

Jianxing Wang

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EDUCATION

School of Geographic and Ocean Science, Nanjing University **Nanjing, China**
B.S. in Oceanography, GPA 3.7/4.0, Ranking: 1/11 09/2016 -06/2020
Graduation Thesis: Observation and Mechanism of Internal Waves in the South Channel of the Yangtze River Estuary
Research Interests: Coastal Hydrodynamics and Morphodynamics; Sediment Transport; Coastal Ecosystem; Numerical Modeling.

University of Haifa **Haifa, Israel**
Summer Exchange, The Mediterranean: Past, Present and Future 08/2018 - 09/2018
Coursework: *The Mediterranean: Summer Course: Grade A*

PUBLICATION

Jianxing Wang, Wang Tao, Fei Xing, Hao Wu, Jianjun Jia, Yaping Wang, “Internal waves triggered by river mouth shoal in the Yangtze River Estuary”. *Ocean Engineering*.

RESEARCH EXPERIENCE

Modern processes associated with sedimentary system and geomorphological evolution in tide-dominated environments. China NSF (Grant No. 41625021). Leader: Dr. Ya Ping Wang of NJU, China
Undergraduate research assistant 2017 - 2019

- Assisted with field sampling at 7 sites on the East China Sea in winter, 2017 and completed a one-week field observation, collecting in situ hydrological data (tide, wave, suspended sediment concentration, salinity and temperature).
- Conducted field sampling at 5 sites at the south channel of the Yangtze River Estuary in winter in 2018 and conducted a 10-day observation.
- Processed water quality data including temperature, salinity, current speed, suspended sediment concentration at different depths to determine internal waves.
- Examined stratification condition using Richardson number.
- Calculated the Froude number to investigate the relationship between oscillations and internal hydraulics.
- Analyzed the vertical distribution of suspended sediment concentration to investigate the internal waves, sediment resuspension and mixing.
- Estimated the turbulence dissipation rate to investigate the energy of the internal waves.

Evolution of sandbars in the south channel of the Yangtze River Estuary due to the decrease of sediment discharge. China National Undergraduate Innovation Program.

Team leader 2017 - 2018

- Collected the annual sediment discharge data from 2000 to 2018 based on the Datong Hydrological Station.
- Processed water quality data including current speed, suspended sediment concentration to calculate the sediment discharge.
- Processed remote sensing images (2013, 2018) of the south channel of the Yangtze River Estuary and revealed the erosion/accretion pattern of sandbars.

FIELD PRACTICE EXPERIENCE

Practice of Geography in the Lushan Mountain

Lushan, China

Team Member

09/2018

- Completed a 15-day field study about geological evolution, hydrodynamic processes, climate change and human impact at the Lushan Mountain.
- Conducted group study about the evolution of the Lulin Lake and delivered a presentation report.

Processes of Critical Zone

Northwest China

Trainee

07/2018 - 08/2018

- Completed a one-week course taught by Dr. Joseph A. Mason (from University of Wisconsin) about Carbon cycle and Weathering.
- Conducted a 2-week field study in Xi'an and Yin Chuan in China based on the skills and knowledge from the training.

Field Research Course for Earth System Science and Environment

Jiangsu, China

Team Member

07/2017 - 08/2017

- Surveyed 5 monitoring locations at Jiangsu Province including mountains and coasts.
- Visited a sewage treatment plant at Yancheng, Jiangsu and studied the processes of sewage purification.
- Visited the Nanjing meteorological station at Nanjing, Jiangsu.

Field Research Course on Huangshan Mountain

Huangshan, China

Team Member

05/2017

- Completed a 3-day field observation about geological evolution and vegetation of Huangshan Mountain.

HONORS AND AWARDS

- Second-Class People's Scholarship, Nanjing University, China (top 10% eligible) 2018
- Excellent Student, Nanjing University, China 2018
- Third-Class Vansting Scholarship, Nanjing University, China (top 5% eligible) 2017
- Third-Class People's Scholarship, Nanjing University, China (top 15% eligible) 2017

SKILLS

Field Work Instruments	ADCP, ADV, OBS-3A, CTD, RBR, AD2CP
Laboratory	Experiment in cutting the marsh cores collected in the field and separating samples Experiment in sifting the sediment
Computer	Language: MATLAB, Python, C++ Software: CorelDRAW, ArcGIS, Surfer, Photoshop, ENVI