

# NASA/HEAT Rice U Status Report – April 2023

Patricia H. Reiff, Rice University

- ***Eclipse Animations***

We continue to provide downloads of our eclipse animations paid for by NASA. Three additional planetariums requested the animations in April. Zip Codes: 19611, 10024 (Hayden Planetarium), and 93105. Because each planetarium reaches thousands of users, the total number of people touched by the 100 downloads so far is in the tens of thousands.

- ***Totality! Planetarium show***

Our planetarium show “Totality!” is now being distributed. We are getting the Spanish audio track now translated and voiced. So far 7 planetariums have received the show and many more have expressed interest. It is still being improved a little. The full show is 24 minutes long but we are creating a 10 minute version for science nights. Subtitle files are now being created.

- ***ASTR503 Class finishes***

Our Astronomy lab class for teachers finished successfully. One teacher had major medical issues and is taking an “incomplete” to finish over the summer but the rest did very well on their coursework, labs, and final quiz.

- ***Eclipse planning***

Reiff continues to work with the AAS eclipse planning committees (formal science, informal science and regional planning). She is planning a major eclipse event sponsored by Rice University for the total eclipse in April 2024, which is already sold out. We are continuing a major increase in our eclipse website

<http://space.rice.edu/eclipse> to include links to many resources (NASA, AAS, and others) plus activities, equipment suggestions, and games.

- ***Eclipse Guidelines for Schools***

Carlton Colmenares, candidate for the Master of Science Teaching degree, finished his project for the schools to use in eclipse planning. It was approved

### Guidelines for Observing Eclipses Safely

Carlton C. Colmenares\*



Figure 2 Crowd using handheld solar glasses to view an eclipse. National Park Service, <https://solarsystem.nasa.gov/eclipses/safety/>

#### Purpose and Background

With two solar eclipses coming in 2023 and 2024, science educators in the USA, and particularly in Texas, have unique opportunities to engage students with in-person observations. Safe, inspiring, and enjoyable activities can be performed by students as citizen scientists under the guidance of their professional educators (science coordinators, department



(with some suggested changes) by his committee. The final version is posted:  
[https://space.rice.edu/eclipse/pdf/HMNS\\_Guidelines\\_for\\_Observing\\_Eclipses\\_Safely.pdf](https://space.rice.edu/eclipse/pdf/HMNS_Guidelines_for_Observing_Eclipses_Safely.pdf)

- *Citizen CATE*

We were selected to be a regional director of the Citizen CATE project to work with their eclipse. We took training on the equipment in Boulder on April 1, and went to Australia to photograph the eclipse in polarized light as an engineering test. Graduate student Charlie Gardner is the student trainer for the southwest regional observing teams. Our test images in polarized light were visually stunning as well as scientifically useful.

