GOES-R Series Virtual Science Fair (VSF) Middle School Scoring Form

Poster Title: _____ Total Score: [ ]

School: _____Mentor/Teacher Name: _____ Reviewer's Initials: _____

Directions: Using the four-point rating scale below, assign an overall score of **Excellent, Very Good, Good, and Fair** for each of the five scoring sections. To calculate the final score for each section, multiply the overall score for each section by the weighting factor provided in the table, and record the final section score. The sum of all of the final section scores is the total score for the team and its research.

Scoring Section	Reviewer's Comments	Reviewer's Score
Section One: Poster Template		
1a. The poster contains all required sections. (Abstract, Hypothesis or Research Question, Methods/Procedures, Results, Discussion/Conclusions and Future Research, References, Related STEM job opportunities.) 1b. The poster is easy to read (large enough font) but does not contain excess graphics, special fonts, clip art, etc. Many college students and scientists create posters that are too dense to read. Only the abstract should contain full sentences – use bullets or short phrases for the rest of the poster (except references) and visuals to make your point. 1c. The poster tells a "story" about the research that is logical to follow and understand. 1d. The Results a/o Conclusion sections include two or more GOES-16 a/o GOES-17 ABI bands. **(If this dimension of the poster is missing, the rating for Section One can be no higher than a Fair (1).**		**Excellent 4** **Very Good 3** **Good 2** **Fair 1** **Weighting Factor: 2** **Section One Score** **Score _____ x 2 = _____**

Excellent	**4**	The poster exhibits <u>outstanding</u> adherence to required format with no errors or limitations.
Very Good	**3**	The poster exhibits <u>very good</u> adherence to required format with no, or minimal errors or limitations.
Good	**2**	The poster exhibits <u>limited</u> adherence to required format with one or two significant errors or limitations.
Fair	**1**	The poster exhibits <u>little or no</u> adherence to required format *and* significant errors or limitations.

Scoring Section	Reviewer's Comments	Reviewer's Score
Section Two: Title, Summary, Hypothesis/Research Question		
2a. Title is concise (less than 15 words) and summarizes the research topic. 2b. Summary is concise (1 page minimum, 2 pages max) and is a synopsis of the research project (context of research/why students chose topic, objectives set, brief methods description, overall results, conclusions). 2c. Hypothesis or Research Question is clearly stated. If hypothesis, it contains an "if, then, because" statement. If research question, the question is answerable through the scientific research stated in the abstract and answering the question requires a significant knowledge of the subject matter. Both the hypothesis and research question require a thoughtful research plan.		**Excellent 4** **Very Good 3** **Good 2** **Fair 1** **Weighting Factor: 4** **Section Two Score** **Score _____ x 4 = _____**

Excellent	**4**	The poster sections display <u>outstanding</u> team knowledge, skills, or performance with no significant errors/limitations.
Very Good	**3**	The poster sections display <u>strong</u> team knowledge, skills, or performance with no significant errors/limitations.
Good	**2**	The poster sections display <u>limited</u> team knowledge, skills, or performance *or* there are significant errors or weaknesses.
Fair	**1**	The poster sections display <u>limited</u> team knowledge, skills, or performance *and* there are significant errors or weaknesses.

Scoring Section	Reviewer's Comments	Reviewer's Score
Section Three: Methods/Procedures, Results		
3a. There is an explanation of how the data (**including the use of 3 or more ABI bands**) are linked to hypothesis/research question. 3b. If applicable, mathematical calculations used to analyze the data are included. 3c. There are tables, graphs, and/or imagery displaying data. 3d. The data presented are sufficient to answer the research question.		**Excellent 4** **Very Good 3** **Good 2** **Fair 1** **Weighting Factor: 5** **Section Three Score** **Score _____ x 5 = _____**

Excellent	**4**	The poster sections display <u>outstanding</u> team knowledge, skills, or performance with no significant errors/limitations.	
Very Good	**3**	The poster sections display <u>strong</u> team knowledge, skills, or performance with no significant errors/limitations.	
Good	**2**	The poster sections display <u>limited</u> team knowledge, skills, or performance *or* there are significant errors or weaknesses.	
Fair	**1**	The poster sections display <u>limited</u> team knowledge, skills, or performance *and* there are significant errors or weaknesses.	

Scoring Section	Reviewer's Comments	Reviewer's Score
Section Four: Discussion/Conclusions and Future Research		
4a. Discussion is concise, yet covers interpretation of results, possible sources of error, comparison with similar studies, and whether the results proved/disproved the hypothesis or answered the research question. 4b. Conclusions are insightful and explain how the conclusions were reached. 4c. Both discussion and conclusion(s) put findings in context, highlighting why they are important and relevant. 4d. Reviewers can discern a "Claim, Evidence, Reasoning" logic, even if not explicitly stated as such. 4e. There are suggestions for follow-on research; protocol modifications. Note: If research team worked with a mentor, it can be mentioned in this section. The impact of working with a project mentor should be included in the video.		**Excellent 4** **Very Good 3** **Good 2** **Fair 1** **Weighting Factor: 6** **Section Four Score** **Score ____ x 6 = _____**

Excellent	**4**	**The poster sections display <u>outstanding</u> team knowledge, skills, or performance with no significant errors/limitations.**
Very Good	**3**	**The poster sections display <u>strong</u> team knowledge, skills, or performance with no significant errors/limitations.**
Good	**2**	**The poster sections display <u>limited</u> team knowledge, skills, or performance *or* there are significant errors or weaknesses.**
Fair	**1**	**The poster sections display <u>limited</u> team knowledge, skills, or performance *and* there are significant errors or weaknesses.**

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Scoring Section	Reviewer's Comments	Reviewer's Score
Section Five: Video/ Oral Presentation		
5a. All team members are introduced with clearly defined roles, responsibilities and contributions. 5b. Every team member gets the opportunity to present during the video. 5c. **The video enhances the poster experience (orally describes the poster) and also discusses additional poster items such as experiences with mentors, related STEM job opportunities, GOES-R series satellite understandings, etc.** 5d. Platform used for the video is appropriate for the oral discussion. Note, it is not required for students to physically appear on the video (e.g. narrated Power Point). 5e. Video has good audio and indicates rehearsal prior to the final presentation. 5f. Video length is 6-10 minutes.		**Excellent 4** **Very Good 3** **Good 2** **Fair 1** **Weighting Factor: 8** **Section Five Score** **Sc_ x 8 = _____**

	Excellent	4	The VIDEO displays <u>outstanding</u> team knowledge, skills, or performance with no significant errors/limitations.
	Very Good	3	The VIDEO displays <u>strong</u> team knowledge, skills, or performance with no significant errors/limitations.
	Good	2	The VIDEO displays <u>limited</u> team knowledge, skills, or performance *or* there are significant errors or weaknesses.
	Fair	1	The VIDEO displays <u>limited</u> team knowledge, skills, or performance *and* there are significant errors or weaknesses.

OVERALL SCORE

Section One Score   _____

Section Two Score   _____

Section Three Score   _____   **TOTAL SCORE (SUM OF ALL FIVE SECTION SCORES) = _____**

Section Four Score   _____   **Max possible score is 100**

Section Five Score   _____

<u>**Optional overall comments**</u> **(If total score is less than a 70, reviewers should include a comment in this section.)**