

Chu-Chun Chen

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Research Interests

Land-atmosphere interaction, terrestrial ecosystem-climate feedback, anthropogenic impacts on climate, numerical modeling.

Education

University of Illinois at Urbana-Champaign

Doctor of Philosophy, Atmospheric Sciences, August 2018 to present.

National Taiwan University, Taipei, Taiwan

Master of Science, Atmospheric Sciences, January 2017.

Bachelor of Science, Atmospheric Sciences, June 2014.

Publications

Chen, C.-C., Lin, H.-W., Yu, J.-Y. and Lo, M.-H. (2016). “The 2015 Borneo Fires: What Have We Learned From the 1997 and 2006 El Niños?” *Environmental Research Letters*, 11(10), 104003.

Chen, C.-C., et al. (2019). “Thermodynamic and Dynamic Responses to Deforestation in the Maritime Continent: A Modeling Study” *Journal of Climate*, 32(12), 3505-3527.

Chen, C.-J., **Chen, C.-C.**, Lo, M.-H., Juang, J.-Y. and Chang, C.-M. (2020). “Central Taiwan’s Hydroclimate in Response to Land Use/Cover Change” *Environmental Research Letters*, 15(3), 034015.

Presentations

Chen, C.-C. and Dominguez, F. (2021, April). *The influence of soil moisture anomalies on ENSO teleconnections over southeastern South America*. Poster presented at School of Earth, Society, and Environment Research Review Program, Urbana.

Chen, C.-C., et al. (2019, June). *Thermodynamic and Dynamic Responses to Deforestation in the Maritime Continent: A Modeling Study*. Paper presented at the 24th Community Earth System Model (CESM) Workshop, Boulder.

Chen, C.-C., et al. (2018, October). *Thermodynamic and Dynamic Responses to Deforestation in the Maritime Continent: A Modeling Study*. Paper presented at the 2nd Midwest Student Conference on Atmospheric Research, Urbana.

Chen, C.-C., Lo, M.-H. and Yu, J.-Y. (2017, December). *Responses of Mean and Extreme Precipitation to Deforestation in the Maritime Continent*. Paper presented at the American Geophysical Union Fall Meeting, New Orleans.

Chen, C.-C., Lo, M.-H. and Yu, J.-Y. (2017, October). *Responses of Precipitation to Natural and Anthropogenic Forcings Over the Maritime Continent*. Paper presented at the Workshop for Climate Variability and Air-Sea Interaction, Taipei.

Chen, C.-C. and Lo, M.-H. (2017, August). *Responses of Mean and Extreme Precipitation to Deforestation in the Maritime Continent*. Poster presented at the Workshop for Typhoon, Cloud and Climate Study, Taipei.

Chen, C.-C., Lo, M.-H. and Yu, J.-Y. (2016, December). *Local and Remote Climate Response to*

- Deforestation in the Maritime Continent*. Poster presented at the American Geophysical Union Fall Meeting, San Francisco.
- Chen, C.-C. and Lo, M.-H. (2016, June). *Local and Remote Climate Response to Deforestation in the Maritime Continent*. Paper presented at the International Conference on Earth Observations and Societal Impacts, Keelung, Taiwan.
- Chen, C.-C. and Lo, M.-H. (2016, April). *Local and Remote Climate Response to Deforestation in the Maritime Continent*. Paper presented at the Taiwan Geosciences Assembly, Taipei.
- Chen, C.-C., Lo, M.-H. and Yu, J.-Y. (2015, December). *Identifying Hotspots of Tropical Deforestation to Induce Teleconnection Patterns*. Poster presented at the American Geophysical Union Fall Meeting, San Francisco.
- Chen, C.-C., Lo, M.-H., and Yu, J.-Y. (2015, November). *The Diminishing Impacts of El Niño Type on Maritime Continent Precipitation*. Poster presented at the Third Consortium for Climate Change Study Workshop on Climate System Modeling, Taipei.

Employment

- Weather Forecast Analyst, FrostDefense Envirotech Inc. December 2020-February 2021.
- Evaluated the skill of the seasonal and sub-seasonal forecasts in predicting frost occurrence.
- Research Assistant, National Taiwan University HydroClimatology Group.
October 2014-January 2015; March 2017-July 2018.
- Designed and executed numerical experiments using the Weather Research and Forecasting Model.
 - Analyzed simulation results and investigated irrigation and urbanization influences in Taiwan.
- Teaching Assistant, National Taiwan University.
- Terrestrial and Global Hydrological Cycle, Fall 2016.
 - Statistics with Meteorological Applications, Spring 2016.
 - Introduction to Earth System Science, Spring 2015.

Honors and Awards

- Second place in Oral presentation during 2nd Midwest Student Conference on Atmospheric Research, October 2018.
- Taiwan UIUC Scholarship, Fall 2018-Summer 2022.
- American Geophysical Union 2016 Fall Meeting Student Travel Grant, December 2016.
- Taiwan Ministry of Science and Technology International Conference Fellowship, December 2015 and December 2016.
- National Taiwan University International Research Fellowship, July 2014-September 2014.
- Taiwan Ministry of Science and Technology College Student Research Training Fellowship, July 2013-February 2014.
- National Taiwan University Presidential Award, Fall 2013.

Skills

Languages: Chinese (native), English (fluent).
Programming Languages: Python, Matlab, NCL, GrADS, Fortran, Shell Script.