December 8, 2020 Social Science Working Group Call

Attendees: Cindy Hu, Kira Sullivan-Wiley, Jody Peters, Güray Hatipoğlu, Mike Dietze, Jaime Ashander

Agenda/Notes:

- 1. Vignette for visualizing data/metadata formatted and archived using the <u>Forecasting</u> <u>Standards (</u>how to archive forecast and its metadata)
 - Update from Jaime
 - https://eco4cast.github.io/EFIstandards/articles/visualization-example.html
 - 'it doesn't appear in the headings for some reason but scroll down to <u>https://eco4cast.github.io/EFIstandards/articles/visualization-example.html#visualizing-the-data</u> to see the actual visual'
 - Example uses a simple logistic model
 - Most of the GitHub get the metadata into R and parsing the metadata using the EML package. Get info about the title, who produced it, the coverage.
 - EFI specific information includes the methods used for the forecasts and how complex it is and how it assimilated new data and treats uncertainty
 - Next section describes the units and meanings of variables. Attribute list provide definitions of variables
 - Used the uncertainty in the ensemble and used rank statistics to show the uncertainty among the 10 ensembles. Looked at 25th and 75th quartiles and median of the 2 species at 3 different depths
 - Next steps do a version of this same exercise for the netcdf file type. It is currently done for a csv file type
 - Then for more complex forecasts with more types of uncertainty, there are more plots we could think about producing.
 - This example doesn't assimilate data and doesn't have clear delineation between forecast and training period.
 - This fits the needs we were looking for!
 - Netcdf would be nice because that file format confuses a lot of people and showing an example of how to get information out would be nice and being able to compare the same example in a csv format
 - Examples of best practices for communicating uncertainty in forecasts not for this example, but would be nice to connect to the Forecasting Challenge separate from this repository. Would be good to talk with Melissa and others in the group at some point.
 - How do people get the forecast data? It is produced as part of an RVignette. The key is to download the data to pull the forecast xml out of what is installed with the package. This is good so anyone can replicate this. It would be good to include a comment specifically about that in the Vignette. Jaime will add a comment.

- In this case we are trying to show how to interface with files that they got from somewhere else, so it requires more dealing with files. Avoid the pre-existing dataset. Add a few more words about what is going on.
 Ex: "This function grabs the file path from the function. Put your file path here for your own file"
- Take vignette and take a different file generated in the standard and have someone go through to see if they put a new file with different data does the vignette work as well. We could check with Quinn to see if the FLARE forecast is in the standard format. John's ticks forecast might be in the standard form. If someone had an interest it would be good to test this out.
- 2. Blog Post Updates
 - Mike Gerst no recent updates
 - Jaime in hiatus
 - Güray's progress is being made.
 - Will have another meeting to do work on another social science type analysis.
 - Thinking it might be ready in a month
 - This will introduce new analysis which is different from previous posts which provide overviews about topics
- 3. Google doc with Joint Call Ideas
 - Idea from Cindy: What are the challenges or obstacles that end-users have of using forecasts.
 - Example why don't all public health offices use forecasted heat events? Is it because of man-power? Time?
 - Partners group is talking about reaching out to early adapter for the Forecast Challenge
 - Have early conversations with potential partners
 - Good opportunity to get to know the other group. Poll participants on the call on how to interact/interact on how to move forward. Ask again when we get together.
 - Have a round of introductions. Meet and greet. Let people know that we want feedback at the end of the meeting to help plan future calls.
 - Then focus on discussing one topic with a backup
 - Each group could put forth their most important issue if they are the same then cover one or if two topics then cover both
 - Poll with ideas and have the two groups rank ideas
 - Or there are 2 ideas to discuss 1) actionable science which Cliff could present on and then 2) Cindy's question is more open ended question. It also is applicable for thinking about the NEON Challenge in year 2 or later as we have the potential to take the forecasts. How to help transition between creating forecasts to having them be useable by stakeholders

- Start with actionable science on the next call
- Go over
- Present this idea to the Partners group
- 4. Poll for Jan-May Call. IGNORE THE DATES BECAUSE THESE WILL BE RECURRING: