

Hypersonic Horizons 2025: The High Speed Video Challenge



2025 Evaluation Rubric

Category	0: Unsatisfactory	1: Needs Improvement	2: Meets Expectations	3: Exceeds Expectations
Hypersonics Content	Explanation of hypersonics concepts is missing or fundamentally incorrect.	Explanation contains inaccuracies or gaps in understanding.	Explanation is accurate, comprehensive, and demonstrates an understanding of key hypersonic concepts.	Explanation is accurate, exceptionally clear, and comprehensive, demonstrating mastery of the subject matter.
Wind Tunnel Background	The bullets in Part 1 were not addressed, or answers were irrelevant	Most bullets in the Part 1 were addressed adequately, <i>OR</i> all were addressed superficially and lack depth of analysis or critical thinking.	All bullets in Part 1 were addressed adequately, showing critical thinking, and thoughtful perspectives.	All bullets in Part 1 were addressed exceptionally, showing a deep understanding of the complexities of the topic.
Wind Tunnel Model Design	No wind tunnel model is provided, or it is irrelevant to the presentation.	Wind tunnel model is provided but lacks clarity, completeness <i>OR</i> does not support the presentation.	Wind tunnel model is complete, clear, and supports the presentation.	Wind tunnel model is compelling, exceptionally clear, and fully integrated into the presentation.
Wind Tunnel Development & Analysis	No new feature/analysis proposed, or they are impractical and unrealistic.	New feature/analysis is proposed but lacks creativity or feasibility; impractical for implementation.	New feature/analysis demonstrates some creativity and is feasible.	New feature/analysis is creative, thoughtful, and feasible, showing potential impact.
Education & Entertainment Value	The video is neither appropriate educational content <i>NOR</i> engaging for students in grades 6-8.	The video is either not appropriate educational content OR not engaging for students in grades 6-8.	The video demonstrates appropriate educational content that would be engaging for students in grades 6-8.	The video demonstrates exceptional educational content and would be engaging for students in grades 6-8.
Video Production Quality (technical details such as editing, focus, sound, and lighting)	Poor audio/video quality significantly hinders comprehension; editing and transitions are nonexistent or disruptive.	Audio/video quality is adequate but contains distractions; editing and transitions are basic.	Audio/video quality is good and does not hinder the message; editing and transitions are smooth and effective.	High-quality audio/video enhances the presentation; editing and transitions are seamless and proficient.
Video Requirements Length: 3-5 min File is less than 1GB Title, Date, School info References Relevant credits	Three or more required elements are missing.	One or two required elements are missing.	All required elements (Title, File Size, Date, References, School Info, Credits, 3–5minute length) are included.	

Total Score:

/20

Notes on areas of exceptional creativity, ingenuity, showcasing innovative solutions: