

HENG QUAN (权衡)

Atmospheric and Oceanic Sciences Program, Princeton University, US

E-mail: hengquan@princeton.edu

Personal website: <https://heng-quan.github.io>

EDUCATION

Princeton University

Sep. 2022 - now

PhD in Atmospheric and Oceanic Sciences Program

Peking University

Sep. 2018 - Jul. 2022

Bachelor of Atmospheric Sciences (School of Physics)

- Overall GPA: **3.85/4.00** or **91/100**
- Ranking: **9/176, top 5%** (physics school) or **1/14** (atmospheric sciences department)

PUBLICATIONS

Quan, H., Zhang, Y., & Fueglistaler, S. Weakening of tropical free tropospheric temperature gradients with global warming (submitted to *Journal of the Atmospheric Sciences*).

Quan, H., Fueglistaler, S., Zhang, B., & Wang, C. Non-linear radiative response to patterned global warming due to convection aggregation and non-linear tropical dynamics (2nd revision under review in *Journal of Climate*).

Quan, H., Koll, D., Lutsko, N., & Yuval, J. Optimal Solar Geoengineering Strategies Based on Reinforcement Learning (in prep).

Quan, H., Zhang, B., Bourguet, S., Linz, M., & Chen, G. (2023). How Do Different Processes Shape Temperature Probability Distributions? A Percentile-averaged Temperature Tendency Decomposition. *Journal of Climate*, 1-36.

Quan, H., Chai, W., & Fu, Z. (2022). Asymmetry of daily mean temperature series over China and its frontal mechanism. *International Journal of Climatology*, 42(3), 1828-1840.

Chai, W., Huang, Y., Yang, L., **Quan, H.**, & Fu, Z. (2021). Evaluation of re-analyses over China based on the temporal asymmetry of daily temperature variability. *Theoretical and Applied Climatology*, 1-13.

PRESENTATIONS

AOFD 2024, Burlington

June 2024

Weaker temperature gradient in a warmer climate

(oral)

CFMIP 2024, Boston

June 2024

SST pattern effect on OLR: The role of convection aggregation

(oral)

AGU 2023, San Francisco

December 2023

Non-linear radiative response to patterned global warming due to convection aggregation

(oral)

Gordon Research Conference on Radiation and Climate 2023, Maine

July 2023

Non-linear radiative response to patterned global warming due to convection aggregation

(poster)

CFMIP-GASS 2023, Paris

July 2023

Non-linear radiative response to patterned global warming due to convection aggregation

(poster)

AWARDS & HONORS

National Scholarship (**top 1%** among 176 students, 2021)

Merit Student Pacesetter (2021)

POSCO Asia Scholarship (**top 3%** among ~180 students, **awarded three times** in 2019,2020 and 2021)

Outstanding bachelor student in Beijing (**10** among 176 students, 2022)

Weiming bachelor student (**7** among 176 students, 2022)

EXTRACURRICULAR ACTIVITIES

Was the **leader of Peking University GO Chess Team** for 2 years, and won **2 champions** in Beijing GO Chess University League, 2019-2021

Was the **president of Peking University GO Chess Club** for 2 years, and organized weekly club activities and the annual PKU GO Chess Cup, 2019-2021