Yao Yu

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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

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. 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: SYNBATH. *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 J2 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

| 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

| Journal reviewer | GRL 2022-; IEEE TGRS 2023- |
|-------------------------------------------------------------|----------------------------|
| 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

R/V Sally Ride at Fieberling seamount chains

GPS survey at Ridgecrest, California

GPS survey at Painted Canyon, California

GPS survey at Palm desert, California

March 2-3, 2019

GPS survey at Palm desert, California

November 12-13, 2018