MSIP Team Feedback Form

Introduction:

Level of Confidence	(X)	Attributes
Expert		Provides a well developed purpose of the project using prior observations as a foundation (this is a sales pitch)
		The science question is testable and falsifiable (can it be unsupported?)
		Explains why the question is scientifically interesting/important (review NASA's 4 goals for Mars Exploration - see lesson).
		Hypothesis is listed based on prior scientific research and/or observations
Intermediate		States the purpose of the project
		Hypothesis is testable without connection to prior scientific research and/or observations
Novice		One hypothesis is listed, but not testable
		Science question is too broad (only big picture question)
		Explains why the question is personally interesting/important
		Explanations for why the project is scientifically interesting/important focuses on a less important facet (missed the big picture)
Bonus		Multiple hypotheses are listed based on prior scientific research and/or observations and aren't exact opposites (inverse) of each other. (Ex: If Variable A increases, then variable B decreases or If Variable A increases, then variable B increases).

Background:

Level of Confidence	(X)	Attributes
Expert		Multiple relevant (credible) literature and/or observations are cited (more than 2)
		Earth ***and*** Mars examples are included using images (if available)
		Definitions are project specific and use images/diagrams as examples
		Content is accurate and lacks misconceptions
Intermediate		Relevant (credible) literature or observations are cited
		Mars ***or*** Earth examples are included ***or*** missing example images/diagrams
Novice		List of Mars facts are provided
		Definitions for general terms
Bonus		Figure/s showing study area included
		Label Figures and reference in text (example: Figure 1; Figure A)

****NOTE** – reports containing science misconceptions will be automatically disqualified from "Best of" classification. We are unable to publish papers containing misconceptions.

Last edited: December 11, 2014

Methods:

Level of Confidence	(X)	Attributes
Expert		Overview of procedures is provided (including instruments/JMARS layers used)
		Specifies the area and feature(s) of study
		Defines the type of information to be collected and includes screenshot examples demonstrating these procedures
		Addresses how data collection will be controlled (using screenshots when necessary)
		Procedures and data sets used will minimize bias (ex: avoids using only THEMIS images "Images by Topic gallery")
Intermediate		General overview of the procedures
		Defines the type of information to be collected or includes examples demonstrating these methods
Novice		Lists the information to be collected
		Lists the instruments/JMARS layers used
Bonus		Appendix includes the step-by-step procedures used to collect data

Data:

Level of Confidence	(X)	Attributes
Expert		Uses a combination of tables, graphs, and maps to communicate results
		All tables/graphs are appropriate to the type of data
		Patterns and/or trends are identified
		Excellent examples are provided as control images
Intermediate		Most tables/graphs are appropriate to the type of data
Novice		Uses one or two appropriate tables, graphs, or maps to communicate results
Bonus		Identify outliers
		Identify trendlines/r-squared values on graphs where appropriate
		Uses graphs or maps to identify patterns and/or trends that show an understanding beyond the scope of the original question/hypothesis

Discussion:

Level of Confidence	(X)	Attributes
Expert		Identify or interpret ***all*** trends/patterns accurately
		Accurately explains why the trend exists (without repeating the hypothesis, using science concepts to explain why)
		Discusses a combination of error/biases/limitations
		Unresolved questions/problems are identified
Intermediate		Explains some of the tables/graphs/maps accurately
		Attempts to discuss why the trends/patterns exists
		Discuss error ***or*** biases ***or*** limitations
Novice		Identifies a trend/pattern
Bonus		Discusses outliers (Is it error, a unique scenario, does it lead to future research?)

Conclusion:

Level of Confidence	(X)	Attributes
Expert		Accurately provides answer to science question based on explanations from Discussion section
		Restates hypothesis/es and accurately determines whether it/they were supported or refuted
		Appropriate acknowledgements are made
		Questions for further study are well developed and based on current work (ex: interesting outliers, correcting for bias or error, or other interesting trends)
Intermediate		Provides answer to science question loosely based on the explanations from the Discussion section
		Identifies further study based on the research
Novice		Attempts to answer the science question
		Restates hypothesis and attempts to determine whether it is supported or refuted

ELA:

Level of Confidence	(X)	Attributes
Expert		Numerous sources are cited (Reference pages) in either MLA or APA format (including alphabetized)
		All images/other work are cited (in-text) in standard format
		Final report is neat and clear; easy to read; labeled; legend for graphs where appropriate, font choice and size
		All literature is credible
Intermediate		Few sources are cited (Reference pages) in either MLA or APA format (including alphabetized)
		Most images/other work are correctly cited (in-text)
		Most literature is credible
		Final report is mostly neat and clear, easy to ready, labeled; appropriate font choice and size
Novice		Sources (Reference pages) are cited in a non-standard format
		In-text citations and image citations are provided in non-standard format
		Less credible literature or secondary sources are used (ie: wikipedia; conspiracy websites; .com sites)