



Milo Space Science Institute

CLIMATE ACTION

ACADEMY





WeAreTheTRUST



HELLO!

Kamille Morales Lebrón

Outreach & Content Specialist- Research Grants Program

Puerto Rico Science, Technology and Research Trust

MOU



RESEARCH GRANTS
funds to grow

A program of the:



Puerto Rico
Science, Technology
& Research Trust

ASU [®] **Milo Space
Science Institute**
Arizona State University



Arizona State University's **Milo Space Science Institute**

- A private, nonprofit organization led by Arizona State University (ASU)
- Aims to make space science and exploration accessible to countries around the world.
- Focuses on increasing knowledge, infrastructure, and human capital in participating countries.

Services provided by Milo:

- Workforce development.
- Access to mission infrastructure as a service.
- Participation in space exploration missions.
- Milo's capacity building programs
- Designed to increase participation in space science.
- Encourage space commerce.
- Promote sustainable growth.
- Improve socio-economic health of communities served.

Arizona State University's
Milo Space Science Institute






New Zealand






Australia



 **Finn Manning** • 2nd [+ Follow](#) ⋮

Electrical Engineering and Physics student | John Curti...
3w • Edited • 

I am delighted to share that I have been accepted into the 2024 Milo Mission Academy which is being hosted in a collaborative effort from Arizona State University's [The MILO Space Science Institute](#), [AROSE](#), and the [Australian Space Agency](#).

This is to be one of the many initial steps of my journey into the space sector. The skills, experience, and network I will be able to build in this program will become an asset to not only my future development but also to the Curtin Student CubeSat Team.

I eagerly look forward to working with enthusiastic like minded peers in interdisciplinary teams as a part of the academy.

[#MiloMissionAcademyAUS](#)



Singapore





MISSION ACADEMY FOR LUNAR EXPLORATION SPACE FOR ALL

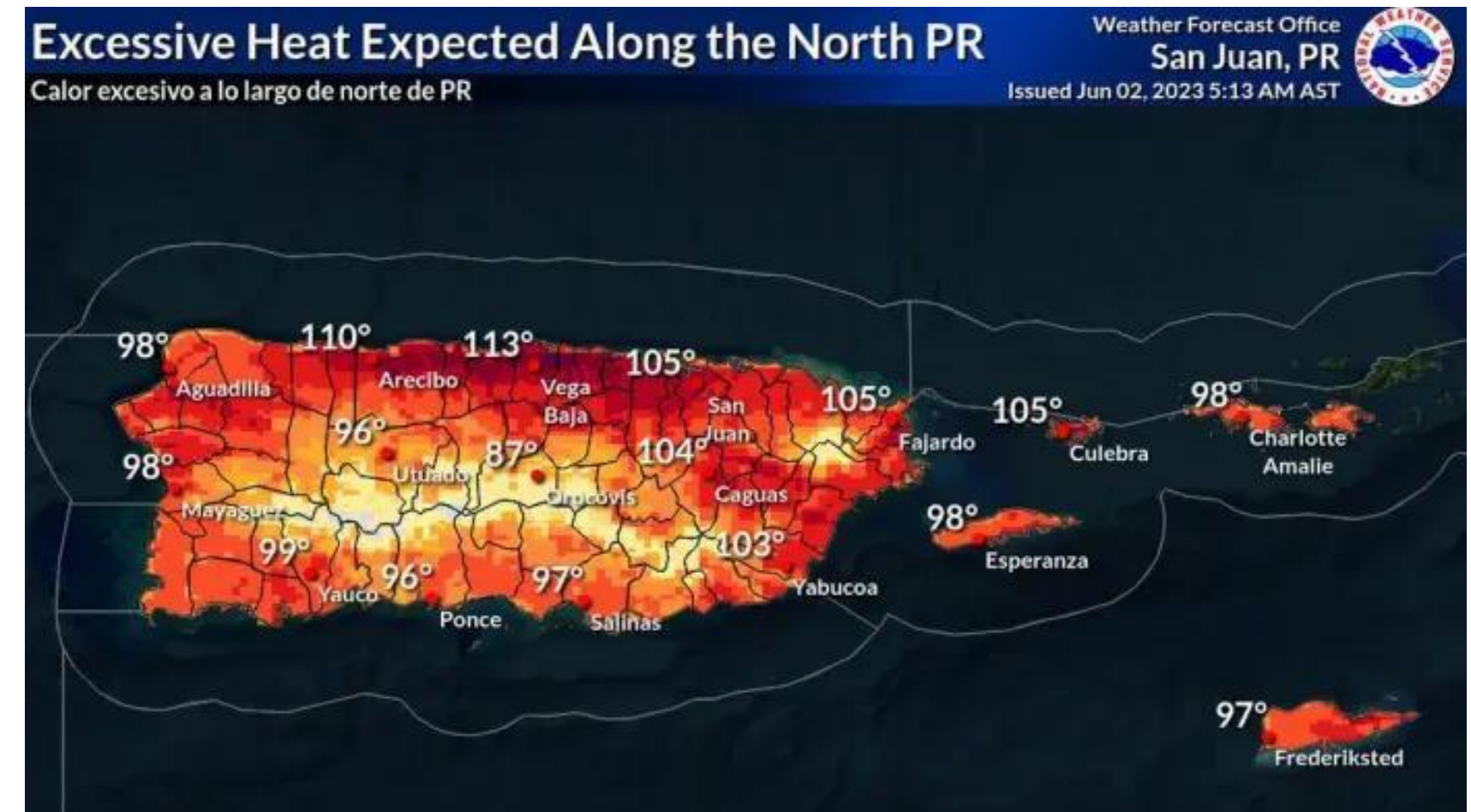
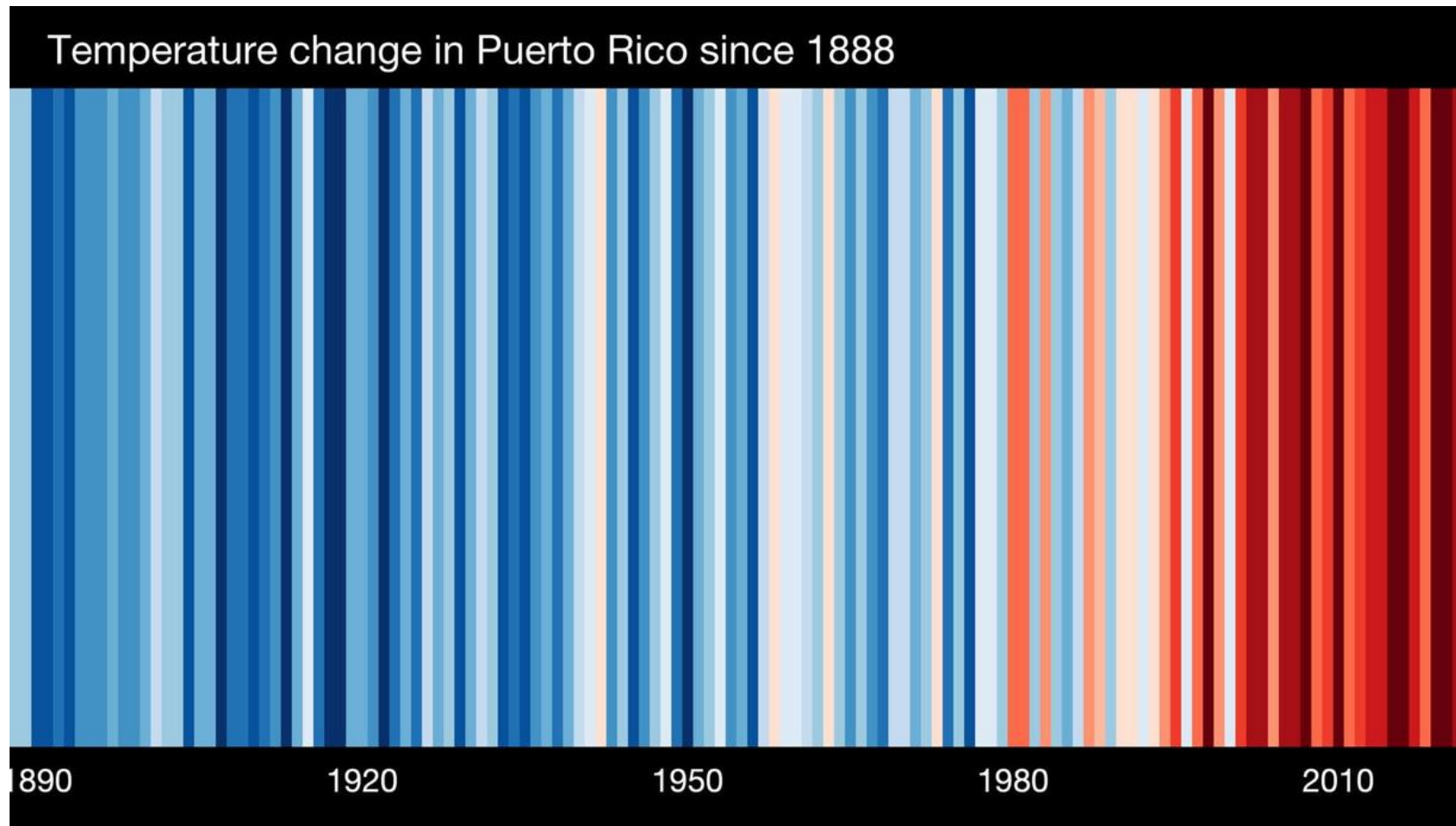


Presented By:



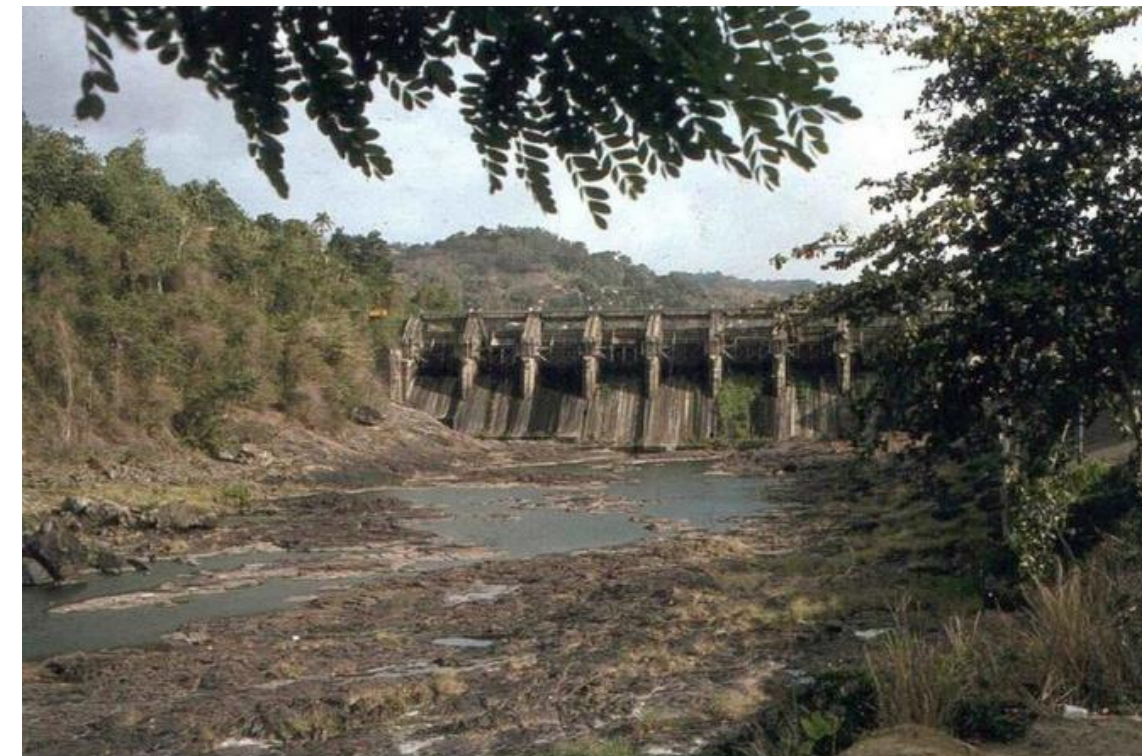


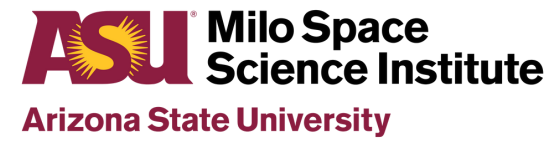
Climate Change Affects Us All





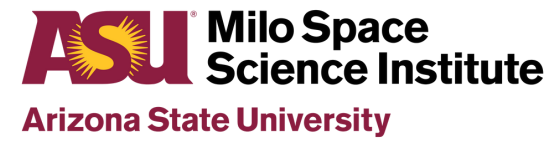
Climate Change effects in Puerto Rico





Climate Action Academy for Puerto Rico

The Climate Action Academy represents a groundbreaking initiative, marking the first time Milo is focusing on equipping students with expertise in remote sensing for addressing climate challenges on Earth. With successful space programs already established in New Zealand, Australia, and Singapore, we are thrilled to pioneer this initiative in Puerto Rico, setting a new standard for climate action.



White House Fact Sheet

Vice President Kamala Harris Launches Call to Action to Bring the Benefits of Space to Communities Across America



Milo Mission Academy for Climate Intelligence and Earth Science

The Milo Institute at Arizona State University and the Puerto Rico Science, Technology, & Research Trust (PRST) are establishing the Milo Mission Academy for Climate Intelligence and Earth Science. The academy will begin in fall 2024 and will equip students with expertise in remote sensing in order to create cutting-edge applications that use satellite data to address challenges on Earth. The applications will play a pivotal role in monitoring natural resources and land use within island communities to safeguard their wellbeing and sustainability. For more information, contact amaldonado@prsciencetrust.org ↗.

Milo Space Science Institute Climate Action Academy

- 12-session program, conducted over 16 weeks using a live, virtual platform
- 90 minute weekly talks conducted in English
- 6 to 10 hours per week
- Teamwork, problem-solving skills, program management methods and basics of entrepreneurship
- Presentation of a Design Review document where teams describe a use-inspired, applied solutions to a real-world challenge

The program will be fully sponsored by PRSTRT's Research Grants Program



Program Activities

Terrestrial Challenge

This academy will be anchored to a challenge that is defined by the climate mitigation needs of Puerto Rico. You will work in teams to develop solutions addressing the challenges. The approach ensures focus on regional priorities and can help make change happen in your community!

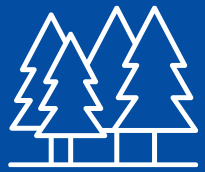
Remote Sensing Resources

Teams will be taught how to access a variety of space resources that can be used to inform and develop innovative solutions. Information about satellite instruments and their relevance for sustainability and climate resilience will be provided.

Innovative Solution

Teams will prepare a Solution Design document, and demonstrate how their solution uses space resources to address the terrestrial challenge. Teams will present their solution design to a panel of reviewers.

Focus Areas



Forest Health and Restoration



Coastal Zone Management



Agricultural Sustainability

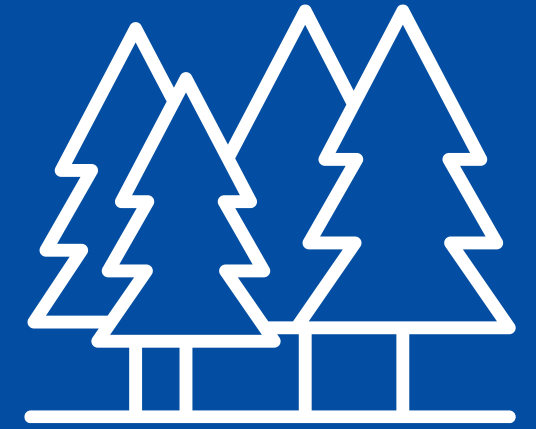


Urban Planning and Infrastructure Resilience



Water Resources Monitoring





Forest Health and Restoration

- Implement remote sensing techniques to monitor the health of Puerto Rico's forests, especially in the aftermath of hurricanes.
- Design a concept for a system that will provide early detection of forest degradation and support reforestation efforts.



Coastal Zone Management

- Use remote sensing data to monitor coastal areas, assess erosion, and identify vulnerable zones.
- Develop concepts for sustainable coastal zone management and protection of marine ecosystems.

Agricultural Sustainability



- Apply remote sensing for precision agriculture to enhance crop management and monitor soil health.
- Identify areas suitable for sustainable agriculture practices and promote efficient water use.



Urban Planning and Infrastructure Resilience

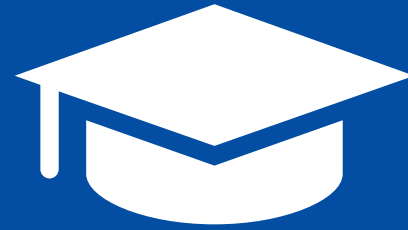
- Leverage remote sensing to analyze urban development patterns and assess vulnerabilities in critical infrastructure.
- Develop a concept for a capability / tool to inform decision makers who are developing plans to enhance the resilience of urban areas, considering future climate change impacts and sea level rise.



Water Resources Monitoring

- Use remote sensing to monitor water resources, including rivers, reservoirs, and groundwater.
- Develop a concept for early detection of drought conditions, sustainable water resource management, and adaptation to changing sea levels.

Requirements for Participation



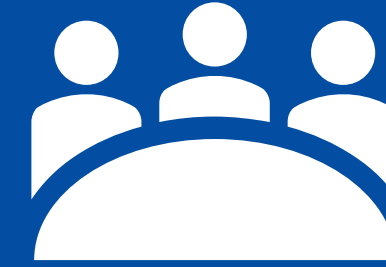
University Student or Early Career Professional in Puerto Rico



Access to a computer or tablet and Zoom platform



Participants must be proficient in English



6-10 hours per week towards team projects



Attend all LIVE session:

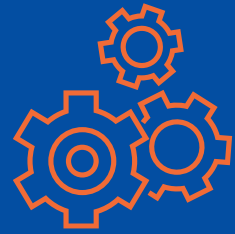
Mondays from 5:30 - 7:30 PM (AST) beginning on August 19, 2024



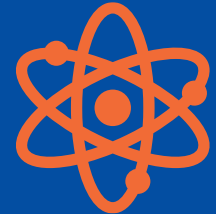
Passion for learning and a commitment to finding solutions to help Puerto Rican communities face the effects of climate change

Participant Profile:

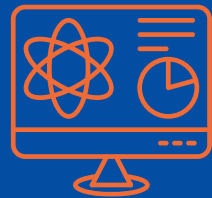
University Students or Early Career Professionals in:



Engineering



Science



Computer Science or Math



Urban Planning



Business



Architecture



Social Sciences



Other

Application Questions:

1. Briefly describe your academic/career journey.
2. Briefly describe any important experience or events that have led you to where you are.
3. Briefly describe your educational and/or career goals.
4. List any previous workforce development experiences you have participated in.

Application Questions:

5. Why do you believe it's important to take action to address climate change, particularly concerning the well-being and future resilience of Puerto Rico?
6. How do you think participating in the Milo Climate Action Academy will enable your career?
7. How did you find out about the Milo Climate Action Academy?

Program Timeline



Application

Participants will access the Milo Climate Action Academy [website](#) and be able to apply online until August 8 2024.

Milo Climate Action Academy

**Protect Our
Future**



Milo Climate Action Academy
**Lead in
Climate Action**



RESEARCH GRANTS
funds to grow



Puerto Rico
Science, Technology
& Research Trust



Milo Climate Action Academy

Sponsored by the Research Grants Program, of the
Puerto Rico Science, Technology, and Research Trust.

Students Apply Here!

Early Career Apply Here!

Providing Accessible STEM Workforce Preparation to Accelerate Your Future

The Milo Climate Action Academy, sponsored by the Research Grants Program, a program of the Puerto Rico Science, Technology, and Research Trust, is an online, interactive, solution-generating experience. The training, valued at \$1,000, will be provided to participants through a sponsored grant, ensuring no cost to the participants.



APPLY HERE

www.milomissionacademy.org/puerto-rico

For questions please contact:

kamorales@prsciencetrust.org



Students Apply Here!



Early-Career Apply Here!



ASU Milo Space
Science Institute
Arizona State University

THANK YOU



APPLY HERE