May 14, 2025 Joint Methods & CI Working Group Call

Attendees: John Smith, Chris Jones, Will Hammond, Dave Durden, Hassan Moustahfid, Jody Peters

- 1. What does the group want to do about the schedule of calls for June-August? Keep this same time or should Jody poll for a new time
 - a. Might get new people joining after the workshop at the EFI Conference
 - b. Wait to poll after the conference
 - c. Dave is going to be traveling all summer so probably not available
- 2. Ecological Modelling Publication: Integrating social equity into marine conservation models https://www.sciencedirect.com/science/article/pii/S0304380025000444
 - a. Highlights:
 - i. We invite modellers to dare to ask different questions & bring knowledge together.
 - ii. Ecosystem models should better represent the realities we see & the impact on fishers.
 - iii. Equity focus leads to better advice for decision makers & more meaningful solutions.
 - iv. We show 3 ways to integrate equity in ecosystem models with different difficulties from more to less demanding
 - 1. (1) explicitly model equity, (2) slightly adjust existing models to incorporate key human components, and (3) ask new questions with existing models.
 - b. See graphical abstract at: <u>https://ars.els-cdn.com/content/image/1-s2.0-</u> <u>S0304380025000444-ga1_lrg.jpg</u>
- 3. Spatial Forecast Workshop for the EFI2025 Conference any remaining tasks and updates for people who can't make the conference?
 - a. Emma sent a lucid chart image checked to see if people can join. They can! Worked for people to join using a Google login
 - b. Chris updated survey
 - c. Will/Dave made progress on burn severity and working on one other update
 - d. Will need to add to the tutorial file pulling data from buckets, submitting forecast, and scoring. Working on that this afternoon
 - e. Yesterday, ingest planetary data was giving errors (can't read http). In the future consider moving to Google Earth Engine
 - f. Some fire sites are small. At the spatial scale we are pulling (0.1 dxdy) get 3 pixels. Worse is Chimney Tops fire. Sawmill is also small. We can up resolution to get more pixels, but not sure if it is worth making changes before workshop or if we should add that to the survey

- g. When Dave overlaps the shapefile with the pixels, they aren't quite overlapping and aren't capturing all the pixels (this is using code originally developed with Quinn/Carl with gdalques).
 - i. Dave is going to play with it in QGIS to see if there is some weird averaging taking place in the background using the base R functions.
 - ii. There is averaging going on from data coming from planetary data
 - iii. Maybe should convert everything to terra and try it again
 - iv. Dave will run through this again and maybe take out Great Smokey
 - v. This won't be an issue for the workshop
- h. Question for workshop group what is the minimum fire size would be most interesting
- i. Goal for after the workshop reach out to the broader EFI community with a survey to get more feedback on the type of questions to answer with this spatial forecast and specifics things people think would be useful to incorporate (fire size, spatial scale, etc)
- j. Of the fires around NEON sites, the Creek site is on par with the size of the August Complex
- 4. Blog post ideas that came up on Slack how to set up a forecasting CI workflow and then how to expand when you outgrow your initial workflow (see the Slack discussion below)
 - a. This group definitely sees the need for the blog post Carl, Ethan, Mike, Quinn would
 - b. How to get the forecasting challenge workflow accessible to others without always needing Carl/Quinn to help with the secret sauce
 - i. Hard part is the CI has to be tied to someone at EFI to get credentials and get the buckets set up
 - ii. There could be a way to set up a folder that is shared with just a few people and the secrets could be shared on an as needed basis.
 - c. Unconference topic or multiple day workshop applying the forecasting pipeline to develop your own challenge. Think this would be really useful for the community
 - d. John reached out to Eliot McIntyre (Canadian) about scoring spatially misaligned forecasts. Your model does really well but your predictions are a pixel off. Eliot has a manuscript he will be posting soon about spatial misalignment