



Lindsey S. Wisner

lindsey.wiser@asu.edu

lindsey.wiser@spacegeneration.org

Website: lindseywiser.com

 lindseywiser

 0000-0002-3295-1279

EDUCATION

Arizona State University *Expected Spring 2025*
Ph.D. Astrophysics
Johns Hopkins University *Graduated May 2020*
B.S. Engineering Mechanics & Earth and Planetary Science *with Honors*

TECHNICAL EXPERIENCE

2020 – Present **Arizona State University, School of Earth and Space Exploration**
Astrophysics Graduate Research Assistant & PhD Candidate

- Characterizing the atmospheres of exoplanets using computer models and space telescopes: James Webb, Hubble, and Spitzer (Primary PhD research with Dr. Michael Line).

2023 – Present **NASA Pandora Mission – SmallSat Telescope, Launch Estimate 2025**
Student Shadow to the Principal Investigator (PI) and Deputy PI

- Designing a telescope commissioning plan.
- Spearheading community and public outreach initiatives.

2023 **NASA/JPL Astro Mission Design School**
Exoplanet Science Objective Lead, Telecommunications Chair

- Formulated an ultraviolet, probe-class, space telescope proposal with support from mission experts at the Jet Propulsion Laboratory.

2018 – 2019 **Space Telescope Science Institute (STScI)**
Mechanical Engineering Capstone Project & Exoplanet Research Intern

- Designed a mechanical mirror for conducting lab research on space telescope designs that can observe Earth-like exoplanets.
- Studied the James Webb Space Telescope’s capabilities to characterize exoplanet atmospheres, pre-launch of the telescope.

2019 **Smithsonian National Air and Space Museum**
Planetary Science Research Intern *as a Brooke Owens Fellow*

- Mapped geological features on the surface of Saturn’s moon, Enceladus.

POLICY EXPERIENCE

2021 – Present **Space Generation Advisory Council (SGAC)**
Lead of the [Space Policy and Advocacy Task Force](#) for North America, Central America, and the Caribbean

- Helped found the Task Force as an Advocacy Lead.
- Providing a platform for young space experts to promote their perspectives through webinars, published articles, and conferences.

2023 – Present **United States National Point of Contact**

- Serving as a resource to US SGAC members. Fostering the US community and representing US members in the SGAC network.

2021 – 2023 **SGAC Events, Organizing Team and Subject Matter Expert**

- Coordinated speakers for SGAC events and served as a space policy subject expert for working groups.

CURRICULUM VITAE - LINDSEY WISER

- 2020 – 2022 Space Law & Policy Project Group
- Worked with an international team to research, write, and advocate for national and international space policy.
- 2020 – Present **Arizona State University, Space Governance Lab**
Graduate Researcher
- Published and presented on the evolving international space governance system with Dr. Timiebi Aganaba.
- 2024 **Congressional Visit Days, American Astronomical Society**
Participant from Arizona
- Met with congressional offices to advocate for science funding for NASA, NSF, and the Department of Energy. Wrote an [invited blog](#).
- 2020 **NASA Headquarters**
Astrophysics Division Intern
- Reviewed the Astrophysics Research and Analysis Program (APRA) for project timelines and diverse student engagement.
- 2020 **Aerospace Industries Association**
Space Policy Intern
- Wrote background material related to space and aviation policy, including spectrum management and planetary protection, among other tasks.

TEACHING, MENTORSHIP, LEADERSHIP

- 2024 – Present **Arizona State University** – Teaching Assistant for Intro to Solar System Astronomy.
- 2020 – Present **Brooke Owens Fellowship** – Alumni Mentor and 2019 Fellow. The BOF is a fellowship for women and gender minorities in aerospace.
- 2020 – Present **Skype A Scientist** – Speaker for classrooms about space exploration.
- 2018 – 2020 **Destination Imagination** – Mentor for a middle school engineering competition team.
- 2018 – 2020 **Students for the Exploration and Development of Space (SEDS)** – Johns Hopkins University Chapter President & Space Policy Team Lead
- 2016 – 2020 **AIAA Design Build Fly** – Johns Hopkins U. Chapter President, Technical Advisor, and Member
- 2018 – 2019 **Johns Hopkins University** – Teaching Assistant for an intro mechanical engineering lab (2 semesters) and lecture (1 semester).

AWARDS & HONORS

- 2023 **SGAC Space Generation Leadership Award & Grant** – Awarded to exceptional volunteers and leaderships within SGAC to fund travel to the International Astronautical Congress.
- 2022 **National Science Foundation Graduate Research Fellowship Program (NSF GRFP), Honorable Mention**
- 2021 **NASA / International Space Education Board Student Delegate** – Grant awarded to attend the International Astronautical Congress.
- 2021 **Summer Exploration Graduate Fellowship Research Award** – Awarded for promising scientific research progress.
- 2020 **Robert George Gerstmyer Award** – Awarded for outstanding undergraduate achievement in engineering.
- 2019 **Brooke Owens Fellowship Program** – Awarded to women and gender minorities with outstanding potential in space and aviation.

- 2019 **Mechanical Engineering Special Achievement Award** – Awarded for outstanding leadership through engineering clubs and societies.
- 2018 **Pi Tau Sigma** – Mechanical engineering honors society membership.

PUBLICATIONS

Science

- Submitting **Wiser, L.**, Bell, T., et al., *A Panchromatic Eclipse Spectrum a Warm Gas Giant Around A Low-Mass Star.*
- Accepted **Wiser, L.**, ... McGrath, C., ... *MAUVE: An Ultraviolet Astrophysics Probe Mission Concept*, PASP.
- In Prep **Wiser, L.**, Roth, A., et al., *A Comparison of 1D and 3D Atmosphere Model Grids In the Era of JWST.*
- 2024 **Wiser, L.**, Line, M., et al., *Lessons from Hubble and Spitzer: 1D Self-Consistent Model Grids for 19 Hot Jupiter Emission Spectra*, ApJ.
- 2024 **Wiser, L.**, Dotson, J., et al., *Commissioning Plans for the Pandora SmallSat*, SmallSat 2024 (SSC24-WP1-17).
- 2024 Schlawin, E., ... **Wiser, L.**, et al., *Multiple Clues for Dayside Aerosols and Temperature Gradients in WASP-69 b from a Panchromatic JWST Emission Spectrum*, AJ.
- 2024 Beatty, T., ... **Wiser, L.**, *Sulfur Dioxide and Other Molecular Species in the Atmosphere of the Sub-Neptune GJ 3470 b*, ApJ.
- 2024 Welbanks, L., ... **Wiser, L.**, *A High Internal Heat Flux and Large Core in a Warm Neptune Exoplanet*, Nature.
- 2023 Bell, T., ... **Wiser, L.**, et al., *Methane Throughout the Atmosphere of the Warm Exoplanet WASP-80b*, Nature.
- 2023 Coulombe L.-P., ... **Wiser, L.**, et al., *A broadband thermal emission spectrum of the ultra-hot Jupiter WASP-18b*, Nature.
- 2023 Martin, E.S., ... **Wiser, L.**, et al., *Measurements of regolith thicknesses on Enceladus: Uncovering the record of plum activity*, Icarus.
- 2022 Glidic, K., ... **Wiser, L.**, et al., *Atmospheric Characterization of Hot Jupiter CoRoT-1 b Using the Wide Field Camera 3 on the Hubble Space Telescope*, AJ.
- 2022 Mansfield, M., **Wiser, L.**, et al., *Confirmation of Water Absorption in the Thermal Emission Spectrum of Hot Jupiter WASP-77Ab with HST/WFC3*, AJ.
- 2021 Mansfield, ... **Wiser, L.**, et al. *A unique hot Jupiter spectral sequence with evidence for compositional diversity*. Nature Astronomy.

Policy

- Accepted **Wiser, L.**, Sheppard, A., et al., *An Overview of Space Policy in North America, Central America, and the Caribbean*, (IAC-24,E9,IP,45,x85848).
- 2023 **Wiser, L.**, Sheppard, A., et al., *An Overview of Space Policy Perspectives from the Young Space Generation*, (IAC-23,E3,2,8,x77227).
- 2022 **Wiser, L.**, Aganaba, T., *An evolving space governance system: Balancing interests in five policy debates*, Acta Astronautica.
- 2022 **Wiser, L.**, Bromley, M., Walker, S., *Tracing the Evolving Science and Media Impact of Space Missions*, (IAC-22,A7,1,7,x69117)
- 2021 Nasr, M., **Wiser, L.**, et al. *Planetary Protection and Martian ISRU*, (GLEX-21-10.2.6x62312)
- 2022 SGAC Space Law & Policy, Human Rights Sub-Team, *Earth Observation Data, Climate Change, and Human Rights*, Jus Ad Astra.
- Ongoing SGAC NCAC Task Force ([link](#)), SGAC Space Law & Policy Blog ([link](#))

Select Abstracts

- 2021 **Wiser, L.,** Benford, D., *A Longitudinal Study of NASA's APRA Suborbital Program*, AAS Meeting Abstracts
- 2019 **Wiser, L.,** Batalha, N., et al., *Optimizing JWST NIRISS SOSS Order 2 Precision For the Detection of K and Na*, AAS Meeting Abstracts.

SELECT PRESENTATIONS & WORKSHOPS

- 2024 ASCEND, *Speaker*
- 2024 American Astronomical Society (AAS) Congressional Visit Days
- 2022, 2024 Exoplanets IV & V, *Speaker*
- 2022 – 2024 OWL at UC Santa Cruz, *Speaker*
- 2021 – 2023 Space Generation Fusion Forum, *Organizing Team, Policy Subject Matter Expert, Delegate*
- 2020 – 2023 International Astronautical Congress (IAC), *Speaker*
- 2019 – 2023 AAS Winter Meeting, *Speaker*
- 2022 CHAMPs Early Career Highlight Seminar, *Speaker*
- 2021 Emerging Researchers in Exoplanet Science (ERES), *Speaker*
- 2021 STScI Spring Symposium, *Speaker*
- 2020 NASA HQ Intern Symposium, *Speaker*
- 2020 AIAA Young Professionals Conference, *Speaker*
- 2019 STScI Space Astronomy Summer Program Symposium, *Speaker*
- 2019 Citizens for Space Exploration Congressional Visit Days
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