

Allison J. Ho

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Education

- 2018 - 2024 ***Scripps Institution of Oceanography, UCSD***
Oceanography, Ph.D.
Dissertation title: “Wave-current-tide interactions in coastal environments”
- 2020 ***Scripps Institution of Oceanography, UCSD***
Oceanography, M.S.
- 2018 ***Pomona College***
Physics and Astrophysics, B.A.

Professional Experience

- 2024 - present **Postdoctoral Fellow**
NASA Jet Propulsion Laboratory, La Cañada Flintridge, CA 91011
- 2018 - 2024 **Graduate Student Researcher**
Scripps Institution of Oceanography UCSD, San Diego, CA 9203,

Publications

- 2024 **A Ho**, et al., *Characterizing Tidal Modulations in Nearshore Wave Records*, (in prep)
- 2023 K Mudd, **A Ho**, A Amador, J Lodise, J Behrens, S Merrifield, *Wind Velocity Estimates from Wave Observing Platforms*, *Coastal Engineering Journal*,
<https://doi.org/10.1080/21664250.2024.2321660>
- 2023 J Yan, T Cook, **A Ho**, M Otero, PA Rogowski, E Terrill, S Merrifield, *PyPlume: A Toolkit for Rapid Ocean Surface Transport Assessments*, *Environmental Modeling & Software*.
<https://doi.org/10.1016/j.envsoft.2023.105783>
- 2023 **A Ho**, S Merrifield, N Pizzo, *Wave-Tide Interaction for a Strongly Modulated Wave Field*, *Journal of Physical Oceanography*. <https://doi.org/10.1175/JPO-D-22-0166.1>
- 2021 P Rogowski, S Merrifield, C Collins, T Hesser, **A Ho**, R Bucciarelli, J Behrens, E Terrill, *Performance Assessments of Hurricane Wave Hindcasts*, *Journal of Marine Science and Engineering*. <https://doi.org/10.3390/jmse9070690>

Honors and Awards

- 2024 ORAU NASA Postdoctoral Program Fellowship
- 2021-22 UCSD Changemaker Fellow Anti-Racist Pedagogy Learning Community – San Diego, CA
- 2021 UCSD Inclusive Excellence Award (awarded to student group *Women and Minorities in Science*, role: leadership board) – San Diego, CA
- 2020 Cody Fellowship – San Diego, CA
- 2018 Franklin P. Brackett Award for Excellence in Astronomy – Claremont, CA
- 2017 Alfred S. Kwok Memorial Award – Claremont, CA
- 2017 Marine Physical Lab NSF REU Grant – San Diego, CA
- 2016 Oregon State University NSF REU Grant – Corvallis, OR

Posters and Presentations

- 2023 **A Ho**, S Merrifield, N Pizzo, E Terrill, MA Merrifield, BO Reilly, M Siegelman, A Amador. *Tidal modulations of surface waves in nearshore environments*. Talk at 3rd International Workshop on Waves, Storm Surges, and Coastal Hazards, South Bend, IN, USA.
- 2023 **A Ho**, *Tidal modulations of surface waves in nearshore environments*. Coastal Ocean Fluid Dynamics Lab Seminar (WHOI, virtual).

- 2023 **A Ho**, *Wave-tide interaction for a strongly modulated wave field*. WISE Seminar (virtual).
- 2023 **A Ho**, S Merrifield, N Pizzo, *Theory and observations of wave-tide interaction for a strongly modulated wave field*. Talk at 2023 AMS Conference, Boulder, CO, USA.
- 2022 **A Ho**, S Merrifield, N Pizzo, *Theory and observations of wave-tide interaction for a strongly modulated wave field*. Talk at 2022 Ocean Sciences Meeting (virtual).
- 2021 **A Ho**, *Observations of tidally-driven wave current interaction at nearshore wave buoys*. Presentation for SIO Applied Ocean Science Seminar, San Diego, CA, USA.
- 2020 **A Ho**, *Air-sea momentum exchange: influence of waves on drag coefficients*. Presentation for Surface Waves Group Seminar, San Diego, CA, USA.
- 2020 **A Ho**, S Merrifield, E Terrill, J Behrens, RE Jensen, and T Hesser, *West Coast Model-Observation Biases of Remotely-Forced Swell*. Poster at 2020 Ocean Sciences Meeting, San Diego, CA, USA.
- 2018 **A Ho**, S Merrifield, E Terrill, AB Villas Boas, L Lenain, and WK Melville, *Observations of Wind-Wave Coupling in Coastal California: Equilibrium Range, Drag Coefficients, and WaveWatch III Assessment*. Presentation at 2019 American Geophysical Union Fall Meeting, Washington D.C., USA.

Field Work and Training

- Sep 1-Oct 7, 2021 *AR60-02 – NORSE Pilot Research Cruise*
R/V Armstrong – Reykjavik, Iceland
Role: Scientist – Wave Glider deployment, recovery, and data analysis
- Oct 17-28, 2019 *SR1915 – ONR SIO Research Cruise*
R/V Sally Ride – Koror, Republic of Palau
Role: Scientist – planned and assisted deployment of wave gliders and buoys
- July 22-26, 2019 *NCEP/NOAA Waves Summer School 2019 – WAVEWATCH III Workshop*
University of Maryland College Park, MD, USA

Teaching Experiences & Mentorship

- Summer 2023 Advisor to Wyatt Cottriel, MPL REU intern. Project: observations of enhanced wave breaking over underwater ridge.
- 2021-2023 Advisor to Kaley Mudd, UCSD undergraduate. Project (honors thesis): wind estimates inferred from wave observing platforms.
- September 2022 Instructor for Math and Computing Workshop (Intro to Bash, Intro to Git, Intro to Latex)
- 2020, 2021 Mentor in SIO Peer Mentorship Program
- 2017 – 2018 Laboratory teaching assistant for digital/analog electronics lab (upper-level lab course)
- 2017 Laboratory teaching assistant and grader for non-majors introductory physics class
- 2015 Academic mentor for introductory physics class (relativity, quantum, thermodynamics)

Outreach / Extra-Curricular Activities / Service

- 2022 – 2023 Ethics Course Curriculum Committee
- 2021 – 2023 Blue Dot Education (board member)
- July 2022 UCSD COSMOS Program Outreach Lecturer
- 2021 – 2022 Applied Ocean Science Curriculum Workgroup Committee
- 2020 – 2022 Women and Minorities in Science at SIO (leadership)
- 2021 – 2022 Sustainability Committee
- 2019 – 2021 Educational Policy Committee
- 2019 – 2021 Scripps Graduate Student Council (Curricular Group Representative)
- 2020 Skype a Scientist Guest Scientist/Lecturer
- 2019 – 2020 Applied Ocean Science Seminar Organizing Committee
- Sept. 2019 Scripps Student Symposium volunteer and mentor to high school students