** Financier: Empresa de Transportes e Trânsito de Belo Horizonte (BHTRANS). 2011–2012. (Member)
- **Datalive - Machine Learning for Marketing (Extension Project).** 2017–2018. (Coordinator)

STUDENT SUPERVISION

Ph.D. Supervision (Current)

- Lucas Azevedo Birro Michelin (Began 2025, Advisor)
- Syed Muhammad Arsalan (Began 2025, Co-advisor)
- Samuel Faria Cândido (Began 2022, Advisor)
- Maíra Soalheiro (Began 2022, Advisor)

Master's Supervision (Current)

- Marco Antônio Aragão Rocha (Began 2025, Advisor)
- Matheus Borges Faria (Began 2023, Advisor)

Ph.D. Supervision (Completed)

- Gabriel Oliveira Assunção (2025, Advisor)
- Alisson Carlos da Costa Silva (2024, Advisor)
- Guilherme Aguilar (2022, Co-advisor)
- Luis Alejandro Másmela Caita (2021, Co-advisor)
- Douglas Roberto Mesquita Azevedo (2020, Advisor)
- Larissa Sayuri Futino Castro dos Santos (2019, Advisor)
- Zaida Jesus Quiroz Cornejo (2018, Advisor)
- Ali Abolhassani (2018, Co-advisor)
- Nívea Bispo da Silva (2017, Advisor)

Master's Supervision (Completed)

- Lucas Azevedo Birra Michelin (2023, Advisor)
- Nara Maria de Oliveira Dornela (2022, Co-advisor)
- Samuel Faria Cândido (2022, Advisor)
- Vitor Faria de Carvalho Oliveira (2022, Advisor)
- Felipe Amorim Sousa (2021, Advisor)
- Thais Pacheco Menezes (2020, Advisor)
- Carla Paula Soares Moreira (2020, Co-advisor)
- Ana Carolina Fernandes Dias (2019, Advisor)
- Gabriel Henrique Oliveira Assunção (2018, Advisor)
- Douglas Roberto Mesquita Azevedo (2016, Advisor)
- Ana Gabriela Braga (2016, Advisor)
- Milton Pifano Soares Ferreira (2016, Advisor)
- Larissa Sayuri Futino Castro dos Santos (2015, Advisor)
- Daniela Lima Magalhães (2015, Co-advisor)
- Renan Xavier Cortes (2014, Advisor)
- Zaida Quiroz Cornejo (2014, Advisor)
- Calisto Manuel Máquina (2014, Co-advisor)

Undergraduate and Specialization Supervision (Completed)

- 6 Specialization Monographs advised (2013–2024)
- 14 Undergraduate Theses advised (2013–2022)

TEACHING EXPERIENCE

Universidade Federal de Minas Gerais (2012–Present)

- **Graduate Courses:** Machine Learning, Generalized Linear Models.
- **Undergraduate Courses:** Advanced Topics in R Programming, Computational Methods for Data Science, Insurance Pricing, Introduction to Statistics, Linear Regression, Data Mining, Statistical Packages, Probability, Statistics I, Statistics and Probability for various departments (Computer Science, Engineering, Information Systems).
- **Short Courses/Tutorials:** Statistical Analysis of Spatial Data and Visualization with Google Map (USP & New England Statistics Symposium), Introduction to Spatial Statistics with R (MGEst), R and GoogleMaps (EMR), SPSS and Spatial Statistics.

University of Connecticut (2007–2011)

- **Undergraduate Courses:** Analysis of Experiments (Linear Regression), Introduction to Mathematical Statistics (Inference), Introduction to Mathematical Statistics (Probability), Introduction to Statistics, Elementary Concepts of Statistics.

SOFTWARE / R PACKAGES

1. Lachos, V. H.; Dey, Dipak K.; **Prates, Marcos O.** *HeckmanEM: Fit Normal or Student-t Heckman Selection Models*. 2021.
2. Ordonez, J. A.; **Prates, Marcos O.**; Lachos, V. H.; Matos, L. A. *OBASpatial: Objective Bayesian Analysis for Spatial Regression Models*. 2020.
3. Azevedo, D. R. M.; **Prates, Marcos O.**; Bandyopadhyay, D. *RASCO: An R Package to Alleviate Spatial Confounding*. 2020.
4. Azevedo, D. R. M.; **Prates, Marcos O.** *TGMRF: Transformed Gaussian Markov Random Fields for Poisson regression*. 2019.
5. Azevedo, D. R. M.; **Prates, Marcos O.**; Assunção, R. M. *FLAMES: Binary regression for Flexible Link function with AssymptotES*. 2019.
6. **Prates, Marcos O.**; Costa, M. A.; Santos, M. A. C. *RBHTrans*. 2012.
7. Garay, A. M.; **Prates, Marcos O.**; Lachos, Víctor Hugo. *nlsmsn: Fitting nonlinear models with scale mixture of skew-normal distributions*. 2012.
8. Matos, L. A.; **Prates, Marcos O.**; Lachos, V. H. *tlmec: Linear Student-t Mixed-Effects Models with Censored Data*. 2011.

9. **Prates, Marcos O.**; Lachos, V. H.; Cabral, Celso R. B. *Fitting finite mixture of scale mixture of skew-normal distributions*. 2010.
10. **Prates, Marcos O.**; Correa, T. R.; Assunção, R. M. *Surveillance to detect emerging space-time clusters*. 2006.
11. Yan, Jun; **Prates, Marcos O.** *fusing R with OpenBugs*. 2004.

EVENT ORGANIZATION

1. Martinez, M. D. U.; Etxeberria, J.; Faes, C.; Kirby, R.; Berrocal, V.; Schmidt, A. M.; Macnab, Y.; Blangiardo, M.; Fronterre, C.; Pearce, J.; **Prates, Marcos O.**; Riebler, A.; Beneit, M. A. M.; Moraga, P.; Lee, D.; Deardon, R.. GEOMED 2026, 2026. (Congress, Cientific Committee)
2. **Prates, Marcos O.**; Loschii, R. H.. Workshop in Bayesian Methods for Health Research, 2025. (Other, Event Organization)
3. Loschi, R. H.; Vallejos, A. J.; Schmidt, A. M.; Bayes, C. L.; Gamerman, D.; Pena, E. G.; Demarqui, Fabio N.; Lopes, H.; **Prates, Marcos O.**; Andrade Filho, M. C.; Stern, R. B.; Petrone, S.; Banerjee, S.. COBAL-EBEB: VII Latin American Meeting on Bayesian Statistics (COBAL) and XVII Brazilian Meeting of Bayesian Statistics (EBEB), 2024. (Congress, Event Organization and head of the Cientific Committee)
4. **Prates, Marcos O.**; Loschii, R. H.; Demarqui, Fabio N.; Pires, M. C.. 1st Workshop in Spatial Statistics for Complex Data, 2024. (Other, Event Organization)
5. **Prates, Marcos O.**; Zuanetti, D. A.; Bayer, F. M.; Bastiani, F.; Leonardi, F.; Nobre, J. S.; Goncalves, K. C. M.; Matos, L. A.; Costa, L. C. C.; Pereira, M. B.; Bonat, W. H.. 25th SINAPE - Brazilian symposium on probability and statistics, 2024. (Congress, Head of the Cientific Committee)
6. **Prates, Marcos O.**; V. H. Lachos; Garay, A. M.; Louzada Neto, F.; Valle, C. A.; Guzman, J. L. B.. A new era of statistical science, 2023. (Congress, Head of the Event Organization and head of the Cientific Committee)
7. Francisco Neto, A.; Torres, C. E. G.; Ferraz, D.; Oliveira, H. C.; Silva, I. R.; Duczmal, L. H.; **Prates, Marcos O.**; Barrenechea, M. H. V.; Ribeiro, M. M.; Mukhopadhyay, N.; Santolin, R. S.; Fernandes, R. S.. 8th International workshop in sequential methodologies (IWSM2022), 2023. (Congress, Event Organization)
8. Ehlers, R.; Gonzalez-Lopez, V.; Branco, M. D.; V. H. Lachos; **Prates, Marcos O.**; Polpo, A.; Loschii, R. H.. 16th Brazilian Meeting of Bayesian Statistics, 2022. (Congress, Cientific Committee)
9. **Prates, Marcos Oliveira**; Matos, L. A.; Cabral, Celso R. B.. 24th SINAPE - National symposium on probability and statistics, 2022. (Congress, Head of Event Organization and Cientific Committee)
10. **Prates, Marcos O.**. ABE Award 2020, 2021. (Other, Head of the Event Organization)
11. Silva, D. B. N.; **Prates, Marcos O.**; Toledo, M. L.; Magalhaes, M. S.. XVII School of regression models - EMR 2021, 2021. (Congress, Event Organization)
12. **Prates, Marcos O.**; Galletti, T. P.. International Hub for the UConn Sports Analytics Symposium, 2020. (Congress, Event Organization)

13. Galletti, T. P.; Montenegro, L. C. C.; Reia, E. A.; **Prates, Marcos Oliveira**; Azevedo, D. R. M.; Ferreira, M. P. S.. RStudio::conf Watch Party - Belo Horizonte, 2020. (Congress, Event Organization)
14. Pires, M. C.; Ribeiro, A. J. F.; Alves, D. D. S. M.; Montenegro, L. C. C.; Santos, M. A. C.; Silva, R. W. C.; Loschii, R. H.; Santos, T. R.; Mayrink, Vinícius D.; Souza, W. B.; Franco, G. C.; Colosimo, E. A.; **Prates, M. O.** XV MGEST - Minas Gerais meeting of statistics, 2017. (Congress, Event Organization)
15. Goncalves, F. B.; **Prates, M. O.**; Mayrink, Vinícius D.; Loschii, R. H.; Franco, G. C.; Demarqui, Fabio N.; Sanchez, L. E. B.. XIII EBEB - Brazilian meeting of bayesian statistics, 2016. (Congress, Event Organization and Cientific Committee)
16. Cordeiro, G. M.; V. H. Lachos; Sanchez, L. E. B.; Colosimo, E. A.; Morais, A. L.; Demarqui, Fabio N.; **Prates, M. O.**; Souza, W. B.. IV Workshop on survival analysis and applications, 2015. (Congress, Event Organization)
17. **Prates, Marcos O.**; Alves, D. D. S. M.; Demarqui, Fabio N.; Santos, M. A. C.; Assunção, Renato M.; Loschii, R. H.. III Minas Gerais forum of statistics and probability, 2014. (Congress, Event Organization)
18. Chen, M.; Pozdnyakov, Vladimir; Yan, Jun; **Prates, M. O.**.. 25th New England Statistical Symposium, 2011. (Congress, Event Organization)

PUBLICATIONS

Books and Book Chapters

1. Gamerman, D.; **Prates, Marcos O.**; Galletti, T. P.; Mayrink, Vinícius D. (2021). *Bayesian Inference: An Introductory Course*. Boca Raton: CRC Press, 368p.
2. Assunção, Renato M.; Souza, Roberto C. S. N.; **Prates, Marcos O.** (2020). Chapter in *Scan Statistics*. Eds: Joseph Glaz, Markos V. Koutras. New York: Springer, pp. 1-24.
3. Assunção, R. M.; Costa, M. A.; **Prates, Marcos O.**; Silva, L. G. S. E. (2014). Chapter in *Computational Actuarial Science with R*. Ed: Arthur Charpentier. Boca Raton: Chapman & Hall, pp. 207-256.

Refereed Journal Articles

1. Oliveira, Marcos S.; **Prates, Marcos O.**; Galarza, Christian E.; Lachos, Victor H. Influence diagnostics in the Heckman selection models based on EM algorithms. *JOURNAL OF APPLIED STATISTICS*, 2025. <https://doi.org/10.1080/02664763.2025.2461715> (Accepted)
2. **Prates, Marcos O.**; Quiroz, Zaida C.; Hu, Zhiyong; Dey, Dipak K. Fast Generalized Spatial Multilevel blockNNGP Modeling. *Econometrics And Statistics*, 2024. <https://doi.org/10.1016/j.ecosta.2024.11.001> (Accepted)
3. Assunção, G. O.; Izbicki, R.; **Prates, Marcos O.** Is Augmentation Effective in Improving Prediction in Imbalanced Datasets?. *JOURNAL OF DATA SCIENCE*, 2024. <https://doi.org/10.6339/24-JDS1154> (Accepted)

4. Michelin, Lucas; Godoy, Lucas C.; Ramos, Heitor S.; **Prates, Marcos O.** Fast mixture spatial regression: A mixture in the geographical and feature space applied to predict porosity in the post-salt. *Spatial Statistics*, v. 65, p. 100873, 2025.
5. **Prates, Marcos O.**; Gamerman, D.; Candido, S. F.; Castro, L. M. A multivariate generalized logistic approach with spatially varying nonlinear components for modeling epidemic data. *SPATIAL AND SPATIO-TEMPORAL EPIDEMIOLOGY*, v. 53, p. 100718, 2025.
6. Dornela, Nara; Rezende, Sonaly; **Prates, Marcos O.**; Viana, Ester; Marcial, Pablo. Análise da prestação de serviços de saneamento em Minas Gerais: perspectivas econômica e social. *Revista de Política Públicas da UFMA*, v. 28, p. 693-714, 2025.
7. Silva, Alisson Cc; Demarqui, Fábio N; Silva, Braulio F; **Prates, Marcos O.** The analysis of criminal recidivism: a hierarchical model-based approach for the analysis of zero-inflated, spatially correlated recurring event data. *JOURNAL OF THE ROYAL STATISTICAL SOCIETY SERIES A-STATISTICS IN SOCIETY*, p. 1-29, 2025.
8. Ordoñez, Jose A.; **Prates, Marcos O.**; Matos, Larissa A.; Lachos, Victor H. Objective Bayesian analysis for geostatistical Student-t processes. *Journal of Spatial Science*, v. 69, p. 61-79, 2024.
9. Ordoñez, José A.; **Prates, Marcos O.**; Bazán, Jorge L.; Lachos, Victor H. Penalized complexity priors for the skewness parameter of power links. *CANADIAN JOURNAL OF STATISTICS-REVUE CANADIENNE DE STATISTIQUE*, v. 52, p. 98-117, 2024.
10. Menezes, T. P.; **Prates, Marcos O.**; Assunção, R. M.; Castro, M. S. M. Latent archetypes of the spatial patterns of cancer. *STATISTICS IN MEDICINE*, v. 43, p. 5115-5137, 2024.
11. Masmela-Caita, L. A.; Galletti, T. P.; **Prates, Marcos O.** Imputation of missing data using Gaussian linear cluster-weighted modeling. *Brazilian Journal of Probability and Statistics*, v. 38, p. 479-502, 2024.
12. Abolhassani, Ali; **Prates, Marcos O.**; Mahmoodi, Safieh. Irregular Shaped Small Nodule Detection Using a Robust Scan Statistic. *Statistics In Biosciences*, v. 15, p. 141-162, 2023.
13. Quiroz, Zaida C.; **Prates, Marcos O.**; Dey, Dipak K.; Rue, Håvard. Fast Bayesian inference of block Nearest Neighbor Gaussian models for large data. *STATISTICS AND COMPUTING*, v. 33, p. 54, 2023.
14. V. H. Lachos; Rojas, M. G.; Zeller, C. B.; **Prates, Marcos O.** Likelihood-based inference for linear mixed-effects models using the generalized hyperbolic distribution. *Stat*, v. 12, p. e602, 2023.
15. García, Carlos; Quiroz, Zaida; **Prates, Marcos O.** Bayesian spatial quantile modeling applied to the incidence of extreme poverty in Lima-Peru. *COMPUTATIONAL STATISTICS*, v. 38, p. 603-621, 2023.
16. Azevedo, Douglas Rm; **Prates, Marcos O.**; Bandyopadhyay, Dipankar. Alleviating spatial confounding in frailty models. *BIOSTATISTICS*, v. 24, p. 945-961, 2023.
17. **Prates, Marcos O.**; Azevedo, D. R. M.; Macnab, Y.; Willig, Michael R. Non-Separable Spatio-temporal Models via Transformed Multivariate Gaussian Markov Random Fields. *JOURNAL OF THE ROYAL STATISTICAL SOCIETY SERIES C-APPLIED STATISTICS*, v. 71, p. 1116-1136, 2022.

18. Guzman, J. L. B.; Ari, S. F.; Bolfarine, H.; **Prates, Marcos O.** Spatial regression models for bounded response variables with evaluation of the degree of dependence. *Statistics and Its Interface*, v. 14, p. 95-107, 2021.
19. Schumacher, F. L.; Ferreira, C. S.; **Prates, Marcos O.**; Lachos, V. H. A robust nonlinear mixed-effects model for COVID-19 death data. *Statistics and Its Interface*, v. 14, p. 49-57, 2021.
20. Azevedo, D. R. M.; **Prates, Marcos O.**; Assunção, R. M. Estimating hidden populations by transferring knowledge from geographically misaligned levels. *STATISTICAL METHODS IN MEDICAL RESEARCH*, v. 30, p. 62-74, 2021.
21. Valeriano, K. A. L.; V. H. Lachos; **Prates, Marcos O.**; Matos, L. A. Likelihood-based inference for spatiotemporal data with censored and missing responses. *ENVIRONMETRICS*, v. 32, p. e2663, 2021.
22. V. H. Lachos; **Prates, Marcos O.**; Dey, Dipak K. Heckman selection-t model: Parameter estimation via the EM-algorithm. *JOURNAL OF MULTIVARIATE ANALYSIS*, v. 184, p. 104737, 2021.
23. Raquel, G. C.; Conceição, K. S.; Andrade Filho, M. G.; **Prates, Marcos O.** A zero-modified Poisson mixed model with generalized random effect. *JOURNAL OF STATISTICAL COMPUTATION AND SIMULATION*, v. 91, p. 2457-2474, 2021.
24. Bandyopadhyay, D.; **Prates, Marcos O.**; Zhao, X.; Lachos, Victor H. Spatial skew-normal/independent models for nonrandomly missing clustered data. *STATISTICS IN MEDICINE*, v. 40, p. 3085-3105, 2021.
25. Ramos, Rafael G.; Silva, Bráulio F. A.; Clarke, Keith C.; **Prates, Marcos O.** Too Fine to be Good? Issues of Granularity, Uniformity and Error in Spatial Crime Analysis. *JOURNAL OF QUANTITATIVE CRIMINOLOGY*, v. 37, p. 419-443, 2021.
26. Costa, Marcelo Azevedo; Ruiz-Cárdenas, Ramiro; Mineti, Leandro Brioschi; **Prates, Marcos O.** Dynamic Time Scan Forecasting for multi-step wind speed prediction. *RENEWABLE ENERGY*, v. 177, p. 584-595, 2021.
27. Abolhassani, A.; **Prates, Marcos O.** An up-to-date review of scan statistics. *Statistics Surveys*, v. 15, p. 111-153, 2021.
28. **Prates, Marcos O.**; Azevedo, D. R. M.; Godoy, L. C.; Bandyopadhyay, D. Can transformed Gaussian Markov random fields handle spatial confounding? *Journal of the Indian Statistical Association*, v. 59, p. 197-220, 2021.
29. Azevedo, Douglas R. M.; **Prates, Marcos O.**; Bandyopadhyay, Dipankar. MSPOCK: Alleviating Spatial Confounding in Multivariate Disease Mapping Models. *Journal of Agricultural, Biological, and Environmental Statistics*, v. 26, p. 464-491, 2021.
30. Gonçalves, F. B.; **Prates, Marcos O.**; V. H. Lachos. Robust Bayesian model selection for heavy-tailed linear regression using finite mixtures. *Brazilian Journal of Probability and Statistics*, v. 34, p. 51-70, 2020.
31. Abolhassani, Ali; **Prates, Marcos O.**; Castellare, Fredy; Mahmoodi, Safieh. Zero-inflated Bell scan: A more flexible spatial scan statistic. *Spatial Statistics*, v. 36, p. 100433, 2020.
32. Azevedo, D. R. M.; Bandyopadhyay, D.; **Prates, Marcos O.**; Abdel-Salam, A. G.; Garcia, D. Assessing spatial confounding in cancer disease mapping using R. *CANCER REPORTS*, p. 1-11, 2020.

33. Silva, N. B.; **Prates, Marcos O.**; Gonçalves, F. B. Bayesian linear regression models with flexible error distributions. *Journal of Statistical Computation and Simulation*, v. 90, p. 2571-2591, 2020.
34. **Prates, Marcos O.** Spatial extreme learning machines: An application on prediction of disease counts. *STATISTICAL METHODS IN MEDICAL RESEARCH*, v. 28, p. 2583-2594, 2019.
35. Castellare, F.; **Prates, Marcos O.**; Abolhassani, A. Comments on 'A spatial scan statistic for compound Poisson data'. *STATISTICS IN MEDICINE*, v. 38, p. 1297-1299, 2019.
36. V. H. Lachos; Cabral, Celso R. B.; **Prates, Marcos O.**; Dey, Dipak K. Flexible regression modeling for censored data based on mixtures of student-t distributions. *COMPUTATIONAL STATISTICS*, v. 34, p. 123-152, 2019.
37. Franco, G. C.; Migon, H. S.; **Prates, Marcos O.** Time series of count data: A review, empirical comparisons and data analysis. *Brazilian Journal of Probability and Statistics*, v. 33, p. 756-781, 2019.
38. **Prates, Marcos O.**; Assunção, Renato Martins; Rodrigues, Erica Castilho. Alleviating Spatial Confounding for Areal Data Problems by Displacing the Geographical Centroids. *Bayesian Analysis*, v. 14, p. 623-647, 2019.
39. Máquina, C. M.; Demarqui, Fabio N.; **Prates, Marcos O.**; Santos, N. T. Análise de Dados de Sobrevivência Espacialmente Correlacionados. *REVISTA BRASILEIRA DE BIOMETRIA*, v. 37, p. 419-434, 2019.
40. Quiroz, Zaida C.; **Prates, Marcos O.** Bayesian spatio-temporal modelling of anchovy abundance through the SPDE Approach. *Spatial Statistics*, v. 28, p. 236-256, 2018.
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