Making the Sky: Astronomy in 3D Workshop for Visually-Impaired High School & College Students

On July 26 and 27, 2017, Dr. Kimberly Arcand, April Jubett and Kelly Williams (Chandra/Smithsonian Astrophysical Observatory-SAO) ran two workshops with 20 visually impaired high school & college students, along with three National Federation of the Blind (NFB) staff assistants at the NFB Youth Slam, at Towson University, Baltimore.

Students learned about stars and light before exploring the upcoming total solar eclipse with NASA tactile/Braille booklets on the Eclipse, "Touch the Sun."

Sonic Astrophysicist, Dr. Wanda Diaz Merced, who is also visually impaired, demonstrated sonification of variable stars remotely.

Next, stellar evolution was introduced, with hands-on exploration of numerous NASA/Chandra 3D printed models (Cassiopeia A, SN1987A, & V745Sco), including tactile/Braille panels on supernova remnants.

Students contributed input to help improve the architecture of the 3D models for handling by blind and visually impaired audiences.

The sessions ended with an exploration of a new Lego-based tactile model, with input solicited from the students, as well as a general question and answer session.

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