

YU-HAO TSENG

Research Gate ◊ Google Scholar ◊ Github ◊ LinkedIn (Preferred name: Jaden Tseng)

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PROFESSIONAL SUMMARY

Highly motivated early-career marine environmental scientist with advanced training in physical oceanography, remote sensing, and quantitative analysis of oceanic and atmospheric processes. Demonstrates expertise in satellite data interpretation and mesoscale to large-scale ocean currents observations. Recognized for a strong publication record in peer-reviewed journals, international research collaborations, and academic excellence. Experienced in the analysis of Kuroshio Current dynamics. Looking for opportunities to contribute to marine science and environmental research initiatives.

EDUCATION

National Taiwan Ocean University (NTOU) February 2024–present
Ph.D. in Marine Environmental Informatics (in progress), Advisor: Prof. Ho, Chung Ru

National Taiwan Ocean University (NTOU) June 2023
M.S. in Marine Environmental Informatics, Advisor: Prof. Ho, Chung Ru
GPA: 4.0/4.0

Core courses: Oceanography, Field Work in Oceanography, Climate and Ocean Variability, Ocean Currents in Marginal Sea, Atmospheric Remote Sensing, Special Topic on Environmental Remote Sensing.

National Taiwan Ocean University (NTOU) June 2022
B.S. in Marine Environmental Informatics (with *Honors*)
GPA: 3.9/4.0 (ranked first out of 31 in a class)

Core courses: Engineering Mathematics, Fluid Mechanics, Tides, Physical Oceanography, Ocean and Climate Change, Dynamical Oceanography, Remote Sensing of Environment, Ocean Wave.

RESEARCH INTERESTS

- Physical oceanography and marginal sea dynamics
- Remote sensing for oceanic and atmospheric studies (SST, chlorophyll-a, precipitation, geostrophic currents)
- Large-scale ocean current observation and analysis

PUBLICATIONS

Cheng, K.-H., Chang, C.-H., Yang, Y.-C., **Tseng, Yu-Hao**, Ho, C.-R., Hsu, T.-W., & Doong, D.-J. (2025). Analysis of Wind–Wave Relationship in Taiwan Waters. *Journal of Marine Science and Engineering*, 13(6), 1047. <https://doi.org/10.3390/jmse13061047>

Tseng, Yu-Hao, Ho, C.-R., Zheng, Q., & Zheng, Z.-W. (2025). Loop Current West of the Luzon Strait Triggered by Kuroshio Cut-off Events East of Taiwan Island. *Journal of Geophysical Research: Oceans*, 130(2), e2024JC021572. <https://doi.org/10.1029/2024JC021572>

Tseng, Yu-Hao, Lu, C.-Y., Zheng, Q., & Ho, C.-R. (2021). Characteristic Analysis of Sea Surface Currents around Taiwan Island from CODAR Observations. *Remote Sensing*, 13(15), 3025. <https://doi.org/10.3390/rs13153025>

Google Scholar: https://scholar.google.com/citations?user=_zozF1AAAAAJ (Published, peer-reviewed articles: Cheng et al., 2025; **Tseng, Yu-Hao** et al., 2021, 2025, Posters: *EGU 2023*, *EGU 2024*, *ACRS 2024*, *APRS 2024*, *EGU 2025*)

ACADEMIC SERVICE

Reviewer, *Journal of Geophysical Research: Oceans* (2025–present)

RESEARCH EXPERIENCE

NOAA and NTOU Joint Internship Program

June 2023–September 2023

Research Intern, Supervisors: Prof. Chen, Haonan and Dr. Liao, Tony

NOAA

- Collaborated with NOAA’s Global System Laboratory (GSL) in Colorado, USA
- Led performance analysis of Microwave Integrated Retrieval System (MiRS) for precipitation and hurricane events in the Gulf of Mexico
- Compared satellite-based precipitation retrievals with ground radar data

Effects of oceanic eddy in eastern Taiwan on the upstream of Kuroshio and sub-mesoscale island wakes (Tseng, Yu-Hao et al., 2021, 2025)

July 2022–June 2025

Graduate Researcher, Supervisors: Prof. Ho, Chung-Ru

NTOU

- Supported by Taiwan’s National Science and Technology Council (NSTC)
- Investigated Kuroshio cut-off events and their impact on Luzon Strait loop currents using satellite data
- Explored links between Pacific Decadal Oscillation (PDO) and Kuroshio cut-off events

HONORS AND AWARDS

1. TOEFL ITP Higher Education Research Grant (2024), awarded by TOEFL ITP Test - Higher Education Academic Research Grants Program *November 2024*
2. NTOU Scholarship of Five-Year BA-MA Program, awarded by NTOU *September 2022–June 2023*
3. Honorary Membership of The Phi Tau Phi Scholastic Honor Society of the Republic of China, awarded by The Phi Tau Phi Scholastic Honor Society of R.O.C *June 2022*
4. The 1982 Alumni Scholarship, awarded by NTOU MEI (2021 & 2022) *May 2021 & May 2022*
5. The first rank of College Students Paid Summer Project, 2020, awarded by NTOU *December 2020*
6. Academic Excellence Award, awarded by NTOU (×6 semesters) *December 2019–May 2022*

TRAINING AND DEVELOPMENT

Visiting Scientist (Research Scholar)

June 2023–September 2023

Supervisors: Prof. Chen, Haonan and Dr. Liao, Tony

(Full-time: 40 hrs/week) NOAA

- Focused on satellite precipitation retrieval validation

Teaching Assistant of Engineering Mathematics

September 2021–June 2022

Supervisor: Prof. Tsai, Fujung

NTOU

- Led review sessions and supported students learning

Teaching Assistant of Fluid Mechanics

March 2020–June 2020

Supervisor: Prof. Tsai, Cheng-Han

NTOU

- Facilitated peer learning and class reviews

Intern

April 2019–May 2019

Supervisor: Dr. Chiu, Jui-Kun

NMMST

- Supported museum operations and educational activities

SKILLS/HOBBIES

Programming Languages

Python, MATLAB, Fortran, C++, Julia, IDL, GMT

Language

Mandarin (native) and English (TOEFL iBT MyBest score: 90)

Hobbies

Biking, music (guitar), and hiking