

July 21, 2022 Joint Methods & CI Working Group Call

Attendees: Brittany Barker, Matt Brousil, Jody Peters
Regrets: Jake Zwart, Mike Dietze, Hassan Mouhstafid

Agenda/Notes:

1. Visualization Task View - so close...
 - a. Link to the New Copy of the Doc
 - b. Uncertainty Quantification & Propagation, Modeling & Stats and Workflow Task Views to use as Reference: <https://projects.ecoforecast.org/taskviews/>
 - c. [Task Views GitHub repository](#)
 - d. The text from the Google doc has been moved into an Rmd file for the bookdown of the Task Views site.
 - e. There is just a little bit of troubleshooting to do with the code for a few figures and with an install package for the bookdown site (see f and g below). Brittany had a chance to confirm she also had issues with the code for the figures and Mike sent some suggestions for ways to update the code. Jody just needs to set aside a day to dig in and continue to troubleshoot the code. Hope to get to this the week of August 1.
 - f. Figures with issues:
 - i. Hexagonal heat map example in the 3.3.2.1.1 Histograms section showing the geom_hex and ggMarginal example. Jody thinks there should be a heatmap inside the plot, but it isn't showing up.
 - ii. Matrix error for resolving s3-data.amazonaws.com host when knitting the code to create the Scatterplot matrix and correlation matrix for five weather variables at Oak Ridge in the Pairs Plots and Correlograms in section 3.3.2.2.3
 - g. Bookdown build issue
 - i. When Jody pushes the Rmd file to GitHub, the Actions that would add the visualization.Rmd to the [Task Views bookdown page](#) has [this error](#) about installing the 'stringi' package. Need to figure out how to get this package added in the right place.
 1. Stringi - good for working with character vectors or manipulating strings. Brittany usually uses stringr. Try to install the package in Rmd
 2. Brittany has a line of code that if packages don't load then it install them and will send that to Jody
 3. Make sure that tidyverse is installed
 - ii. Brittany - wasn't able to get it to knit when she
 - iii. Brittany is part of an R group so if Jody still runs into issues with the bookdown and the install package, she can reach out to that group

- h. Mike and Carl had a conversation about cloud-native file format options in Slack. Mike - is there anything from that conversation that you think should be followed up for the Task View?
2. Workshop Proposal
 - a. Identify gaps in CI/methods for forecasting and put forth NSF proposal for a workshop/series of workshops for \$50-100K. Want something modular and interoperable. Want to pull in people with CI and computing resources
 3. Data Ingest, Cleaning, and Management Task View
 - a. From June call - Brittany can contribute to remote sensing, Matt works on this topic all the time, and Kelly was interested in this
 - b. Matt might be interested in leading/co-leading. Can't do it until mid-August to early-September.
 - c. Jody happy to help with co-leading. Brittany will look through
 - d. Don't follow up on August call, but reassess how Matt is doing with his other projects and then before September try to go through the outline to clean it up and then run it by the group on the September call
 - e. Brittany gave a presentation to R ladies on parallel processing and big data so could add to that
 4. Forecast Workflow Example
 - a. [Example from NEON Challenge](#) - uses Aquatic Ecosystems
 - b. Update from Mike about what he is prepping for an example for Flux Course
 - c. What would be nice to update or add to make the on ramp to creating forecasts easier?
 - d. Matt has been working on a workflow for the Tick Challenge. Has a workflow for that is built with targets. Has it documented on OSF right now.
 - i. <https://osf.io/e4uhy/wiki/home/>
 - e. On next call - compare across the workflows. What are the similarities, what are the differences, what would be most useful for teaching someone new to forecasting?
 5. [NEON Ecological Forecast Challenge](#) CI Update