WEI LI

Department of Earth and Atmospheric Sciences

University of Houston

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ACADEMIC INTERESTS

- Air quality data processing and modeling
- Atmospheric chemistry and climate interactions

EDUCATION BACKGROUND

University of Houston   Aug.2018-Present

Ph.D. Atmospheric Science   **GPA: 3.959/4.0**

Thesis title: Atmospheric Composition Changes During Droughts in the Continental U.S.

Advisor: Dr. Yuxuan Wang (https://www.yxwanggroup.net/)

China University of Geosciences, Beijing   Aug.2015-Jun.2018

M.S. Mineral Resources Prospecting and Exploration   **GPA: 3.6/4.0**

Hebei University of Engineering   Aug.2011-Jun.2015

B.S. Resources Exploration Engineering   **GPA: 4.17/4.3**

PROJECT EXPERIENCE

- ✧ **Project (Aug.2018-Present）：**
  - Data analysis and GEOS-Chem modeling for the San Antonio Field Campaign
  - Synoptic and meso-scale (sea breeze) circulations and their associations with ozone in Houston
  - GEOS-Chem global simulation to generate boundary/initial conditions for CAMx
  - WRF-CAMx 1km spatial resolution simulations for TRACER-AQ field campaign
  - Data acquisition and process for NOAA AC4 project about drought effects on air quality
  - Evaluation and improvement of drought stress on biogenic isoprene emissions supported by NASA

  --My work included:
  - Ground-based and remote sensing data collection, processing, and visualization
  - GEOS-Chem and WRF-CAMx simulations and CMIP6 model evaluation
  - Report and publication writing
  - Results presentation at professional conferences

AWARDS

- 2021, **Outstanding Academic Achievement Scholarship** from University of Houston
- 2017, **1st Class Scholarship** from China University of Geosciences, Beijing
- 2016, **1st Class Scholarship** from China University of Geosciences, Beijing

- ➢ 2015, **1st Class Scholarship** from China University of Geosciences, Beijing

- ➢ 2014, **2nd Class Scholarship**. Awarded **Merit Student** from Hebei University of Engineering.

- ➢ 2013, **1st Class Scholarship**. Awarded **Merit Student** from Hebei University of Engineering.

- ➢ 2012, **National Encouragement Scholarship**

PUBLICATIONS

1. **Li, W.**, Wang, Y., Bernier, C., & Estes, M. (2020). Identification of sea breeze recirculation and its effects on ozone in Houston, TX, during DISCOVER-AQ 2013. Journal of Geophysical Research: Atmospheres, 125(22), e2020JD033165.

2. **Li, W.**, Wang, Y., Flynn, J., Griffin, R. J., Guo, F., & Schnell, J. L. (2021). Spatial variation of surface O3 responses to drought over the contiguous United States during summertime: role of precursor emissions and ozone chemistry. Journal of Geophysical Research: Atmospheres, e2021JD035607.

3. **Li, W.**, & Wang, Y. (2022). Reduced surface fine dust under droughts over the southeastern United States during summertime: observations and CMIP6 model simulations. EGUsphere, 1-21. (under review)

PRESENTATION & TEACHING

Poster presentation and session co-chair in the AMS online meeting   Dec. 2022

Poster presentation in the AGU fall online meeting   Dec. 2020

Oral presentation in the AGU fall meeting in San Francisco   Dec. 2019

Oral presentation in the 9th International GEOS-Chem meeting at Harvard University   May 2019

Teaching Assistant in University of Houston   2019-2021

- ● Climate Change lab

- ● Environmental Data Analysis lab (R programming)

Teaching Assistant in New Oriental Education for two weeks   Dec. 2015

- ● Assisted enrollment procedure of new students

- ● Assisted teaching and provided after-school guidance

SKILLS & INTERESTS

- ➢ Professional expertise:

  - ● Skilled in R & Python programming.

  - ● Familiar with Linux operation system and bash commands.

  - ● Capable of running GEOS-Chem, WRF-CAMx and WRF-Chem models.

- ➢ Enjoy travelling, keeping fit, and table tennis.