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Subject: Tasks for validation  
Date: September 2, 2019 at 10:22 AM  
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JF

Hey Jude,

Per our phone meeting, here are the details of the tasks and the links to the data and code. Take your time with this because it is so important. Once you are done, we'll likely be able to tighten up the loose ends on the manuscript and move toward submission. In the meantime I will write the rest of the manuscript and the Supplementary Materials.

**For all variables (4 climate change, 4 oil/gas, 1 fed lands) complete the following:**

1. Use the .Rmd for said variable and look over it's structure and **re-run the code and the results.**
2. As you work through each variable, can you **please add the final code to a new clean .Rmd that we'll use for our public facing data replication.** Perhaps one single master file with the code for the results we present in the paper and in the supplementary materials.
3. After you re-run and validate the models, can you please **insert the p-value/confidence intervals/means/etc in the actual manuscript where appropriate**, and if needed tweak how I've described the significant finding in the manuscript.
4. When you go through the fire variable, **output the same wildfire ribbon plot** that I have pasted in the manuscript, but change the colors so they match the red and green coxcomb plots. I didn't want to do this yet if your code is going to change the values. I doubt it will but, figured it was better to wait. Here are the color codes to use, taken from my coxcomb plots. "scale\_fill\_manual(name="", values=c('#32CD32', '#ff0000'), labels=c("Historical", "Present-day"))"
5. Similarly, include in the .Rmd the **code and output for a precipitation graph** like the one that is pasted in the google docs manuscript. (this one was created w/ the code in the "\_Supplemental" folder described below). Please include a brief description of the plot in the figure description, so readers know how to interpret the meaning/significance of the plot.
6. **Sensitivity/robustness checks:** you mentioned on the phone that you can omit some of the larger tribes to see if it changes anything. After you get a feel for the data and re-run the code, I'm guessing you'll know which ones to test. If you can, include that code/explanation, and I'll paste it into the methods appendix.

## Code and data:

We have a lot of this on Github, but a few of the files are too large to upload to my github. I need to fix that, so for now here is a link to the main [dropbox folder](#). I also shared it with you so that you can use it directly via your operating system folders.

I'm attaching our main "datasets\_codebook.html" that describes the data and most of the

variables. The new climate change variables and oil/gas variables are not included in this, but you already know the structure of those because you created some of them. This html file is mostly useful because it describes:

- The two main .csv files that are also in this main dropbox folder (1. tribes level data 2. Pairwise records level data)
- The main file we use for importing raw data, cleaning, and merging is “data wrangle...map data\_v6.R” Again, this is in the dropbox folder.
- The main data is contained in “processed\_data.RData”

I created a new folder “**\_Jude\_Validation\_Copies**” in this dropbox where I’ve included copies of the relevant Rmd files (all beginning with “explore\_dif\_...”) for the variables above. Feel free to edit these copies as needed because the original copies are in other folders (mostly in the “\_Statistical\_Analysis” and “\_Variables” folders). The “\_Supplemental” folder in here includes work from a second statistician to replicate some of the “explore\_dif\_” variables. The precipitation one is especially good. Some of the PDFs in this folder, as well as the analysis, might be useful for you.

As always, let me know if you have any questions! Thanks!

Justin

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