

Rachel Yuen Sum Tam

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Department of Atmospheric Science, University of Illinois, Urbana-Champaign

EDUCATION

Master of Science in Atmospheric Science

University of Illinois, Urbana-Champaign,

Advisor: Professor Cristian Proistosescu

Aug 2021 - Present

Urbana, IL

Bachelor of Science in Oceanic and Atmospheric Science, Cum Laude

University of California, San Diego,

Minor in Climate Change Studies

Jun 2021

La Jolla, CA

RESEARCH EXPERIENCE

Graduate Research Assistant

Department of Atmospheric Science, University of Illinois, Urbana-Champaign,

Advisor: Professor Cristian Proistosescu

Aug 2021 - Present

Urbana, IL

- Investigate sources of uncertainty of low cloud radiative flux changes contributed by the main cloud controlling factors and model sensitivity in historical and future simulations.

Undergraduate Student Researcher

CLIVAR and Carbon Hydrographic Data Office (CCHDO)

Supervisor: Ms Carolina Berys-Gonzalez

Jul 2020 – Aug 2021

La Jolla, CA

- Identified ocean physical and chemical property differences database and raw received bottle data in CARINA (CARbon dioxide IN the Atlantic Ocean) project
- Merged CARINA bottle files that have similar nutrients data and physical properties with Python and Terminal Operations

Undergraduate Student Researcher

Climate, Atmospheric Sciences, and Physical Oceanography Department, SIO

Advisor: Professor Amato Evan

Jun 2020 – Jun 2021

La Jolla, CA

- Drew AVHRR satellite and climate model data from SSEC Climate Data Portal and CMIP6
- Designed MATLAB code that removes errors caused by satellite drifting, annual seasons, and average data in temporal and spatial dimensions
- Conducted data quality check by plotting graphs with resulted data from MATLAB codes and raw data

Undergraduate Student Researcher

Mar 2020 – Aug 2021

Climate, Atmospheric Sciences, and Physical Oceanography Department, SIO

La Jolla, CA

Advisor: Research Oceanographer Dr. James Swift

- Edited, sorted, and joined data from three decades of monthly Hawaii Ocean Time-series cruises to improve the interdisciplinary utility of the data (using Java Ocean Atlas and Excel)
- Used similar tools and techniques to prepare cleaned global ocean trans-basin section data from the past 40 years for education and research

PRESENTATIONS

Oral Presentations

Tam, R. (2022, September). *Different drivers of low Cloud Radiative feedbacks and their uncertainty in historical and future simulations.* Midwest Climate Conference at Purdue University, West Lafayette, IN.

Tam, R., Evan, A. (2021, May). *Seasonal Cycle of Arctic Cloud Cover based on AVHRR Satellite Data.* Undergraduate Research Conference (URC) at UC San Diego, La Jolla, CA.

Poster Presentations

Swift, J., Saraf, D., **Tam, R.**, et al. (2022, March). *The New Java OceanAtlas Suite - Application Updates, Expanded Data Library, and Education Support.* Ocean Sciences Meeting, Honolulu, HI.

OTHER PROFESSIONAL EXPERIENCE

Teaching Assistant

Fall 2022

ATMS 140 Climate and Global Change

- Hosted in-person and virtual office hours for a class of 130 students.

Conference Co-chair

Jan 2022 – Oct 2022

6th Midwest Student Conference on Atmospheric Research (MSCAR)

- Invited sponsors and organized the first MSCAR with an in-person component since the 2019 pandemic and hosted 87 in-person attendees and 40 virtual participants
- Invited and communicated with over 8 graduate schools in the Midwest and 4 corporations for the first in-person Graduate School and Careers Fair
- Recruited and led over 20 graduate and undergraduate volunteers on promoting and planning the virtual and in-person components of the conference

Conference Subcommittee

July 2021 – Oct 2021

5th Midwest Student Conference on Atmospheric Research (MSCAR)

- Assisted in planning virtual logistics of the conference and facilitated the poster session at the conference by creating and managing the poster judging rubric.

Student Intern

Apr 2021 – Jun 2021

CalPIRG Students

- Conducted promotional work for 100% for Renewable Energy Campaign in forms of social media, weekly letters to the editor and phonebanking
- Co-authored op-ed *CALPIRG's 100% Clean Renewable Energy Campaign: 1st Climate Action Summit* with UCSD Associated Students' President Manu Agni and published in campus newspaper *The Guardian*

HONORS AND AWARDS

Department of Atmospheric Sciences Graduate Student Recruitment Fellowship, UIUC	Fall 2021
Undergraduate Library Research Prize, UC San Diego	Spring 2021
Triton Research & Experiential Learning Scholars, UC San Diego	Fall 2020 – Spring 2021
Provost Honors, UC San Diego	Winter 2020 – Winter 2021

PROFESSIONAL MEMBERSHIPS

- **American Geophysical Union (AGU)**