Components	Questions	Author Checklis	at Author Notes	Reviewer Checklis	Reviewer Notes
Project Organization	Is my folder structure logical? Suggestions for best practices for R/GitHub	~	GJAMDATA, R and out folders to separate data,	~	Well organized and documented
	Is my code in numbered files to indicate the order they should be run?	~	Numbered 0 to 9. Any files with the same number	~	All scripts are numbered, in right order, and documented, deprecated folder is not mentioned in the readme, but I assume it will be removed eventually anyways.
	Are raw data, code, and intermediate outputs separated?	~	Raw code within X and Y subdirectories in GJAN	~	Code and data match the file structure and are separated
	Are all inputs and outputs of a script clearly indicated at the beginning and end of the code?	~	Inputs are called via read.csv() or load() at the b	~	outputs for 4 Reduce R and 4 Reduce, ecosystem R are labeled as GJAMDATA/processed, xydata 2 RData
	Does file and folder naming complement the worldlow?	~	See above	~	readable and organized
	Include information about the project - use <u>&bby's doc</u> as a way to organize. This information includes the project overview, hypotheses tested, analyses you want reviewed, project stage.	✓	See Project Overview - GJAM - AW-CK docx	✓	
Project and input metadata	is all the code available on Github?	~	All code from inputs provided by lan to productio	~	Able to fully complete analysis with inputs and code in the repository
	If code is ready to be submitted, is the repository public?	~	Yes	$\overline{\mathbf{v}}$	Repository is public!
	Have I provided information about the packages used in the code within the scripts?	~	All packages are called using the packagename	\sim	consistent package conventions
	Have I provided metadata for the raw data?	$\overline{\mathbf{z}}$	Raw data are described in the README under 1	✓	yes, well documented
	Are all data in a publicly available data respository? If the data is not in a public repository, see points 1) and 2) below.	☑	All data are available in the github repository. Th	\checkmark	lim not sure what else to do, but this does definitely work
	 Are data that will be published when the manuscript is published shared with the reviewer? If not, see below. 		NA		
	2) If data are sensitive in nature with no plan of publication, is simulated data provided to the reviewer?		NA		
	Can someone other than the code creator or project participants understand (and access) the workflow and content of the data?		The sequence of code to run and explanations of	$\overline{\mathbf{v}}$	yes, works very well and is both well documented and inhalive
	Is a README provided and does it include the following 5 points of information? See Readme template and best practices	✓	Yes	$\overline{\mathbf{v}}$	great README, has minor typos
	1) the data contents and intermediate outputs?	~	Data inputs are described in 1.Process.R and 2.	✓	yes, output for 4 Process R and 4 Process_ecosystem R does not match the README
	2) which license did you pick?	~	MIT License	~	
	did you include descriptions of each file, including scripts and any other files in the repository?		Yes	$\overline{\mathbf{v}}$	descriptions and everything match
	4) versions of external packages used and software?	~	Yes	~	in READMEI
	5) Have I provided the dimensions of the intermediate products?	$\overline{\mathbf{v}}$	Yes	✓	dimensions match
	Is my code understandable? Are there comments or an associated markdown document?		Yes. Comments in each script	✓	well commented
Code Readability	Are there comments describing each code chunk or line?	~	Yes	~	yes
	Is the code logically broken up into sections or into seprate files?		Yes	✓	yes, each step of the process makes sense
	Does each file of my code have a brief explanation at the top?	~	yes	~	yes
	Does my code have a consistent style?	✓	I think so?	✓	maintains consistent conventions and structure, so I think so
	is the use of external packages clearly documented?	~	yes	~	yes, called consistently each time, documented in the README
Output Reproducibility	Can the written results be reproduced using the provided code and data?	~	yes. See manuscript, lan is responsible for the w	~	yes, figures and summary statistics are reproduced, model matches paper description
	Can an external reviewer run through the code without having to manipulate it?	✓	Yes. Don't re-run 6.Run. Outputs given	$\overline{\mathbf{v}}$	yes, only have to manipulate when selecting the model and data in the analysis section
	Are computationally intensive outputs provided to the reviewer?	~	yes. Don't re-run 6.Run. Outputs given. Also, out	~	yes, see author notes
	Can the results be reproduced and can the figures be replicated?	✓	yes	$\overline{\mathbf{v}}$	yes, figures made in 8. Visualize R match paper and interpretations
	Is there a clear link between code and output?	\checkmark	yes	~	yea e e e e e e e e e e e e e e e e e e
	Have I withheld data for out-of-sample prediction? What are the results?	✓	yes. see step 9	$\overline{\mathbf{v}}$	yes, able to reproduce the oos prediction and analysis
	What tests have you done (e.g., unit tests)?		I still don't know what this means, no		nia
	What tests have you undertaken to ensure output reproducibility? List in the author notes. What tests should another person do to ensure output reproducibility?	✓	I ran everything on two computers. I checked ing		worked great for mel
	Do the statistical methods I describe in writing match what I have coded?	✓	yes, see manuscript. I mostly wrote methods reli	V	description of implementation and analysis in the methods section is great and matches well, gets at the key points of covariate sensitivity and residual correlation, oce prediction and comparison is documented and matches the output from the analysis. In not sure what makes
Methodological Consistency	Are there explanations for methodological (coding and statistical) choices made in comments or markdown?		yes	\checkmark	yes, hypothesis multin the statistical methodology employed and conclusions reached