

Student:		
Title:		
		Points
<u>Context (25pts)</u>	(Clearly define big picture and hypothesis)	25
	Introduction establishes the broad relevance of the problem.	
	Language that is specific to the presenter's subfield is defined appropriately for a general audience of scientists.	
	If an experiment was conducted, the logic and key details of the experimental design are clear. If the data were otherwise acquired (e.g., opportunistic sampling, big data), then the relevant details of original data acquisition are clearly presented.	
	The motivation for the hypothesis is clear.	
	The hypothesis is clearly defined.	
<u>Data prep (20pts)</u>	(Cleansing & architecture)	20
	The data architecture is clearly defined.	
	The data have been checked for anomalies.	
<u>Visualization (20pts)</u>	(What was found? How can we see it?)	20
	Graphical integrity. Are plots clear and communicating results accurately & effectively?	
	Visual balance: i.e., data:ink ratio & white space balance	
	Simplicity-complexity balance: are plots as simple as possible & as complex as necessary?	
	A clear understanding of visual vocabulary is demonstrated.	
<u>Analysis & Techniques (10pts)</u>	(At least three techniques described in class)	10
	Technique 1:	
	Technique 2:	
	Technique 3:	
	Others:	
	Do analyses contribute to testing the hypothesis as outlined in the introduction to the problem?	
	Is the functional form of the models used to evaluate the hypothesis clearly defined?	
	Have the assumptions of the techniques used been tested? If the assumptions are not fully met, a rationale must be given for proceeding with the analysis.	
	Are the techniques used complementary?	
<u>Conclusions & Interpretations (25 pts)</u>		25
	Show that the interpretation demonstrates a basic understanding of the analytical techniques used (e.g., no confusion of permutation & bootstrapping).	
	Show that the interpretation respects the limitations of the data and techniques; express the degree of confidence in the data and the analytical results.	
	Is the interpretation thorough (e.g., must explain directionality and size of the effects, if appropriate, instead of simply stating significance)?	
	Do the conclusions link to the introductory context and hypothesis?	
	Do follow-up questions/analyses logically follow from the current results?	
<u>General Comments (no points)</u>		
	The notebook itself draws on relevant formatting features for clear presentation (markdown, sectioning).	
	The functional form of the models used to evaluate the hypothesis is explicitly written.	
	Variable names have clear meanings. The analysis is generally clearly implemented and code is intuitive to follow.	
	The language used to scaffold the presentation is concise but descriptive enough to convey the main points of the presentation.	
	Data tables are organized in a tidy fashion.	
	Each pre-processing step well-justified and remains faithful to the variability present in the data (i.e., no removal of data without a well-reasoned justification).	
	All relevant forms of data anomalies have programmatic checks and resolutions.	
	Data is shown to be stored in raw form and processed form.	
<u>Grade</u>		100