

April 19, 2021 Social Science Working Group Call

Attendees: Kira Sullivan Wiley, Whitney Woelmer, Mike Gerst, Cindy Hu, Güray Hatipoğlu, Melissa Kenney, Jody Peters, Jeff Morissette

Agenda/Notes:

1. Plan for virtual call about forecast and uncertainty visualization (Melissa, Mike, Whitney)
May 17 at 2pm
 - 9 registrants so far
 - Will send ad to Ecolog, EFI Newsletter listserv on April 26
 - Kira will provide an introduction
 - Jody will make everyone in this group co-hosts so you can help with muting people and if need be remove anyone who is acting inappropriately
 - We will record the talk to make available
 - Has out details for the call - 5 min intro. Mike/Melissa - have 30 min and Whitney have 10 min. Then 15 min of Q&A
 - Use Poll Everywhere for Q&A
2. Plan for meetings in June-August and our next joint Social Science/Partners call (tentatively scheduled for June)
 - Google doc with Joint Call Ideas
 - Can use the May panels/presentation as our joint call.
 - Jody will send out a poll for calls for June-August
3. Blog Post Updates
 - Mike Gerst - still on the back burner
 - Jaime
 - Güray - have been in touch with Jaime and Kira and it is coming along.
 - Reminder the goal of the series is to introduce themes or ideas in the social sciences that are relevant to the ecological forecasting community. Providing a case example of the topic. Not to be hugely in-depth. Here is a topic, here is how it is relevant, and here are some suggested readings.
 - Will hope to get Güray's post up in the next month or so and then
4. Visualization Best Practices Brainstorm
 - Start of a bibliography to compile resources
 - Gerst et al 2020
<https://journals.ametsoc.org/view/journals/wcas/12/1/wcas-d-18-0094.1.xml>
 - EFI Task Views about coming up is about visualizing forecasts, decision support. There has been discussion about having this group participate with the CI/Methods working groups on this Task View
 - Rule from Mike from work he and Melissa have done:

- Remind people to keep it simple. Figure out the 1-2 important patterns or things that they want people to know and match to that. Don't include a bunch of extraneous things
- Can improve a graphic 70% by simple best practices. If you have a knack for thinking about it from a user perspective then can have something useful.
- Flipping your thinking from producing material for scientists in your own discipline vs scientists or others outside your discipline
- If you design it for the public then you can improve understanding for people with high numeracy as well as general public
- Being able to find info and contextualize it for your own purposes is one of those things when you are relying the visualization
- What are the key requirements or considerations for visualizing ecoforecasting?
 - Some elements useful for eco forecasting
 - Input data and uncertainty, modeling techniques and uncertainty of the model
 - Something as simple as taxonomy of uncertainty judgement. The reason why you are including uncertainty. What are you trying to get people to understand
- 2 types of options - report for lay person, report for specialized person
 - Value for thinking about how someone would use the visualization or how to build the visualization
 - The difference between present in peer-review vs presenting in any other forum.
 - Example from the diagrams in IPCC report - if you have visualization experts break it down and test efficacy there are ways of keeping the same complexity, but presenting it in a way that is more accessible so that it will be interpreted correctly.
 - Big thing - you aren't there to contextualize what people are interpreting you want to increase the likelihood that they are getting it right
 - If you increase understanding for the general public, you do so for the the experts as well
- Want to provide best practices even if they are not specific to ecoforecasting.
 - For example, Cindy added a book by Edward Tufte that has pretty simple rules about visualization
 - Golden principles for visualization and think about how to apply that info to things related to forecasting (e.g., input data, modeling, parameters, uncertainty)
 - Balance Tufte with some other texts, especially evidence-/ experimental- based works
 - Guidance for printed world vs people on their phones

- Mike has a resource from a few years back that brought some of these resources together and compared them
- Melissa says a lot can be done on static graphics
 - User-controlled graphics are especially interesting, where there is a lot of user choice
 - Human-centered design and computing-- this is important and worth doing a deep dive on
- Cindy can take a first stab at pulling together some high level “rules” from Tufte-- she will link this next to the Tufte reference in Whitney’s bibliography doc
- Mike G will link the paper he mentioned above into Whitney’s bibliography doc