

July, 2024

Yuan-Jen Lin

Postdoctoral Research Scientist

Center for Climate Systems Research, Columbia University | NASA Goddard Institute for Space Studies (GISS)

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EDUCATION

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| National Taiwan University | Taipei, Taiwan |
| Ph.D. in Atmospheric Sciences | 2016 – 2022 |
| Thesis: “Climate feedback and the ocean: uncertainties and their interaction under global warming” | |
| Advisor: Yen-Ting Hwang | |
| National Taiwan University | Taipei, Taiwan |
| B.S. in Atmospheric Sciences | 2012 – 2016 |

RESEARCH EXPERIENCE AND EMPLOYMENT

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| Postdoctoral Research Scientist | 2022 - present |
| Center for Climate Systems Research, Columbia University NASA Goddard Institute for Space Studies (GISS) | |
| Visiting Scholar | 2021 – 2022 |
| Atmospheric & Environmental Sciences, SUNY Albany (Host: Brian E. J. Rose) | |
| Research Assistant | 2016 – 2021 |
| Atmospheric Sciences, National Taiwan University (Supervisor: Yen-Ting Hwang) | |

PEER-REVIEWED PUBLICATIONS

- 2023 **Lin, Yuan-Jen**, Brian EJ Rose, and Yen-Ting Hwang. “Mean state AMOC affects AMOC weakening through subsurface warming in the Labrador Sea.” *Journal of Climate* 36, no. 12 (2023): 3895-3915. <https://doi.org/10.1175/JCLI-D-22-0464.1>
- 2021 **Lin, Yuan-Jen**, Yen-Ting Hwang, Jian Lu, Fukai Liu, and Brian EJ Rose. “The dominant contribution of Southern Ocean heat uptake to time-evolving radiative feedback in CESM.” *Geophysical Research Letters* 48, no. 9 (2021): e2021GL093302. <https://doi.org/10.1029/2021GL093302>
- 2019 **Lin, Yuan-Jen**, Yen-Ting Hwang, Paulo Ceppi, and Jonathan M. Gregory. “Uncertainty in the evolution of climate feedback traced to the strength of the Atlantic meridional overturning circulation.” *Geophysical Research Letters* 46, no. 21 (2019): 12331-12339. <https://doi.org/10.1029/2019GL083084>
- in review.* **Lin, Yuan-Jen**, Gregory V. Cesana, Cristian Proistosescu, Mark D. Zelinka, and Kyle C. Armour. “The relative importance of forced and unforced temperature patterns in driving the time variation of low-cloud feedback.” (in review, *Journal of Climate*)
- in prep.* **Lin, Yuan-Jen** and co-authors. “Intermodel spread of radiative feedback patterns traced to regional surface warming using NASA GISS ModelE3 Green’s Function.”

PRESENTATIONS

- Seminar, Department of Atmospheric Science, Colorado State University Jan 2024
“The relative importance of forced and unforced temperature patterns in driving the time variation of low-cloud feedback”
- NCAR Climate and Global Dynamics Laboratory (CGD) Seminar Jan 2024
“The relative importance of forced and unforced temperature patterns in driving the time variation of low-cloud feedback”
- Atmospheric & Climate Dynamics Seminar, University of Washington Nov 2023
“The relative importance of forced and unforced temperature patterns in driving the time variation of low-cloud feedback”
- SEAS Colloquium in Climate Science (SCiCS), Columbia University Apr 2022
“Understanding changing ocean circulation and its role in modifying climate sensitivity”
- Lightning Talk at the 15th ECS symposium Feb 2022
“The dominant contribution of Southern Ocean heat uptake to time-evolving radiative feedback in CESM”
- Climate Seminar, University at Albany (SUNY) Oct 2021
“The role of ocean in the time-evolving radiative feedbacks”
- CASPO Seminar, Scripps Institution of Oceanography Nov 2020
“Understanding the role of ocean in modifying time-evolving radiative feedback”

HONORS AND AWARDS

- 2022 Chou Chia Publication Award: Lin et al. (2021) (doi: 10.1029/2021GL093302)
- 2021 Chou Chia Publication Award: Lin et al. (2019) (doi: 10.1029/2019GL083084)
- *Chou Chia Publication Award is an annual award for climate related publication in Taiwan, in memory of the climate scientist Chou Chia.*
- 2019 Best Presentation Award | Atmospheric Sciences Annual Meeting, Taoyuan, Taiwan.
- 2017 Best Presentation Award | Atmospheric Sciences Annual Meeting, Miaoli, Taiwan.

GRANT FUNDING

- Graduate Student Study Abroad Program, Ministry of Science and Technology, Taiwan 2021-2022
The grant supports my one-year research visit at SUNY Albany.

SELECTED CONFERENCE PRESENTATIONS

- CFMIP/CLIVAR Meeting on Clouds, Circulation and Climate, Chestnut Hill, MA. Jun 2024
(poster) *Intermodel spread of radiative feedback patterns traced to regional surface warming using NASA GISS ModelE3 Green's Function*
- Workshop on Confronting Earth System Model Trends with Observations, Boulder, CO. Mar 2024
(oral) *The relative importance of forced and unforced temperature patterns in driving the time variation of low-cloud feedback*
- CFMIP-GASS Meeting on Cloud, Precipitation, Circulation & Climate Sensitivity, France. Jul 2023
(poster) *The relative importance of forced and unforced temperature patterns in driving the time variation of low-cloud feedback*
- AGU Fall Meeting, Chicago, IL. Dec 2022
(oral) *Mean state AMOC affects AMOC weakening through subsurface warming in the Labrador Sea*

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| The Pattern Effect Workshop, Boulder, CO. <i>(poster) The role of ocean in modifying SST pattern formation and time-evolving radiative feedback</i> | May 2022 |
| US AMOC Science Team Meeting, Woods Hole, MA. <i>(poster) Mean state AMOC affects AMOC weakening through subsurface warming in the Labrador Sea</i> | Apr 2022 |
| CFMIP Annual Meeting on Clouds, Precipitation, Circulation & Climate Sensitivity, Online. <i>(poster) The role of ocean in the time-evolving radiative feedbacks</i> | Sep 2021 |
| AGU Fall Meeting, Online. <i>(oral) Attributing Radiative Feedback Evolution to Regional Ocean Heat Uptake</i> | Dec 2020 |
| East Asian Workshop on Climate Dynamics, Busan, Korea. <i>(oral) Uncertainty in the Evolution of Climate Feedback Traced to the Strength of the Atlantic Meridional Overturning</i> | May 2019 |
| CFMIP Annual Meeting on Clouds, Precipitation, Circulation, & Climate Sensitivity, CO. <i>(oral) Uncertainty in the Evolution of Climate Feedback Traced to the Strength of the Atlantic Meridional Overturning</i> | Oct 2018 |
| Atmospheric Sciences Annual Meeting, Miaoli, Taiwan. <i>(poster) Responses to Greenhouse Gas Forcing and their Influence on Global and Regional Climate Change in CMIP5 GCMs</i> | Feb 2017 |

LEADERSHIP AND SERVICE

Peer Review

Geophysical Research Letters
Journal of Climate
Journal of Advances in Modeling Earth Systems
Nature Geoscience
Nature Communications
Communications Earth & Environment

Executive Committee Member of Climate Seminar, University at Albany, SUNY. (2021-2022)

Volunteer Staff, CFMIP Annual Meeting. (2021)

TEACHING AND MENTORING EXPERIENCE

Teaching Assistant, National Taiwan University
Climate Science (Spring 2021, Spring 2020, Fall 2018, Fall 2016)
An Introductory Survey to Atmospheric Science Research (Spring 2018, Spring 2017)

SKILL MATRIX

Programming Languages: Python (proficient), Fortran, Matlab
Shell Scripting: Bash
Version Control: Git
GCMs: Community Earth System Model (CESM), NASA GISS ModelE
High Performance Computing: Intel Compiler, PBS, Slurm Workload Manager
Data Analysis/Visualization: Python (xarray, numpy, scipy, matplotlib, etc.), Cloud computing (Pangeo), Climate Data Operators (CDO), NetCDF Operators (NCO), NCAR Command Language (NCL), Matlab