NASA/HEAT Rice U Status Report – March 2023

Patricia H. Reiff, Rice University

• Eclipse Animations

We continue to provide downloads of our eclipse animations paid for by NASA. Six additional planetariums requested the animations in March. Zip Codes: 92104, 78416, 79714,

plus France, Peru, and Easter Island. Because each planetarium reaches thousands of users, the total number of people touched by the 97 downloads so far is in the tens of thousands.

• Totality! Planetarium show

Our planetarium show "Totality!" based on these animations has been completed in preliminary form and sent to reviewers for comment and suggestions. From the HEAT program the reviewers with Mitzi Adams and Carolyn Ng, who both gave very good suggestions for improvement. The show has been previewed to various audiences, including the teachers in my ASTR530 class, and the feedback has been helpful. It was also shown in the Discovery Dome booth at the NSTA meeting in Atlanta.

• HamSCI Conference

Dr. Reiff was the keynote speaker at the HamSCI conference in Scranton, PA on March 17. Her talk was "Forging Amateur-Professional Bonds - the Role of Amateurs". Over 200 ham radio scientists attended the banquet, which discussed ways in which radio amateurs can work alongside heliophysics

scientists. The HamSci group is doing several radio propagation "citizen science" experiments in conjunction with the upcoming total eclipse.

• NSTA Conference, Atlanta March 23-25, 2023

The preliminary version of our planetarium show "Totality!" was shown in the Discovery Dome booth at the NSTA meeting in Atlanta (all booth charges and all travel paid for by our partnering company, MTPE, Inc.). In addition, Carlton Colmenares and Reiff had an eclipse workshop again presenting our eclipse powerpoint, demonstrating safe eclipse observation equipment. We provided each teacher with a classroom pack of eclipse glasses (paid for by MTPE) as well as UV-sensitive beads as a "solar monitor". In all more than 600 teachers were scanned at NSTA and many joined our "e-teacher" email list as well as our "eclipse" email list.





Over 11,000 people are on our "e-teacher" mailings lists, and nearly 1,000 on the eclipse mailing list. We gave out more than 4,000 pair of eclipse glasses to teachers at NSTA, with classroom sets going to the teachers who took the classroom workshop or the dome eclipse training sessions.

• Eclipse planning

Reiff continues to work with the AAS eclipse planning committes (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 <u>http://space.rice.edu/eclipse</u> to include links to many resources (NASA, AAS, and others) plus activities, equipment suggestions, and games.

• Eclipse planning for Schools

Carlton Colmenares, candidate for the Master of Science Teaching degree, has a second draft of a handout for schools to plan for the eclipses as part of his Capstone project, which has been sent to his committee for suggestions.

• Citizen CATE

We have agreed to be a regional director of the Citizen CATE project to work with their eclipse. We will be going to Australia to photograph the eclipse in polarized light as an engineering test. Graduate student Charlie Gardner will be the student trainer for the southwest teams.