

August 1, 2017

NASA KENTUCKY
Space Grant Consortium
& EPSCoR Program



NASA Kentucky
University of Kentucky, College of Engineering
112 Robotics Building (RMB)
Lexington, KY 40506-0108

UK, HCC, and BCTC to Launch High-Altitude Balloons During Eclipse

The University of Kentucky and two state community colleges are partnering with NASA to launch high-altitude scientific balloons from western Kentucky during the upcoming total solar eclipse on August 21, 2017.

These balloons, which expand to the size of a firetruck and carry payloads to near-space altitude of 100,000 feet, are being launched as part of the NASA Space Grant National Eclipse Ballooning Project along the entire path of the eclipse.

Teams of college students from the University of Kentucky, Hopkinsville Community College and Bluegrass Community and Technical College will each launch a package of payloads designed to gather scientific and engineering data and broadcast live high-altitude video of the eclipse to a website hosted by NASA.

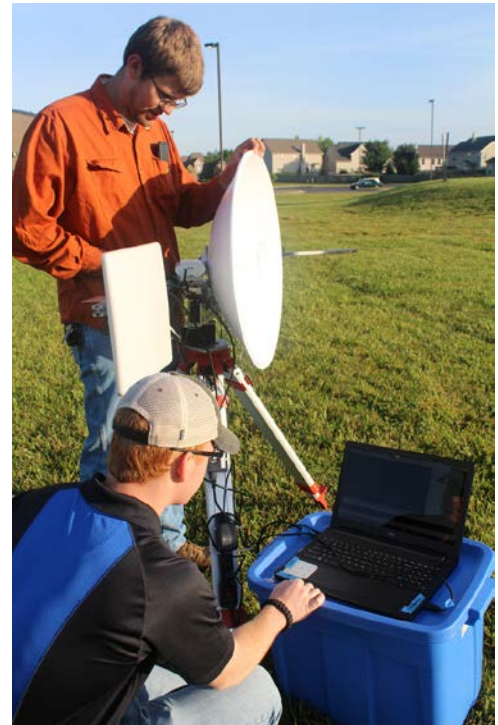
Kentucky teams will be joined by college students from schools in five other states traveling to western Kentucky to take advantage of its location as a prime spot to experience eclipse totality, where the moon will completely obscure the sun for as much as two minutes and forty seconds during the middle of the day.

The total eclipse will cross the western part of Kentucky from Paducah to Hopkinsville. Locations in Kentucky away from the 70-mile wide centerline will experience a partial eclipse of less than 100 percent totality.

If launches go as planned for the college teams, video from the balloons can be viewed online at <http://eclipse.stream.live> during the eclipse.

“We are excited to see what the eclipse looks like over Kentucky,” said Matthew Graham, a UK Medical Laboratory Science major from Midway, Kentucky. “This project has given us a great opportunity to put our education into action.”

The national ballooning project will broadcast live aerial video of the eclipse from Oregon to South Carolina, with balloon launches planned in every state along its path.



University of Kentucky students prepare to conduct a high-altitude balloon launch

Kentucky students have been working more than a year to plan the launches, meet Federal Aviation Administration regulations, and design equipment packages to collect data and enable live video streaming during flight.

Most of the work was completed outside of classroom hours, in addition to the students' regular class load.

As they reach maximum altitude, the balloons experience decreasing atmospheric pressure and expand until they burst. Payloads then fall back to earth attached to a parachute.

"If you find one of our payload packages, don't be alarmed, it is harmless," said Dr. Suzanne Smith, professor in the UK College of Engineering. "Students on our recovery team will be coming to retrieve it."

Each package will show identifying information. If found, please call the phone number on the package.

More information on the eclipse and the National Eclipse Ballooning Project can be found at <https://eclipse2017.nasa.gov/> and <http://solareclipse.engineering.uky.edu/>.

This project is sponsored by the NASA Kentucky Space Grant Consortium, which supports aerospace education opportunities at affiliate institutions across the state. Visit <http://nasakentucky.org> for more information.

NASA KENTUCKY Space Grant Consortium & EPSCoR Program

University of Kentucky, College of Engineering
112 Robotics Bldg, Lexington, KY 40506-0108

nasakentucky.org | nasa@uky.edu | nasa.engr.uky.edu

NASA Kentucky Space Grant Consortium and EPSCoR Program partners with NASA to provide faculty and student opportunities, increase research capacity, and enhance workforce development statewide

Phone (859) 218-6272 • nasakentucky.org • nasa.engr.uky.edu • @NASAKentucky • Email: nasa@uky.edu