

# Yao Yu

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## Professional appointments

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Schmidt AI in science postdoc fellow

University of California, San Diego, USA (2023 – 2025)

## Education

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**Doctor of Philosophy** in Earth Sciences

University of California, San Diego, USA (2018 – 2023)

**Master of Engineering** in Geodesy and Geomatics

Wuhan University, China (2015 – 2018)

**Bachelor of Engineering** in Geodesy and Survey

Wuhan University, China (2011 – 2015)

**Visiting Student**

Academia Sinica, Taiwan (November, 2016 – March, 2017; October, 2017 – February, 2018)

## Publications

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### *Peer-reviewed papers*

**Yu, Y.**, Sandwell, D. T., Dibarboure, G., Chen, C., & Wang, J. (2024). Accuracy and Resolution of SWOT Altimetry: Foundation Seamounts. *Earth and Space Science*.

Gevorgian, J., Sandwell, D. T., **Yu, Y.**, Kim, S. S., & Wessel, P. (2023). Global distribution and morphology of small seamounts. *Earth and Space Science*, <https://doi.org/10.1029/2022EA002331> [pdf].

**Yu, Y.**, Sandwell, D. T., & Gille, S. T. (2023). Seasonality of the Sub-mesoscale to Mesoscale Sea Surface Variability from Multi-Year Satellite Altimetry. *Journal of Geophysical Research: Oceans*, <https://doi.org/10.1029/2022JC019486> [pdf].

**Yu, Y.**, Gille, T., & Sandwell, D. (2022). Global Mesoscale Ocean Variability from Multiyear Altimetry: An Analysis of the Influencing Factors, *Artificial Intelligence for the Earth Systems*, <https://doi.org/10.1175/AIES-D-21-0008.1> [pdf].

Sandwell, D. T., Goff, J. A., Gevorgian, J., Harper, H., Kim, S. S., **Yu, Y.**, Tozer, B., Wessel, P., & Smith, W. H. (2022). Improved Bathymetric Prediction Using Geological Information: SYN BATH. *Earth and Space Science*, <https://doi.org/10.1029/2021EA002069> [pdf].

**Yu, Y.**, Sandwell, D., Gille, T., & Villas Bôas, A.B. (2021). Assessment of ICESat-2 for the recovery of ocean topography, *Geophysical Journal International*, <https://doi.org/10.1093/gji/ggab084> [pdf]

Chao, B. F., & **Yu, Y.** (2020). Variation of the Equatorial Moments of Inertia Associated with a 6-year Westward Rotary Motion in the Earth, *Earth and Planetary Science Letters*, <https://doi.org/10.1016/j.epsl.2020.116316> [pdf]

Chao, B. F., **Yu, Y.**, & Chung, C.H. (2020). Variation of Earth's Oblateness J<sub>2</sub> on Interannual-to-Decadal Timescales: Climate Connections, *Journal of Geophysical Research*, <https://doi.org/10.1029/2020JB019421> [pdf]

Tanaka, Y., **Yu, Y.**, & Chao, B. F. (2019). Gravity and geoid changes by the 2004 and 2012 Sumatra earthquakes from satellite gravimetry and ocean altimetry. *Terr. Atmos. Ocean. Sci*, doi:10.3319/TAO.2018.10.24.02 [[pdf](#)]

**Yu, Y.**, Chao, B. F., García-García, D., & Luo, Z. (2018). Variations of the Argentine gyre observed in the GRACE time-variable gravity measurements and Ocean Altimetry, *Journal of Geophysical Research, Oceans*, <https://doi.org/10.1029/2018JC014189> [[pdf](#)]

### ***Thesis***

Ph.D. thesis: “*Small-Scale Oceanic Variability in Satellite Altimetry*” advised by Prof. David Sandwell & Prof. Sarah Gille [[pdf](#)]

Master’s thesis: “*Variations of the Argentine Gyre Observed in the GRACE Time-Variable Gravity and Ocean Altimetry Measurements*” advised by Prof. Benjamin Chao & Prof. Zhicai Luo [in Chinese]

Undergraduate thesis: “*Recovery of Terrestrial Water Mass Redistributions Using Mascon Approach*” advised by Prof. Zhicai Luo & Prof. Bo Zhong [in Chinese]

## Honors

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Schmidt AI in science postdoc fellowship, UCSD	2023-2025
H. William Menard Memorial Fellowship, UCSD	2023
NASA summer school on Satellite Observations and Climate Models, JPL	2022
Scripps Institution of Oceanography graduate fellowship, UCSD	2018
Summer school on Spaceborne Earth Observations and Global Change, Shanghai Astronomical Observatory	2014
National Scholarship, China	2014

## Teaching experience

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Teaching assistant of SIO 111 Ocean waves (undergraduate level)	winter quarter, 2022
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## Professional service

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NASA early career FINESST panelist	2024
Journal reviewer for GRL, IEEE TGRS, JGR ML	2022-
AGU session convenor (G23B and G31B)	2023
AGU Geodesy Executive Committee early career representative	2023-
AGU Geodesy Executive Committee student representative	2022-2023
SIO student mentor	2020-2022
GEBCO Bathymetric Compilation Group	2021

## Conference presentations

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OSTST	2021, 2023
AGU fall meeting	2019, 2020, 2021, 2022, 2023
Ocean sciences meeting	2020, 2022
SWOT science team meeting	2022
Asia Ocean Geosciences Society	2017

## Field work

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GPS survey at Mexicali, Mexico	March 8-9, 2020
R/V Sally Ride at Fieberling seamount chains	January 13-23, 2020
GPS survey at Ridgecrest, California	July 12, November 10-11, 2019
GPS survey at Painted Canyon, California	March 2-3, 2019
GPS survey at Palm desert, California	November 12-13, 2018