April 17, 2020 Joint Methods & CI Working Group Call

Attendees: Jake Zwart, Quinn Thomas, Mike Dietze, Rob Kooper, Kenton McHenry, Alexey Shiklomanov, Jody Peters

Agenda:
1. Update on EFI Task View Intro and Workflow/Pipeline Overview (Jake)
   a. Education group will be working to pull together educational materials that may overlap with some of the resources on the Task View. Their plan is to ask for input at RCN if people have resources they use for their courses or if there are resources that they think would be really helpful to have
   b. Intro text is moving along. Still a bit more to work on. But getting closer.
   c. Kenton asked colleague Daniel Katz to help contribute since he has lots of experience with workflows
   d. Does Tools for literate programming go in this section? Yes. It makes more sense here than in the other 3 upcoming posts. Maybe move it into the metadata section? Text/code together. Metadata is specific structures/hierarchical, machine readable. Leave them separate. Keep it where it is.
   e. High level headers. Perhaps move Data Storage and Access. Better fit for second post on Data Ingest/Cleaning/Management
   f. Jody to start Docs for next 3 posts and put links at the top of each doc for the additional docs. (DONE)
      i. Workflows
      ii. Uncertainty Quantification & Propagation, Modeling & Stats
      iii. Data Ingest, Cleaning, Management
      iv. Visualization/Decision Support Tools, User Interface
   g. Wrap the text up over the next week. Want to post this before the RCN.
   h. Blog post that introduces the Task View. Then link to Task View EFI webpage that is a live document.
   i. Options moving forward
      i. Create a table of the resources with short
      ii. Put it in the R Journal, maybe Methods in Ecology
      iii. Want it on the website, so it can be Google searchable
      iv. Put on preprint server? So it gets a DOI and then put that on the website
      v. There is a journal that does: “10 easy steps to X”. PLOS Computational Biology - example ; full list here ; 10 simple rules for reproducible computational research
   j. Foreshadow the future 3 posts.
   k. Wait on Visualization/Decision Support/User Interfaces post
   l. Uncertainty quantification & propagation, Modeling & Stats could be the next focus
   m. Once we wrap up post 1. Dive into modeling/stats/uncertainty/quantification.
   n. Waiting for data processing is okay since RCN is narrowly focused on NEON data, so less data processing needs. But anticipate where common tools that
exist or common tools that don't exist that should become a post workshop priority so people aren't inventing the wheel. E.g., weather forecast. Once it is downloaded everyone know how to work with temp/precip. Don't need everyone to write their own script to download the data. Or getting NEON data itself, perhaps the tools are sufficient for that and there isn't a need for this. Or maybe an evolving tool if NEON tools won't get bleeding edge data access.

o. After RCN Put together short vignettes for common needs (downloading NEON data, downloading met data, etc). Use short vignettes instead of a full blog post on multiple tools that will take longer.

p. Jody to draft Blog text paragraph that points to the webpage with the Full Description on the Intro Blog Post doc. In the blog invite feedback from the broader group, invite feedback on Twitter, and at RCN workshop

2. NASA RFI on Earth System Predictability Research and Development
   a. RFI: https://beta.sam.gov/opp/bbff69a73f38423e9a0328494c14dab2/view
   b. Google Doc to craft letter - either join to help draft text or join to read/sign [LINK REMOVED]
   c. Alexey will touch base with folks at Goddard to get more details

3. RCN 1 slide/5 minute presentation with updates. Discuss plans and we can finalize details on May 8 call.
   a. Give overview of both groups that are separate. Then highlight the task view that the two groups worked on together and focus the majority of the time Task View
   b. One big thing the CI worked on was how to automate archiving - global identifier. Automation of it may not be in the standards group. Standards talk will be Mike or Carl which will focus on output/metadata standards with quick bullets at end of things down the pipeline. Idea of hierarchy of what gets submitted to forecasting challenges. 1st tier - outputs, 2nd tier - repository of code, 3rd tier - container that executes
   c. Jake/Alexey will split the Methods/Task View/CI and will record

4. Old Agenda Items that we can discuss if we get time
   a. Methods/CI Working Group text on Website - do we want to update it?
      i. See individual Methods and CI pages
   b. Follow up on discussion from Feb 21, 2020 Method call about forming a subgroup within intersection between Methods/CI interested in spec-ing out what a general met workflow (or expand to grid data) looks like.
      i. Make this an at conference/post-conference discussion