Yao Yu

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Professional appointments

Schmidt AI in science postdoc fellow

University of California, San Diego, USA (2023 - S2025)

Education

Doctor of Philosophy in Earth Sciences

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

Thesis: "Small-Scale Oceanic Variability in Satellite Altimetry" advised by Prof. David Sandwell & Prof. Sarah Gille

Master of Engineering in Geodesy and Geomatics

Wuhan University, China (2015 – 2018)

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

Bachelor of Engineering in Geodesy and Survey

Wuhan University, China (2011 – 2015)

Thesis: "Recovery of Terrestrial Water Mass Redistributions Using Mascon Approach" advised by Prof. Zhicai Luo & Prof. Bo Zhong

Visiting Student Academia Sinica, Taiwan (November, 2016-March, 2017; October, 2017-February, 2018) Advised by Prof. Benjamin Chao

Publications

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]

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 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
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 8-9, 2020 January 13-23, 2020 July 12, November 10-11, 2019 March 2-3, 2019 November 12-13, 2018