

# HENG QUAN (权衡)

Atmospheric and Oceanic Sciences Program, Princeton University, US

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## EDUCATION

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### 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

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

**Quan, H.,** Fueglistaler, S., Zhang, B., & Wang, C. The Sea Surface Temperature Pattern Effect on Outgoing Longwave Radiation: the Role of Large-scale Convective Aggregation. (under review).

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

**Quan, H.,** Fueglistaler, S., Zhang, B., & Wang, C. (2024). Non-linear radiative response to patterned global warming due to convection aggregation and non-linear tropical dynamics. *Journal of Climate*, 37(21): 5675-5686.

**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*, 36(15): 5179-5196.

**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.

## TALKS

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### AGU 2024, Washington D.C.

Weakening of tropical free tropospheric temperature gradients with global warming

### ICDM Workshop 2024, Nanjing

Weaker temperature gradient in a warmer climate

### AOFD 2024, Burlington

Weaker temperature gradient in a warmer climate

### CFMIP 2024, Boston

SST pattern effect on OLR: The role of convection aggregation

### AGU 2023, San Francisco

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

## POSTERS

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### **AGU 2024, Washington D.C.**

Weakening of tropical free tropospheric temperature gradients with global warming

### **Gordon Research Conference on Radiation and Climate 2023, Maine**

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

### **CFMIP-GASS 2023, Paris**

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

## AWARDS & HONORS

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### **PhD (2022-now):**

Best Student Oral Presentation Award in the 2024 ICDM workshop

### **Undergraduate (2018-2022):**

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

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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