Keqi He
Division of Earth and Ocean Sciences, Nicholas School of the Environment, Duke University
5120 Environment Hall, Duke University, Durham, NC, 27708
Email: *keqi.he@duke.edu*; Phone: 919-638-2308

A. PROFESSIONAL PREPARATION:
Ph.D. Student, Earth and Ocean Sciences, Duke University, Durham, NC, USA (2019-Present)
B.S., Water and Hydropower Engineering/Chu Kochen Honors College, Zhejiang University, Zhejiang, China (2015-2019)

B. RESEARCH INTERESTS:
Hydrology
Regional hydroclimate change response to climate change
Studying ecosystems variability using satellite data
Impacts of hydroclimate change on ecosystems

C. GRANTS & AWARDS:
➢ Graduate Student Training Enhancement Grant (GSTEG), Duke University ($9,333, June 2020-Aug. 2020)
➢ The University Student Science and Technology Innovation Program (Xin Miao Talent Program) project of Zhejiang (￥5,000, Apr. 2018-Apr. 2019)
➢ The Research Training of Zhejiang University (￥1,000, Apr. 2017-Apr. 2018)
➢ Hong Kong Ph.D. Fellowship (HK$ 1,276,000, 2019-2023; Disclaimed)
➢ Mathematical Contest in Modeling (MCM/ICM) Honorable Mention (2018)
➢ 'Pan Jiazheng' Hydropower Scholarship (2018)
➢ First Prize of Excellent Undergraduate Scholarship of Zhejiang University (2017)
➢ First-grade Scholarship of Zhejiang University (2017)

D. PROFESSIONAL & RESEARCH EXPERIENCE:
Duke University, Wenhong Li's Group, Graduate Researcher
Durham, NC, USA   Aug. 2019-Present
● Utilize satellite data for investigating Southeast US wetlands response to climate change
Zhejiang University, Yueping Xu's Group, Research Assistant
Hangzhou, Zhejiang Province, China   Feb. 2017-Aug. 2019
● Analysis of Glaciers and Snow Covers at the Source of the Yaloo Zangbu River and Their Impact on the Runoff of the Yaloo Zangbu River
● Temporal and Spatial Variation of Snow in Southwest Basin of China (the Yangtze River Basin, the Yellow River Basin, the Lantsang River Basin, the Nujiang River Basin, the Yaloo Zangbu River Basin)
● Improvement of HBV Hydrological Model and Its Application in the Southwest Cold Region

E. TEACHING EXPERIENCE:
Duke University, TA - EOS 355, Global Warming
Durham, NC, USA   Spring 2020
Duke University, TA - EOS 550, Climate & Society

Durham, NC, USA   Fall 2019

F. PEER-REVIEWED PUBLICATIONS:
- **Keqi He**, Chao Gao, Jingkai Xie, Yueping Xu. Multi-objective optimization of hydrological model based on runoff and snow [J]. *Journal of Hydroelectric Engineering*, 2019, 38(3): 65-74. (in Chinese)
- Gao C, Liu L, Ma D, **He K.**, Xu Y. Assessing responses of hydrological processes to climate change over the southeastern Tibetan Plateau based on resampling of future climate scenarios[J]. *Science of the Total Environment*, 2019, 664: 737-752.

G. LEADERSHIP & VOLUNTEER ACTIVITIES:
Director of the Assistant Alliance, Zhejiang University Apartment Student Management
Committee   June 2016-June 2017
Volunteer, NOAA's 44th Climate Diagnostics & Prediction Workshop at Duke University,
Durham, NC, USA   Oct. 22nd-24th 2019
Volunteer, Environmental Knowledge Propaganda   Oct. 2015

H. SELECTED COURSEWORK:
Duke University
- ENV 590 LiDAR Remote Sensing
- CEE 690 Hydrology
- ENV 771 GIS Field Skills
- EOS 511 The Climate System
- CEE 675 Remote Sensing of the Environment
- CEE 683 Groundwater Hydrology
- EOS 722 Hydrologic Data Analysis

Zhejiang University
- Hydrology
- Synoptic Meteorology
- Hydrometeorology
- Fluid Mechanics
- Engineering Hydrology
- Hydrology & Engineering Geology
- Hydraulics and River Dynamics
- Water Information Engineering

I. CONFERENCES & WORKSHOPS
- 53th National Collegiate Honors Council Annual Conference, Boston, MA, USA
  Nov. 7th-11st 2018
- Asian Undergraduate Summit, National University of Singapore, Singapore
  July 15th-23th 2018
- The HKPh.D. Fellowship Summer Workshop, Chinese University of Hong Kong, Hong Kong, China   July 9th – 14th 2018

J. OTHER EXPERIENCE:
- Programming Languages (in order of experience):   MATLAB, C, R, Mathematica
- Professional Competence: ArcGIS, LINUX, ENVI