Joshua Hewitt

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Education

Since 2013 Ph.D. candidate Statistics, Colorado State University

Advisor: Jennifer A. Hoeting

2018 Graduate teaching certificate Colorado State University

2009 M.S.E. Applied Mathematics & Statistics, Johns Hopkins University

2009 B.S. with general honors Applied Mathematics & Statistics, Johns Hopkins University

Experience

2019–present2009–2013Duke University, Postdoctoral AssociateBooz Allen Hamilton, Statistician

Publications

 Hewitt, J., Fix, M. J., Hoeting, J. A., and Cooley, D. S. (2018). Improved return level estimation via a weighted likelihood latent spatial extremes model. Accepted for publication in the Journal of Agricultural, Biological, and Environmental Statistics (JABES).

20. Hewitt, J., Hoeting, J. A., Done, J. M., and Towler, E. (2018). Remote effects spatial process models for modeling teleconnections. *Environmetrics*, e2523, https://doi.org/10.1002/env.2523.

- 3. Schmeer, S. R., Kampf, S. K., MacDonald, L. H., Hewitt, J., and Wilson, C. (2018). Empirical models of annual post-fire erosion on mulched and unmulched hillslopes. *Catena*, **163**, 276–287.
- 4. Vidal, C., Hewitt, J., Davis, S., Younes, L., Jain, S., and Jedynak, B. (2009). Template registration with missing parts: Application to the segmentation of M. tuberculosis infected lungs. In *Biomedical Imaging: From Nano to Macro, 2009. ISBI'09. IEEE International Symposium* on (pp. 718-721). IEEE.

Workshops

Hewitt, J., Scharf, H., and Fix, M. (2015). Tutorial on Parallel Programming in R. *American Statistical Association Conference on Statistical Practice*, New Orleans, Louisiana. February 2015.

Software

Hewitt, J. (2018). "telefit: Estimation and Prediction for Remote Effects Spatial Process Models". *R package* http://CRAN.R-project.org/package=telefit

Presentations

Invited talks

2018 Improved return level estimation via a weighted likelihood latent spatial extremes model. *Stochastic Weather Generators Conference*, Boulder, Colorado. October, 2018.

Contributed talks

- Improved return level estimation via a weighted likelihood latent spatial extremes model. *Joint Statistical Meetings*, Vancouver, British Columbia. August 2018.
- 2017 2. Remote effects spatial process models for teleconnection. *Joint Statistical Meetings*, Baltimore, Maryland. August 2017.

Departmental seminars

- 2018 1. National Center for Atmospheric Research, Boulder, Colorado.
- 2017 2. University of Chicago, Chicago, Illinois.
- 2016 3. Colorado State University, Fort Collins, Colorado.
 - 4. National Center for Atmospheric Research, Boulder, Colorado.
- 5. Colorado State University, Fort Collins, Colorado.
- 2014 6. Colorado State University, Fort Collins, Colorado.

Posters

- 1. Hewitt, J., Fix, M. J., Hoeting, J. A., and Cooley, D. S. Improved return level estimation via a weighted likelihood latent spatial extremes model. *ENVR Workshop: Research, Practice and Policy*, Ahseville, North Carolina. October 2018.
 - 2. Hewitt, J., Fix, M. J., Hoeting, J. A., and Cooley, D. S. Improved return level estimation via a weighted likelihood latent spatial extremes model. *Institute for Mathematics and its Applications Workshop on Frontiers in Forecasting*, Minneapolis, Minnesota. February 2018.
- 3. Bowser, G., Le Mat, A., Hewitt, J., and Wood, T. GoPollinators: Detecting pollination interactions with GoPro and Field cams. *Ecological Society of America Annual Meeting*, Portland, Oregon. August 2017.
 - 4. Hewitt, J., Hoeting, J. A., Done, J. M., and Towler, E. Remote effects spatial process models for modeling teleconnections. *Challenges in the Statistical Modeling of Stochastic Processes for the Natural Sciences*, Banff, Alberta. June 2017.
 - 5. Hewitt, J., Hoeting, J. A., Done, J. M., and Towler, E. A geostatistical model for teleconnections. *Poster session for admitted CSU statistics graduate students*, Fort Collins, Colorado. March 2017.
- 2016 6. Hewitt, J., Hoeting, J. A., Done, J. M., and Towler, E. A spatial-statistical approach to modeling teleconnections. *The* 13th *International Meeting on Statistical Climatology*, Canmore, Alberta. June 2016.
 - 7. Hewitt, J., Hoeting, J. A., and Done, J. M. Modeling climate teleconnections. *ENVR/EnviBayes Workshop on Bayesian Environmetrics*, Columbus, Ohio. March 2016.
- 2015 8. Hewitt, J., Wang, H., Leisz, S., and Fisher, C. Morphological and statistical detection of archaeological features in LIDAR imagery. *Poster session for admitted CSU statistics graduate students*, Fort Collins, Colorado. March 2015.

Teaching

Courses taught at Colorado State University

2017 Statistics for Behavioral Sciences II (STAT 312)

Instructor; Spring 2017, Fall 2017

2015–2016 Introduction to Biostatistics (STAT 307)

Instructor; Spring 2015, Spring 2016

2014 Introduction to Statistics (STAT 301)

Instructor; Fall 2014

2013–2014 Introduction to Statistics (STAT 201)

Teaching assistant; Fall 2013, Spring 2014

Honors

2018 1. Sustainability Leadership Fellow; School of Global Environmental Sustainability, Colorado State University.

2017 2. Student paper award; Section on Statistics and the Environment, American Statistical Association.

3. Education and Service award; Department of Statistics, Colorado State University.

4. Poster award; Department of Statistics, Colorado State University.

5. Summer fellow; Center for Interdisciplinary Mathematics and Statistics, Colorado State University.

2013 6. University graduate fellowship; Colorado State University.

Travel grants

2016–2017 **STATMOS travel grants**

Funding from the NSF-supported Research Network for Statistical Methods for Atmospheric & Oceanic

Sciences (STATMOS) to present research at related workshops and conferences.

2016 Rossbypalooza

Funding from the University of Chicago to attend a graduate student workshop on climate and statistics.

Service

2018 Session Chair

Stochastic Weather Generators Conference – Dynamics and Forecasting

Joint Statistical Meetings – Spatial and Spatiotemporal Modeling in Climate and Meteorology

2017–2018 Stat Alliance at Colorado State University

Co-Founder of American Statistical Association Student chapter at Colorado State University.

STATMOS liaison at Colorado State University

Liaison to CSU graduate students involved in the NSF-supported STATMOS research network.

2016–2017 Graduate teaching assistant mentor

Mentor to junior graduate student instructors at Colorado State University.

2015–2016 Student-organized activities and research seminars coordinator

Co-coordinator of student-organized seminar series at Colorado State University.