ASA II Section on Statistics and the Environment

ASA Section on Statistics and the Environment Newsletter
Winter Edition 2024
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Message from Outgoing ENVR Chair

It has been an immense privilege serving as ENVR Chair. 2023 has witnessed inspiring research, mentoring initiatives, and engaging events of our thriving community. Many of us caught up and celebrated the accomplishments of ENVR members at Toronto. Looking ahead to 2024, we look forward to the upcoming JSM gathering in Portland, followed by our ENVR workshop hosted at the National Center for Atmospheric Research (NCAR)!

Heartfelt gratitude extends to the dedicated members of the 2023 ENVR Executive Board for their service and commitment to the ENVR community. We encourage everyone to reach out to any board member with innovative ideas or express interest in collaborating with the ENVR Board. Additionally, immense appreciation goes to the 2023 ENVR award committee members for efforts in recognizing the exceptional accomplishments and contributions to our students and members.

A special acknowledgement is due to the members of the 2024 ENVR Workshop organizing committee for their diligence in setting the stage. As we embrace the leadership of Chair William Christensen and the new 2024 Board, we look forward to another year of growth, innovation, and collaborative success.

Bo Li
2023 ENVR Chair

Message from Incoming ENVR Chair

Happy New Year everyone! I am delighted to serve as the Chair of ENVR this year. We are very fortunate to have had strong leadership and an active ENVR Executive Committee for many years. Most recently, Bo Li has served with distinction, and I am grateful for her thoughtfulness and vision.

This year, the ASA Section on Statistics and the Environment is offering great opportunities to get involved in mentoring, professional development, and staying up with the cutting edge of environmental statistics. Notably, watch for an exciting program sponsored by ENVR at the Joint Statistical Meetings in Portland, Oregon from August 3 to August 8. Then, don't miss our biennial ENVR Workshop, October 3-5, 2024, at the beautiful NCAR Mesa Lab in Boulder, Colorado. This year's program will include events that will honor the contributions and influence of Doug Nychka, who has profoundly impacted the work and lives of many in our community. This workshop promises to be an intellectually stimulating, productive, and rewarding weekend. I look forward to seeing you!

William Christensen
2024 ENVR Chair

JSM 2023 Debrief

JSM was held in person in 2023 in Toronto, Ontario, Canada. Thanks to the organizers and participants, ENVR had a strong scientific program during JSM 2023. We sponsored or co-sponsored 5 invited sessions, 3 topic-contributed sessions, 8 contributed sessions, and 2 poster sessions. It was great for us as a community to meet in person, interact, and strengthen connections. We are also proud that ENVR has been supporting junior statisticians and data scientists via organizing the annual ENVR Mentoring Roundtable and the ENVR Student Paper Competition during JSM. I hope you enjoyed this in-person JSM 2023. We look forward to seeing you in person at JSM 2024 in Portland, Oregon!

Eric Gilleland
2023 JSM Program Chair

Figure 1: (a) ENVR mixer on Aug. 7th. (b) Newly elected ASA Fellow Dan Cooley. (c) Newly elected IMS Fellow Dale Zimmerman. (d) Distinguished Achievement Award winner Dan Cooley. Early Investigator Award recipients: (e) Rajarshi Guhaniyogi and (f) Staci Hepler.

Figure 2: ENVR student paper award winners: (a) Bora Jin, Duke University; (b) Eva Murphy, Clemson University; (c) Claire Heffernan, Johns Hopkins University; (d) Myungsoo Yoo, University of Missouri; (e) Matthew Bonas, University of Notre Dame.

2024 ENVR Workshop in Boulder CO, October 3-5

The 2024 ENVR Workshop will be held October 3-5, 2024, at the NCAR Mesa Lab in Boulder, CO. The theme of the conference will be "Advances in Spatial Statistics with Applications to Climate and the Environment."

One of the reasons this conference will be returning to NCAR is that part of the conference--including a special session and a banquet--will be dedicated to honor the career and impact of Doug Nychka who is and has been a seminal figure in the climate and environmental statistics communities. Doug spent 20 years at NCAR as a leader and mentor in developing new mathematics and statistics applied to climate and environmental sciences. October is a beautiful time of year in Colorado so save the date and plan ahead! More details to come.

Eric Gilleland & William Christensen
2024 ENVR Workshop Co-Chairs

2024 Data Challenge

The ENVR Data Challenge, an idea initiated by Chris Wikle in 2019, will be resumed this year. The competition is open to student groups of up to four participants (anyone actively enrolled in K-12, undergraduate, or graduate school who has not yet obtained a PhD; note that a team can have a mixture of participants with different experience levels) and may include one additional non-student senior collaborator. This contest challenges participants to analyze massive and complex environmental datasets using statistical, machine learning, and visualization tools and methods. Much of the contest rules and submission requirements will follow those of the 2020 Data Challenge [URL: https://shorturl.at/abcI7]. At least one member from winning teams will be invited to present their results at the 2024 ENVR Workshop in Boulder, CO (October 3-5, 2024). Details will be released soon; stay tuned!

Whitney Huang
2024 ENVR Data Challenge Chair

Upcoming ENVR Award Nominations

Every year ENVR solicits nominations for the ENVR Distinguished Achievement Award (DAA) (formerly, Distinguished Achievement Medal) and the ENVR Early Investigator Award (EIA) (formerly called the Young Investigator Award). Both are given in recognition of outstanding contributions to the development of methods, issues, concepts, applications, and initiatives in environmental statistics. The section uses a broad definition of environmental statistics--from theoretical/foundational through applications and policy--and seeks to recognize the full range of activities that academic, governmental, and industrial statisticians and scientists study in statistics and the environment. Environmental statistics is interdisciplinary, and outstanding contributions may occur outside of traditional disciplinary niches.

The upcoming award nominations will be announced in early 2024 with a due date in Spring 2024. As you think of your colleagues to nominate, refer to the nomination criteria as a guide.

2024 Elected Officers (ENVR Executive Board)

Chair: William Christensen, Brigham Young University
Past Chair: Bo Li, University of Illinois
Chair-Elect: Mikyoung Jun, University of Houston
Secretary: Lyndsay Shand, Sandia National Laboratories
Treasurer: Toryn Schafer, Texas A&M University
Publications Chair: Whitney Huang, Clemson University
Publications Chair-Elect: Ander Wilson, Colorado State University
Program Chair: Soutir Bandyopadhyay, Colorado School of Mines
Program Chair-Elect: Abhirup Datta, Johns Hopkins University
COS Rep (2024-2026): Ali Arab, The Georgetown University