Haoxing Ju

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EDUCATION

Nanjing University

Ph.D. - Atmospheric Science

Advisor: Prof. Lili Lei

Nanjing University

B.S. - Atmospheric Science

RESEARCH EXPERIENCE

Research Assistant

Non-Gaussian ensemble filter in Radiance assimilation

 $\circ~$ Construct DART quantile-conserving assimilation system into a WRF-LES OSSE case.

 $\circ~$ Test DART non-Gaussian filters in assimilating all-sky infrared radiance into LES scale WRF model.

 $VOC\ assimilation\ strategy\ in\ Chemical\ Transport\ Model$

- $\circ~$ Constructed VOC concentration-emission assimilation system in WRF-CHEM model.
- $\circ~$ Developed VOC selection strategy for assimilating station observations.
- $\circ~$ Poster presentation in Atmospheric Environmental Remote Sensing Society (AERSS) Annual Meeting 2023.

• Undergraduate Research Assistant Nanjing University • East Asian Summer Monsoon Rainfall and the Associated Atmospheric Circulations Mar 2019 - Sep 2020

PUBLICATIONS

• Ju, H., Lei, L., Anderson, J. L., Zhou, L., Tan, Z., and Zhang, Y. "A Probit-transformed Rank Histogram Filter for All-sky Infrared Radiance Assimilation", *Journal of Advances in Modeling Earth Systems*, 2024 (under review)

Presentations

- 1st Atmospheric Environmental Remote Sensing Society(AERSS) Annual Meeting, Wuhan, China, 2023 (poster)
- Summer School of Data Assimilation for Geoscience, Nanjing, China, 2023 (poster)

TEACHING

• Teaching Assistant Graduate Course: Data Assimilation

Awards

- People's Scholarship 2018, 2019, 2020
- Tiangong International Scholarship 2024

Skills

Programming

 $Python(numpy/scipy/xarray)/MATLAB/Shell\ scripts(cshell/bash\ shell)/Fortrantian (scripts)/Shell\ scripts)$

Sports

Team member of Nanjing University Cycling Racing Team

Language

Chinese: native/English: bilingual/Japanese: JLPT N2

Nanjing University May 2024 - present

Nanjing University

Fall 2022

Sep 2017 - Jun 2021

Nanjing, China

Nanjing, China

Sep 2021 - present

Nanjing University Jul 2023 - Jun 2024

Sep 2021 - Jun 2023