

## **SOFIA:** Learning From the Invisible

https://www.colorado.edu/fiske/about-us/fiske-productions

By looking at the universe in infrared light, astronomers are able to see objects that are otherwise invisible. However, this infrared light gets absorbed by water vapor low in Earth's atmosphere. To solve this problem, the Stratospheric Observatory for Infrared Astronomy (SOFIA) is a modified Boeing 747 designed to carry an infrared telescope high above Earth's surface. SOFIA is also known for the Airborne Astronomy Ambassadors program, where groups of high school teachers are brought onto the flight to see the teamwork and process involved in scientific research. They then take this unique experience back to their classrooms.

Interviews: Dana Backman, AAA Principal Investigator, SETI Institute; Simon Steel, Senior Director of Education and STEM Programs, SETI Institute; Daniel Burleson, Rancho High School, NV; Kathryn Smith, William S. Hart High School, CA; Tyler Thompson, West Career & Technical Academy, NV; Dawn Minnick-Trujillo, Las Vegas Academy of the Arts, NV.

## **Educational Resources**

## SOFIA overview

https://www.nasa.gov/mission\_pages/SOFIA/overview/index.html https://en.wikipedia.org/wiki/Stratospheric\_Observatory\_for\_Infrared\_Astronomy https://www.youtube.com/watch?v=g5z6fZKOtP4

## Infrared astronomy resources

https://www.sofia.usra.edu/multimedia/about-sofia/sofia-mobile-information/infrared-astronomy-more-our-eyes-can-see https://coolcosmos.ipac.caltech.edu/page/what\_is\_infrared https://www.youtube.com/watch?v=v4J56InIIUE&feature=youtu.be https://www.youtube.com/watch?v=s-dnEiVVJCy4

Airborne Astronomy Ambassadors program https://www.seti.org/aaa https://www.youtube.com/watch?v=DAVHlckNNd4

Classroom activities on infrared light

https://www.exploratorium.edu/snacks/infrared-remote https://www.nasa.gov/centers/jpl/education/wise-20091123.html https://www.sofia.usra.edu/sites/default/files/InfraredResources.pdf https://www.zooniverse.org/projects/ssilverberg/disk-detective

NASA's Science Activation Program funds 24 teams to connect NASA science experts, real content, and experiences with community leaders to do science in ways that activate minds and promote understanding. Fiske's Explorations project is one of those teams.

https://science.nasa.gov/science-activation-team/fiske-planetarium



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