

Curriculum Vitae

PERSONAL INFORMATION

Name: Xu, Xiaobiao
Office address: Center for Ocean-Atmospheric Prediction Studies, Florida State University
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RESEARCH INTERESTS

• High-resolution modeling of the large-scale ocean circulation, especially the transport and transformation of water masses of the Atlantic meridional overturning circulation (AMOC) • overflow representation in ocean model • western boundary currents/jets, recirculations, mesoscale to submesoscale eddies • high-frequency motions such as internal tides.

EDUCATION

2001 - 2006 Ph.D. University of Miami, Miami (FL)
1998 - 2001 M.S. First Institute of Oceanography, Qingdao (China)
1994 - 1998 B.S. Ocean University of China, Qingdao (China)

WORK EXPERIENCE

2021 - **Senior Research Scientist**, Florida State University, Tallahassee (FL)
2016 - 2021 **Associate Research Scientist**, Florida State University, Tallahassee (FL)
2012 - 2016 **Assistant Research Scientist**, Florida State University, Tallahassee (FL)
2009 - 2012 **Assistant Research Scientist**, Univ. of Southern Mississippi, Stennis Space Center (MS)
2006 - 2009 **Postdoc**, Univ. of Southern Mississippi, Stennis Space Center (MS)

REFEREED PUBLICATIONS

1. **Xu, X.**, E. P. Chassignet, S. Dong, and M. O. Baringer, 2022, Transport structure of the South Atlantic Ocean derived from a high-resolution numerical model and observations, *Front. Mar. Sci.- Physical Oceanography*, 9:811398. doi: 10.3389/fmars.2022.811398.
2. Chassignet, E. P. and **X. Xu**, 2021, On the importance of high-resolution in large-scale ocean models, *Advances in Atmospheric Sciences*, **38**, 1621-1634, doi:10.1007/s00376-021-0385-7
3. Chassignet, E. P., **X. Xu**, and O. Zavala-Romero, 2021, Tracking marine litter with a global ocean model: Where does go? Where does it come from? *Front. Mar. Sci.- Marine Pollution*, 8:667591. doi:10.3389/fmars.2021.667591
4. Zeng, L., E. P. Chassignet, **X. Xu**, and D. Wang, 2021, Long-term variability of the South China Sea mixed layer salinity over the past six decades, *Clim. Dyn.*, doi:10.1007/s00382-021-05711-1
5. Ajayi, A., J. Le Sommer, E. P. Chassignet, J.-M. Molines, **X. Xu**, A. Albert, and W. Dewar, 2021, Diagnosing cross-scale kinetic energy exchanges from two submesoscale permitting ocean models, *Journal of Advances in Modeling Earth Systems*, doi:10.1029/2019MS001923

6. Zhao, X., C. Zhou, **X. Xu**, R. Ye, and W. Zhao, 2020, Deep circulation in the South China Sea simulated in a regional model, *Ocean Dynamics*, **70**,1461-1473, doi:10.1007/s10236-020-01411-2
7. Chassignet, E. P., S. Yeager, B. Fox-Kemper, A. Bozec, F. Castruccio, G. Danabasoglu, W. M. Kim, N. Koldunov, Y. Li, P. Lin, H. Liu, D. Sein, D. Sidorenko, Q. Wang, and **X. Xu**, 2020, Impact of horizontal resolution on global ocean-sea-ice model simulations based on the experiment protocols of the Ocean Model Intercomparison Project phase 2 (OMIP-2), *Geoscientific Model Development*, **13**, 4595-4637, doi:10.5194/gmd-2019-374-RC2
8. Roberts, M. J., L. C. Jackson, C. D. Roberts, V. Meccia, D. Docquier, T. Koenigk, P. Ortega, E. Moreno-Chamarro, A. Bellucci, A. Coward, S. Drijfhout, E. Exarchou, O. Gutjahr, H. Hewitt, D. Iovino, K. Lohmann, R. Schiemann, J. Seddon, L. Terray, **X. Xu**, Q. Zhang, P. Chang, S. G. Yeager, F. S. Castruccio, S. Zhang, L. Wu, 2020, Sensitivity of the Atlantic meridional overturning circulation to model resolution in CMIP6 HighResMIP simulations and implications for future changes, *Journal of Advances in Modeling Earth Systems*, doi:10.1029/2019MS002014
9. Gonçalves Neto, A., J. Palter, A. Bower, H. Furey, and **X. Xu**, 2020, Labrador Sea Water transport across the Charlie-Gibbs Fracture Zone, *J. Geophys. Res. Oceans*, doi:10.1029/2020JC016068
10. **Xu, X.**, E. P. Chassignet, Y. L. Firing, and K. Donohue, 2020, Antarctic Circumpolar Current transport through Drake Passage: What can we learn from comparing high-resolution model results to observations? *J. Geophys. Res. Oceans*, **125**, e2020JC016365. doi:10.1029/2020JC016365
11. Ajayi, A., J. Le Sommer, E. P. Chassignet, J.-M. Molines, **X. Xu**, A. Albert, and E. Cosme, 2020, Spatial and temporal variability of North Atlantic eddy field at scale less than 100 km, *J. Geophys. Res. Oceans*, **125**, doi:10.1029/2019JC015827
12. Hirschi, J. J.-M., B. Barnier, C. Böning, A. Biastoch, A. T. Blaker, A. Coward, S. Danilov, S. Drijfhout, K. Getzlaff, S. M. Griffies, H. Hasumi, H. Hewitt, D. Iovino, T. Kawasaki, A. E. Kiss, N. Koldunov, A. Marzocchi, J. V. Mecking, B. Moat, J.-M. Molines, P. G. Myers, T. Penduff, M. Roberts, A.-M. Treguier, D. V. Sein, D. Sidorenko, J. Small, P. Spence, L. Thompson, W. Weijer, and **X. Xu**, 2020, The Atlantic meridional overturning circulation in high-resolution models, *J. Geophys. Res. Oceans*, **125**(4), e2019JC015522, doi:10.1029/2019JC015522
13. Zou, S., A. Bower, H. Furey, M. S. Lozier, and **X. Xu**, 2020, Redrawing the Iceland-Scotland overflow water pathways in the North Atlantic, *Nature Communication*, **11**(1):1890, doi:10.1038/s41467-020-15513-4
14. Zou S., M. S. Lozier, and **X. Xu**, 2020, Latitudinal structure of the meridional overturning circulation variability in the North Atlantic Ocean, *J. Clim.*, **33**, 3845-3862, doi:10.1175/JCLI-D-19-0215.1
15. Maloney, E., A. Gettelman, Y. Ming, J. D. Neelin, D. Barrie, A. Mariotti, C.-C. Chen, D. R. B. Coleman, Y.-H. Kuo, B. Singh, H. Annamalai, A. Berg, J. F. Booth, S. J. Camargo, A. Dai, A. Gonzalez, J. Hafner, X. Jiang, X. Jing, D. Kim, A. Kumar, Y. Moon, C. M. Naud, A. H. Sobel, K. Suzuki, F. Wang, J. Wang, A. Wing, **X. Xu**, and M. Zhao, 2019, Process-oriented evaluation of climate and weather forecasting models, *Bull. Am. Meteorol. Soc.*, doi:10.1175/BAMS-D-18-0042.1
16. LaCasce, J. H., J. Escartin, E. P. Chassignet, and **X. Xu**, 2019, Jet instability over smooth and corrugated slopes, *J. Phys. Oceanogr.*, doi:10.1175/JPO-D-18-0129.1
17. **Xu, X.**, E. P. Chassignet, and F. Wang, 2019, On the variability of the Atlantic meridional overturning circulation transports in coupled CMIP5 simulations, *Clim. Dyn.*, doi:10.1007/s00382-018-4529-0
18. **Xu, X.**, A. Bower, H. Furey, and E. P. Chassignet, 2018, Variability of the Iceland-Scotland overflow water transport through the Charlie-Gibbs Fracture Zone: results from an eddy simulation and observations, *J. Geophys. Res. Oceans*, **123**, 5808-5823, doi:10.1029/2018JC013895
19. Zeng, L., E. P. Chassignet, R. W. Schmitt, **X. Xu**, and D. Wang, 2018, Salinification in the South China Sea since late 2012: a reversal of the freshening since 1990s, *Geophys. Res. Lett.* **45**, 2744-2751, doi:10.1002/2017GL076574

20. **Xu, X.**, P. B. Rhines, and E. P. Chassignet, 2018, On mapping the diapycnal water mass transformation in the upper North Atlantic Ocean, *J. Phys. Oceanogr.*, **48**, 2233-2258, doi:10.1174/ JPOD-17-0223.1
21. Chassignet, E. P. and **X. Xu**, 2017, Impact of horizontal resolution ($1/12^\circ$ to $1/50^\circ$) on Gulf Stream separation, penetration, and variability, *J. Phys. Oceanogr.*, 1999-2021, doi:10.1175/ JPO-D-17-0031.1
22. Trossman, D., B. K. Arbic, D. N. Straub, J. G. Richman, E. P. Chassignet, A. J. Wallcraft, and **X. Xu**, 2017, The role of rough topography in mediating impacts of bottom drag in eddying ocean circulation models, *J. Phys. Oceanogr.*, 1941-1959, doi:10.1175/JPO-D-16-0229.1
23. **Xu, X.**, P. B. Rhines, and E. P. Chassignet, 2016, Temperature-salinity structure of the North Atlantic circulation and associated heat and freshwater transports, *J. Clim.*, doi:10.1175/JCLI-D-15-0798
24. Zhao, X., C. Zhou, W. Zhao, J. Tian, and **X. Xu**, 2016, Deepwater overflow observed by three bottom-anchored moorings in the Bashi Channel, *Deep Sea Res., Part I*, **110**, 65-74, doi:10.1016/j.dsr.2016.01.007
25. **Xu, X.**, P. B. Rhines, E. P. Chassignet, and W. J. Schmitz Jr., 2015, Spreading of the Denmark Strait overflow water in the western subpolar North Atlantic: Insights from eddy-resolving simulations with a passive tracer, *J. Phys. Oceanogr.*, **45**(12), 2913-2932, doi:10.1175/JPO-D-14-0179.1
26. **Xu, X.**, E. P. Chassignet, W. E. Johns, W. J. Schmitz Jr., and E. J. Metzger, 2014, Intraseasonal to interannual variability of the Atlantic meridional overturning circulation from eddy-resolving simulations and observations, *J. Geophys. Res. Oceans*, **119**, doi:10.1002/2014JC009994
27. **Xu, X.**, H. E. Hurlburt, W. J. Schmitz Jr., J. Fischer, R. Zantopp, and P. J. Hogan, 2013, On the currents and transports connected with the Atlantic meridional overturning circulation in the subpolar North Atlantic, *J. Geophys. Res. Oceans*, **118**, doi:10.1002/jgrc.20065
28. **Xu, X.**, W. J. Schmitz Jr., H. E. Hurlburt, and P. J. Hogan, 2012, Mean Atlantic meridional overturning circulation across 26.5°N from eddy-resolving simulations compared to observations. *J. Geophys. Res. Oceans*, **117**, C03042, doi:10.1029/2011JC007586
29. Hurlburt H. E., E. J. Metzger, J. Sprintall, S. N. Riedlinger, R. A. Arnone, T. Shinoda, and **X. Xu**, 2011, Circulation in the Philippine Archipelago simulated by $1/12^\circ$ and $1/25^\circ$ global HYCOM and EAS NCOM, *Oceanography*, **24**(1), 28-47.
30. Hurlburt H. E., E. J. Metzger, J. Richman, E. P. Chassignet, Y. Drillet, M. W. Hecht, O. L. Galloudec, J. F. Shriver, **X. Xu**, and L. Zamudio. 2011, Dynamical evaluation of ocean models using the Gulf Stream as an example, in *Operational Oceanography in the 21st Century*, A. Schiller and G. B. Brassington, eds., Springer-Verlag, New York.
31. **Xu, X.**, W. J. Schmitz Jr., H. E. Hurlburt, P. J. Hogan, and E. P. Chassignet, 2010, Transport of Nordic Seas overflow water into and within the Irminger Sea: An eddy-resolving simulation and observations. *J. Geophys. Res. Oceans*, **115**, C12048, doi:10.1029/2010JC006351
32. Metzger E. J., H. E. Hurlburt, **X. Xu**, A. L. Gordon, J. Sprintall, R. D. Susanto, and H. M. van Aken, 2010, Simulated and observed circulation in the Indonesian Seas: $1/12^\circ$ global HYCOM and the INSTANT observations. *Dyn. Atmos. Oceans*, doi: 10.1016/j.dynatmoce.2010.04.002
33. Legg S., B. Briegleb, Y. Chang, E. P. Chassignet, G. Danabasoglu, T. Ezer, A. L. Gordon, S. Griffies, R. Hallberg, L. Jackson, W. Large, T. M. Özgökmen, H. Peters, J. Price, U. Riemenschneider, W. Wu, **X. Xu** and J. Yang, 2009, Improving oceanic overflow representation in climate models: the gravity current entrainment climate process team. *Bull. Am. Meteorol. Soc.*, doi: 10.1175/2008BAMS2667.1
34. Chang Y. S., T. M. Özgökmen, H. Peters and **X. Xu**, 2008, Numerical simulation of the Red Sea outflow using HYCOM and comparison with REDSOX observations. *J. Phys. Oceanogr.*, **38**(2), 337-358.
35. **Xu, X.**, E. P. Chassignet, J. F. Price, T. M. Özgökmen and H. Peters, 2007, A regional modeling study of the entraining Mediterranean outflow. *J. Geophys. Res. Oceans*, **112**, C12005, doi: 10.1029/2007JC004145

36. **Xu, X.**, Y. Chang, H. Peters, T. M. Özgökmen, and E. P. Chassignet, 2006, Parameterization of gravity current entrainment for ocean circulation models using a high-order 3D nonhydrostatic spectral element model, *Ocean Modell.*, **14**, 19-44.
37. Chang Y., **X. Xu**, T. M. Özgökmen, E. P. Chassignet, H. Peters and P. F. Fischer, 2005, Comparison of gravity current mixing parameterizations and calibration using a high-resolution 3D nonhydrostatic spectral element model. *Ocean Modell.*, **10**, 342-368.

RESEARCH PROPOSALS & PROJECTS

- NSF (OCE-2023210): *Collaborative Research: Eddy fluxes across the Southern Antarctic Circumpolar Current Front near Southeast Indian Ridge*, lead by K. Donohue (URI), PI, \$299,471 [2020.10 – 2025.09]
- NSF (OCE-2038449): *UK-US Collaborative Research: Subpolar North Atlantic Processes - Dynamics and predictability of variability in Gyre and Overturning (SNAP-DRAGON)*, lead by H. Johnson (Oxford/UK), PI, \$127,342 [2020.08 – 2023.07]
- NASA: *Collaborative Research: Predictability of stationary and non-stationary internal tides in the US Navy global hydrodynamical model*, lead by B. Arbic (UMich), co-PI, \$105,143 [2020.06 – 2023.05]
- ONR (N00014-20-1-2769): *Vertical Resolution in Global HYCOM*, PI, \$431,285 [2020.06 – 2023.05]
- UN: Marine Litter Global Model Expansion, co-PI (PI: Eric Chassignet/FSU), \$70,000 [2020.04 – 2020.10]
- ONR (N00014-19-1-2674): *NOPP Topic5: Improving Arctic Forecast: Arctic Observing System Stimulation Experiments*, lead by E. Chassignet (FSU), co-PI [2019.06-2022.07]
- ONR (N00014-19-12717): *Modeling, characterizing, and predicting effects of internal gravity waves on acoustic propagation on basin to global scales*, lead by E. Chassignet (FSU), co-PI [2019.06-2022.07]
- UN: Marine Litter Modelling, co-PI (PI: Eric Chassignet/FSU), \$65,000 [2019.05 – 2019.09]
- NSF (OCE-1537136): *Subpolar – Subtropical Connectivity of the North Atlantic Circulation*, PI, \$451,170 [2015.09 – 2019.08]
- NOAA/CPO (NA15OAR4310088): *Collaborative Research: Evaluation and Diagnosis of the Atlantic Meridional Overturning Circulation 3D Structure in Climate Models*, lead PI, \$384,318 [2015.08 – 2019.07]
- NOAA/ESPC (NA15OAR4320064): *Collaborative Research: Variability and Coherence of the Atlantic Meridional Overturning Circulation*, lead PI, \$239,175 [2014.10 – 2018.09]

CONFERENCE ABSTRACTS

1. Xu. X., E. P. Chassignet, and A. J. Wallcraft, 2022, Impact of bathymetry and tides on 1/50° North and Equatorial Atlantic simulations, OSM2022 (Abstract PS03-4626)
2. Xu, X. and E. P. Chassignet, 2020, Spreading Patterns of the Labrador Sea Water and Nordic Seas Overflow Water in the North Atlantic, OSM2020 (Abstract PL41A-04)
3. Zou, S., A. Bower, H. Furey, M. S. Lozier, and X. Xu, 2020, Redrawing the Iceland-Scotland Overflow Water Pathways in the North Atlantic, OSM2020 (Abstract PC21A-03)
4. Chassignet E., X. Xu, and A. J. Wallcraft, 2020, Impact of tides on North and Equatorial Atlantic HYCOM simulations from 1/12° to 1/50° (Abstract PS34C-2964)
5. Xu, X., E. P. Chassignet, and A. Wallcraft, 2019, High-resolution Atlantic simulations with and without tides, SWOT science team meeting, Bordeaux, France

6. Xu, X. and E. P. Chassignet, 2019, Transport Structure of the South Atlantic Ocean derived from a high-resolution numerical model and observations, EGU
7. Xu, X., E. P. Chassignet, S. Dong, M. O. Baringer, 2018, Transport Structure in the Southern Atlantic Ocean and the meridional coherence of the Atlantic Meridional Overturning Circulation, 2018 International AMOC science meeting.
8. Xu, X., A. Bower, and H. Furey, 2018, Transport variability of the Iceland-Scotland overflow water through the Charlie-Gibbs Fracture Zone: results from an eddy simulation and observations. OSM2018 (Abstract HE24C-2886)
9. Chassignet, E. P., X. Xu and F. Wang, 2018, Variability of the Atlantic meridional overturning circulation transports in forced CORE-II versus coupled CMIP5 simulations. OSM2018 (Abstract PL31A-01)
10. Rhines, P. B., X. Xu and E. P. Chassignet, 2018, Mapping Diapycnal Mixing in the High-Resolution HYCOM Ocean Model. OSM2018 (Abstract PL12A-03)
11. Ajayi, A. O., J. Lesommer, E. P. Chassignet, E. Cosme, J. Molines and X. Xu, 2018, Scales of Coherent Eddy Structures in the North Atlantic Ocean from two Submesoscale-Permitting Ocean Models. OSM2018 (Abstract PS44A-2264)
12. Xu, X., F. Wang, and E. P. Chassignet, 2017, How well do the CMIP5 models represent the water properties of the Atlantic Meridional overturning circulation? 2017 Working Group on Numerical Experimentation (WGNE) Meeting.
13. Xu, X. and E. P. Chassignet, 2017, North Atlantic circulation in three simulations of $1/12^\circ$, $1/25^\circ$, and $1/50^\circ$. 2017 US-AMOC meeting.
14. Xu, X., F. Wang, P. B. Rhines, and E. P. Chassignet, 2016, θ -S structure of the AMOC in high-resolution ocean simulation and CMIP5 models. AGU Fall Meet. Abstract A33D-0263
15. Xu, X., S. Dong, M. O. Baringer, G. Goni, and E. P. Chassignet, 2016, South Atlantic meridional overturning circulation in eddy-resolving global simulation. Ocean Sci. Meet. Abstract PO14E-2855
16. Chassignet E. P. and X. Xu, 2016, Impact of resolving submesoscale features on modelling the Gulf Stream system. Ocean Sci. Meet. Abstract PO21A-08
17. Rhines, P., X. Xu, E. P. Chassignet and W. J. Schmitz Jr., 2016, A better MOC index: AMOC- θ/S in the North Atlantic Ocean: Spatial circulation, water mass transformation and heat transport on temperature/salinity plane. Ocean Sci. Meet. Abstract PO13E-02
18. Bower A., H. Furey, and X. Xu, 2016, The Charlie-Gibbs Fracture Zone: A crossroads of the Atlantic meridional overturning circulation. Ocean Sci. Meet. Abstract PO54A-3225
19. Xu, X., E. P. Chassignet, P. B. Rhines, and W. J. Schmitz Jr., 2015, Simulation of the North Atlantic circulation at $1/50^\circ$. 20th Conference on Atmospheric and Oceanic Fluid Dynamics.
20. Bower, A., H. Furey, and X. Xu, 2015, New direct estimates of Iceland-Scotland Overflow Water transport through the Charlie-Gibbs Fracture Zone and its relationship to the North Atlantic Current. Abstract EGU2015-6764
21. Bower, A., H. Furey, and X. Xu, 2014, New direct estimates of Iceland-Scotland Overflow Water transport through the Charlie-Gibbs Fracture Zone. AGU Fall Meet., Suppl. Abstract OS41G-02
22. Xu, X., P. B. Rhines, E. P. Chassignet, and W. J. Schmitz Jr., 2014, Spreading of dense overflow water in the northern Atlantic: insights from eddy-resolving simulations and observations of passive and dynamical tracers. Ocean Sci. Meet., Suppl. Abstract OS124-21
23. Rhines, P. B., X. Xu, E. P. Chassignet, and W. J. Schmitz Jr., 2014, Atlantic water-mass transformation and the θ/S AMOC. Ocean Sci. Meet., Suppl. Abstract OS137-12

24. Xu, X., H. E. Hurlburt, W. J. Schmitz Jr., and P. J. Hogan, 2012, Currents and transports connected with the AMOC in the subpolar North Atlantic: Results from observation and eddy-resolving simulations. AGU Fall Meeting, Suppl. Abstract OS23C-04
25. Xu, X., W. J. Schmitz Jr., H. E. Hurlburt, and P. J. Hogan, 2012, Transport of the subpolar North Atlantic from eddy-resolving simulations. Ocean Sci. Meet., Suppl. Abstract OS032-15
26. Xu, X. and H. E. Hurlburt, 2010: Mean transport structure of the western boundary current east of Abaco: Model results and observations. AGU Fall Meet., Suppl. Abstract OS21B-1491
27. Xu, X., W. J. Schmitz Jr., H. E. Hurlburt, E. P. Chassignet, and P. J. Hogan, 2010, Circulation of the northern overflow water in subpolar North Atlantic. *Eos Trans, AGU*, **91(26)**, Ocean Sci. Meet., Suppl. Abstract PO54A-04.
28. Hurlburt, H E, E. J. Metzger, J. F. Shriver, A. Wallcraft, X. Xu, and L. Zamudio, 2010, Flows through archipelagos in 1/12° and 1/25° global HYCOM: Indonesia, the Philippines, and the Caribbean/Bahamas. *Eos Trans, AGU*. **91(26)**, Ocean Sci. Meet., Suppl. Abstract PO23C-02
29. Xu, X., E. P. Chassignet, and T. L. Townsend, 2008, The Mediterranean outflow in a North Atlantic simulation. Ocean Sci. Meet., Suppl. Abstract 1318.
30. Xu, X., E. P. Chassignet, J. F. Price, T. M. Özgökmen and H. Peters, 2007, Numerical representation of the Mediterranean outflow water in the Gulf of Cádiz. The fourth International Ocean-Atmosphere Conference (COAA2007), Suppl. Abstract OC1309.
31. Xu, X., Y. S. Chang, H. Peters, T. M. Özgökmen and E. P. Chassignet, 2006, An entrainment parameterization for gravity current mixing in HYCOM. *Eos Trans, AGU*, **87(36)**, Ocean Sci. Meet., Suppl. Abstract OS36A-16.
32. Chang Y. S., X. Xu, T. M. Özgökmen and H. Peters, 2006, Numerical simulation of the Red Sea outflow using HYCOM and compared with REDSOX observation. *Eos Trans, AGU*, **87(36)**, Ocean Sci. Meet., Suppl. Abstract OS36A-15.
33. Halliwell G. R., L. T. Smith, Z. Garraffo, X. Xu and E. P. Chassignet, 2006, Implementation and evaluation of the Price-Yang-Baringer Mediterranean overflow boundary conditions in HYCOM. *Eos Trans, AGU*, **87(36)**, Ocean Sci. Meet., Suppl. Abstract OS36A-17.

POSTDOCTORAL SUPERVISION

Wang, F. (Jun 2016-May 2018)

PROFESSIONAL MEMBERSHIP AND SERVICES

Member of American Geophysical Union

Member of NASA Surface Water and Ocean Topography (SWOT) Science Team & U.S. AMOC Science Task Team on “AMOC Mechanisms and Predictability”

Proposal reviewer for National Science Foundation (NSF); Department of Energy (DOE) Office of Science; and National Oceanic and Atmospheric Administration (NOAA) Climate Program Office (CPO).

Publication reviewer for *Atmosphere (MDPI)*, *Chinese Journal of Oceanography and Limnology*, *Climate Dynamics*, *Deep Sea Research - Part I*, *Dynamics of Atmospheres and Oceans*, *Geophysical Research Letters*, *Journal of Climate*, *Journal Geophysical Research - Oceans*, *Journal Physical Oceanography*, *Ocean Modelling*, *Ocean Science (Copernicus Publications)*, *Progress in Oceanography*, *Remote Sensing*, *Scientific Reports*, *Tellus A: Dynamic Meteorology & Oceanography*, and *Transactions on Geoscience and Remote Sensing (IEEE)*