YUECHUN WANG

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EDUCATION

- Ph.D. Atmospheric Sciences, Ohio State University, Columbus, OH GPA: 3.992/4 08/2016 present
- **B.S.** Atmospheric Sciences, Nanjing University, Nanjing, China GPA: 4.29/5 09/2012 06/2016

PROJECTS AND RESEARCH

■ Typhoon Damage Modeling Project -- Graduate Research Associate 08/2018 - present

Advisor: Steven Quiring (Professor, Ohio State University)

Project: Developing models and tools to predict typhoon impacts for Guangdong (China) Power Grid Company (https://94ycwang.github.io/GDpower_testdata/link1.html).

■ Applied Climatology Class Project – Team Member 01/2018 – 04/2018

Advisor: Steven Quiring (Professor, Ohio State University)

Project: Hurricane power outage geoviewer, a web-based application to visualize power outage model output geographically for the Texas Department of Emergency Management (https://94ycwang.github.io/TDEM).

■ Ph.D. Dissertation Project 05/2017 - present

Advisor: Steven Quiring (Professor, Ohio State University)

Project: Investigating Soil Moisture—Precipitation Feedback on the North American Monsoon System in the WRF Model **Details:**

- Investigate how soil moisture initialization affects the simulations of the North American Monsoon System in the Weather Research and Forecasting (WRF) model;
- Evaluate the memory of initial soil moisture perturbations in the WRF model.
- NASA Project -- Graduate Research Associate 09/2016 present

Advisor: Steven Quiring (Professor, Ohio State University)

Project: Investigating soil moisture – convective precipitation feedbacks with Soil Moisture – Active Passive (SMAP) **Details:**

- > Perform a sensitivity study on the response of convective initiation to in situ soil moisture in the central United States;
- > Compare the results based on in situ soil moisture with those based on satellite soil moisture products.
- School Lab Research -- Undergraduate Research Associate 10/2015 05/2016

Advisor: Haibo Hu (Associate Professor, Nanjing University)

Project: Impacts of ocean heat transport on the westerly jet in the North Pacific

Details:

- Calculated meridional heat transport through selected ocean cross sections and analyzed the time series of heat transport to find their relevance to lower-tropospheric westerly jet;
- > Completed graduation thesis: Study of the impact of oceanic meridional heat transport on westerly jet during wintertime using WRF–ROMS regional coupled model simulations.

■ Field Trip for National Undergraduate Atmospheric Sciences Students to Gansu Province of China 07/2015

Advisor: Tijian Wang (Professor, Assistant Dean, Nanjing University) and Jing Jiang (Professor, Nanjing University)

Project: A study on the semiarid and arid climate in northwest China

Details:

- Finished a series of field observations during the trip;
- > Completed one practice report.

PROFESSIONAL EXPERIENCE

■ Internship 02/2015

Nanjing Municipal Meteorological Bureau

Details:

- > Acquired practical experience of meteorological operation;
- ➤ Learned the practical applications of various numerical prediction products;
- Provided weather reports based on the MICAPS platform for a week.

SKILLS

■ Programming Languages

MATLAB, NCL, Python, JavaScript, C, Fortran, HTML, CSS, R, PHP

■ Technologies / Environment

WRF-ARW, Linux/Unix.

CONFERENCE PRESENTATIONS

■ Y. Wang, S. Yuan, S. M. Quiring, T. W. Ford, A. Houston and L. Goldstein, 2017: Investigating Soil Moisture—Convective Precipitation Feedbacks Using In-Situ Soil Moisture in the Central United States. Oral presentation at 2017 Annual American Geophysical Union Fall Meeting, New Orleans, Louisiana.

12/14/2017

SOCIAL ACTIVITIES

- Worked as National Olympic Committee (NOC) Assistant at 2nd Summer Youth Olympic Game **2014**
- Worked as Coordination Supervisor at 2nd Asia Youth Game **2013**