

Chanud N. Yasanayake
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Graduate Student, Department of Earth and Planetary Sciences
Johns Hopkins University

Education

Johns Hopkins University	Baltimore, Maryland
M.A., Earth and Planetary Sciences	Aug 2021
Ph.D., Earth and Planetary Sciences (expected graduation: Spring 2025)	
California Institute of Technology	Pasadena, California
B.S., Electrical Engineering	June 2017
Pomona College	Claremont, California
B.A., 3/2 Engineering (Physics)	Aug 2017

Teaching Experience

Johns Hopkins University	Baltimore, Maryland
Teaching Institute Group Facilitator – JHU Teaching Academy	June 2023, 2024
Teaching Assistant – Earth & Planetary Sciences Department	Aug–Dec 2020, 2022
• Remote Sensing of the Environment	
Pomona College	Claremont, California
Writing Fellow – Campus Writing Center	Aug 2013 – May 2015
Teaching Assistant – Physics Department	Sept–Dec 2013, Jan–May 2015
• Electronics with Laboratory	
• General Physics with Laboratory (introductory electricity and magnetism)	

Journal Publications

Yasanayake, C. N., Denevi, B. W., Hiroi, T., Jolliff, B. L., Martin, A. C., Gao, A. L., et al. (2024). The spectral characteristics of lunar agglutinates: Visible–near-infrared spectroscopy of Apollo soil separates. *Journal of Geophysical Research: Planets*, 129, e2023JE008115.

Yasanayake, C. N., Zaitchik, B. F. & Gnanadesikan, A. Seasonal Modulation of the Madden–Julian Oscillation’s Impact on Rainfall in Sri Lanka. *Journal of Climate* **36**, 7231–7255 (2023).

Selected Conference Presentations

Yasanayake, C.N., B. Zaitchik, L. Gardner, A. Gnanadesikan, & A. Shet (2024). Simulating Mosquito Habitats as an Element of Climate-informed Disease Forecasting. 104th AMS Annual Meeting.

Yasanayake, C.N., B. Zaitchik, L. Gardner, A. Gnanadesikan, & A. Shet (2023). The Sensitivity of Mosquito Habitats to Forecasting Error: Simulating *Aedes* Container Breeding Sites with GEOS-S2S Hindcasts. AGU Chapman Conference on Climate and Health for Africa, Poster #T54.

Yasanayake, C.N. and B. Zaitchik (2021). Sri Lanka and the MJO: Studying Subseasonal Variability in a Monsoon-driven Climate. American Geophysical Union Fall Meeting 2021, Abstract #A55U-1725.

Research Experience

Johns Hopkins University Baltimore, Maryland
Graduate Student Researcher with Dr. Benjamin Zaitchik Aug 2019 – present

- Investigating associations between climate variability and dengue in Sri Lanka.
- Characterizing subseasonal climate impacts of the Madden–Julian Oscillation.

Johns Hopkins University Applied Physics Laboratory Laurel, Maryland
Research Intern with Dr. Benjamin Greenhagen, Dr. Brett Denevi Aug 2017 – Aug 2019

- Measured thermal emission spectra of minerals in a simulated lunar environment chamber.
- Characterized spectral properties/composition of agglutinates from lunar soil samples.
- Handled lab responsibilities: assisting student interns, troubleshooting instrumentation, ordering new equipment.

National Institute of Standards and Technology Boulder, Colorado
Research Intern with Dr. Tasshi Dennis May–July 2015

- Characterized spectral simulation accuracy of a programmable, laser-based solar simulator.

University of California, Santa Barbara Santa Barbara, California
Research Intern with Dr. Christopher Palmstrøm June–Aug 2014

- Developed hardware upgrades for a laser-based experimental setup used to measure semiconductor properties at cryogenic temperatures.

Pomona College Claremont, California
Research Intern with Dr. Alma Zook June–Aug 2013

- Designed and constructed infrastructure for telescope instrumentation using SolidWorks CAD modeling, machining, and 3D printing.

Technical Proficiencies

Programming languages and software

Python, NCL, R, MATLAB, Perl, ArcGIS, ENVI

Data/lab experience

Meteorological/remote sensing data analysis, GIS, visible and infrared spectroscopy, geological sample preparation

Honors and Awards

AMS Student Oral Presentation Award – Third Place 2024

NSF Graduate Research Fellowship – Honorable Mention 2021

Pomona College Tileston Physics Prizes 2013, 2014, 2015

Honor Societies:

 Tau Beta Pi 2017

 Phi Beta Kappa 2015