

# Ella Ho

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## PROFESSIONAL SUMMARY

Dual-degree atmospheric scientist and astronomer with hands-on experience in broadcast meteorology, weather modeling, and climate science communication. Skilled in on-air delivery, severe weather coverage, and data visualization. Passionate about public engagement through accessible and accurate forecasting.

## SKILLS & CERTIFICATIONS

**Meteorology Tools:** MAX Studio, ArcGIS, GFS, HRRR, ECMWF, Jupyter, Spyder  
**Programming:** Python (NumPy, pandas, Matplotlib), R, SQL, HTML/CSS, JavaScript, C++  
**Multi-Media:** Adobe Creative Cloud, AutoCAD, SolidWorks, Microsoft Office, G Suite, Procreate  
**Certifications:** Radiation Safety (BioRAFT), Applied Leadership (CU Boulder Gold Program), Responsible Conduct of Research (CITI)

## EDUCATION

**B.A. in Astrophysical & Planetary Sciences | Minor: Space** - *University of Colorado at Boulder* **Spring 2023**  
**B.A. in Atmospheric & Oceanic Sciences** - *University of Colorado at Boulder* **Expected Spring 2026**

## PROFESSIONAL EXPERIENCE

**Student Assistant** - *Cooperative Institute for Research in Environmental Sciences (Boulder, CO)* **Aug 2025 - Present**

- Developed and facilitated community-facing outreach programming on climate science and weather resilience.
- Supported public engagement strategies, translating complex environmental issues into accessible messaging.
- Contributed to interdisciplinary team efforts aimed at promoting environmental programs across the country.

**Broadcast Meteorology Intern** - *Nexstar's FOX2/KPLR11 (St. Louis, MO)* **Jun 2025 - Aug 2025**

- Produced daily forecasts using radar, satellite imagery, and multi-model guidance (GFS, HRRR, ECMWF).
- Delivered multiple mock on-air forecasts and two on-air weather packages, receiving feedback from AMS-certified meteorologists in a top-25 market newsroom and boosting on-camera performance.
- Supported live severe weather coverage, contributing to real-time storm tracking and public safety updates.

**ASSETT Student Researcher** - *CU Boulder College of Arts & Sciences (Boulder, CO)* **Aug 2022 - Nov 2023**

- Built data visualizations and interactive tutorials in R and ArcGIS to teach mapping and data analysis, supporting data-driven learning for students in a developing course in the African Studies Department.
- Designed a capstone curriculum for data science in the humanities, adopted in the Arts & Sciences program.

**Assistant Climate Researcher** - *Ecology and Evolutionary Biology Department (Boulder, CO)* **Aug 2022 - June 2023**

- Modeled climate impacts on South American tropical flora using real-world weather data.
- Analyzed precipitation/temperature shifts to assess ecosystem vulnerability under future climate scenarios.

**Student Researcher** - *North Central Climate Adaptation Science Center (Boulder, CO)* **May 2022 - Aug 2022**

- Used R to analyze historical climate data and create climate scenario maps to guide conservation planning across the Rocky Mountain region.

## PROJECTS

**Parker Space Probe Parker Spiral** (Research Methods Final Project) **Spring 2025**

- Modeled the Parker Spiral using 7 years of solar wind and magnetic field data.
- Quantified angular deviations between theoretical and observational data using custom Python scripts.

**Lunar Surface Impact Visualizer** (Planetary Dynamics Final Project) **Fall 2023**

- Developed a Python-based simulation of lunar surface impacts, visualizing ejecta patterns and crater evolution.
- Applied physical modeling to predict energy transfer and impact morphology across multiple lunar scenarios.

## EXTRACURRICULARS

**Executive Board Member** - *American Meteorological Society (Boulder Chapter)* **Spring 2025 - Present**

- Organized student-led events on forecasting, storm safety, climate literacy, and campus outreach sessions.
- Fostered connections between students and professionals via speaker panels and networking sessions.

**Mentee** - *Ball Aerospace Sisters & BIPOC Mentorship Program* **Aug 2018 - May 2021**

- Mentored by engineers on the James Webb Space Telescope Optical Mirror System.