YaoYu

🕽 +1(725)600-2649 | 9500 Gilman Drive, CA 92093 | 🖂 yayu@ucsd.edu

Professional appointments

Schmidt AI in science postdoc fellow University of California, San Diego, USA (2023 – 2025)

Education

**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

***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](https://drive.google.com/file/d/12oVzyZzpfLn9Kum7SeFLfXA7QH40HwJw/view?usp=share_link)].

**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](https://drive.google.com/file/d/10DZhWeiJ-yEUqpUYi36yYzJoF97cEscx/view?usp=share_link)].

**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](https://drive.google.com/file/d/1HAcZIs9TPQKPr6MS1Uc7KEc0JJ-8Vk2H/view?usp=sharing)].

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: SYNBATH. *Earth and Space Science*, <https://doi.org/10.1029/2021EA002069> [[pdf](https://drive.google.com/file/d/1DD7wQy9SCVUDRjQ5m0w7exERNaYRlWZQ/view?usp=sharing)].

**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](https://drive.google.com/file/d/1lrtFZXjIfW2zDfr4WPMsqZa0ugJ2FecF/view?usp=sharing)]

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](https://drive.google.com/file/d/13B4h61VkUbJ44FzXjgToXwC6q4Il_Enn/view?usp=sharing)]

Chao, B. F., **Yu, Y.**, & Chung, C.H. (2020). Variation of Earth's Oblateness J2 on Interannual-to-Decadal Timescales: Climate Connections, *Journal of Geophysical Research*, <https://doi.org/10.1029/2020JB019421> [[pdf](https://drive.google.com/file/d/1vObWP_5Q7tHMz63CeELB1sEAxLmGBRTC/view?usp=sharing)]

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](https://drive.google.com/file/d/1bP2WB5WqPS8T9m6AeaOst8Uh4A2DEfjJ/view?usp=sharing)]

**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](https://drive.google.com/file/d/1ukT1FaWl0Ubqj_mJ44jeov4_-g94ooGP/view?usp=sharing)]

***Thesis***

Ph.D. thesis: “*Small-Scale Oceanic Variability in Satellite Altimetry*” advised by Prof. David Sandwell & Prof. Sarah Gille [[pdf](https://drive.google.com/file/d/1SPeqXzfFJX5-5Wf0K2imlfmB_zrUNA-i/view?usp=sharing)]

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

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

Teaching assistant of SIO 111 Ocean waves (undergraduate level) *winter quarter, 2022*

Professional service

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

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

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