NASA Nebraska Eclipse Ballooning Project

Omaha, Nebraska – A NASA team from Metropolitan Community College (MCC) and the University of Nebraska-Lincoln (UNL) will launch high-altitude balloons from Grand Island, Neb. during the solar eclipse on Monday, August 21. The Nebraska High Altitude Balloon (HAB) team, supported by the NASA Nebraska Space Grant, will live-stream aerial video of the Great American Eclipse from the edge of space.

Nebraska’s HAB team is one of 55 across the country sending 8-foot-tall helium-filled balloons to 80,000 feet or more to conduct scientific exploration and send live footage of the solar eclipse to a NASA-sponsored website at http://eclipse.stream.live. The team will launch 2 balloons and their payloads in succession from the Stuhr Museum at 12:00 and 12:10 p.m. Central Time. A third balloon, sponsored by Omaha Public Schools (OPS) will launch at 12:20 p.m. The serial launch allows the team to capture video and data at intervals between 40,000 and 80,000 feet during the eclipse.

Michael and Kendra Sibbernse, who teach physics and astronomy at UNL and MCC respectively, lead the team of students participating in the national Eclipse Ballooning Project. According to Michael, “The eclipse project is the brainchild of the Montana Space Grant program, which came up with the idea to launch multiple balloons nationwide, each sharing the same payload and broadcasting live video for people to watch. We’re pretty excited to be a part of this history-making project providing a unique eclipse experience to the entire world.”

A recent eclipse test flight by the HAB team included a solar panel project, carbon dioxide monitoring, and specialized camera systems. The flight covered 163 miles, helping ensure the scientific, video, tracking equipment, and procedures work well during the eclipse ascent on the 21st.

“One of the best parts of the Nebraska High-Altitude Balloon project is connecting students to actual science and offering an exciting ‘gee-whiz’ experience that you really can’t get anywhere else. It is a unique way to experience the scientific process in action,” said Michael Sibbernse.

Mike Leidy, an MCC student HAB team member, agreed with Sibbernse. “Being part of this once in a lifetime project has been an adventure and the engineering trials (and errors) were a great learning experience. Plus, having the NASA name attached made the whole project feel more significant and special.” Fellow HAB teamer Fay Cardona added, “I’m really thankful I have this opportunity and am excited to be part of the eclipse ballooning team. I’m looking forward to helping NASA and their astrobiology experiment,” which is among the scientific payloads being launched.

The eclipse high-altitude balloon project was initiated in 2014 and is sponsored by the NASA Science Mission Directorate and NASA’s Space Grant program, a network with over 900 affiliates nationwide including 11 institutions of higher education within the NASA Nebraska Space Grant Consortium.

Additional information:
- Nebraska High-Altitude Ballooning, including photos: http://nearspacescience.com/
- NASA’s Live-Streaming Eclipse Site: http://eclipse.stream.live
- NASA Nebraska Space Grant activities in Nebraska: http://ne.spacegrant.org/
- National Eclipse Ballooning Project: http://eclipse.montana.edu/
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Photos such as this may be downloaded from: http://nearspacescience.com/