

# Jiang Zhu

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## EDUCATION

- ◇ Ph.D., Atmospheric and Oceanic Sciences May 2017  
University of Wisconsin-Madison, Madison, US  
Advisor: *Prof. Zhengyu Liu*
- ◇ M.S., Atmospheric and Oceanic Sciences Jun 2011  
Peking University, Beijing, China  
Advisor: *Prof. Haijun Yang*
- ◇ B.S., Atmospheric Sciences Jun 2008  
Peking University, Beijing, China

## RESEARCH EXPERIENCE

- ◇ Scientist VI, NSF National Center for Atmospheric Research (NCAR) October 2025–present
- ◇ Project Scientist I, II, III, NSF NCAR May 2020–October 2025
- ◇ Postdoctoral Research Fellow, University of Michigan June 2017–May 2020  
Projects: Climate sensitivity and feedbacks; Water isotope simulation; Paleoclimate data assimilation for the Paleocene–Eocene Thermal Maximum and the last deglaciation
- ◇ Visiting Scholar, NSF NCAR January 2014–January 2015  
Projects: Development and validation of the isotope-enabled Community Earth System Model
- ◇ Graduate Research Assistant, University of Wisconsin-Madison August 2011–May 2017  
Projects: Interpretation and modeling of water isotopes; ENSO variability in the past and future; Holocene temperature conundrum; Abrupt climate changes and the large-scale ocean circulation

## RESEARCH GRANTS

- ◇ 2025–2030 Collaborative Research: Frameworks: SCI-SWIM: Sustainable Community Infrastructure for Stable Water Isotope Modeling Enabling Earth System Research. NSF CSSI #2513025, Award Amount \$2,552,220 (PI: Zhu; co-PI: Wieder and Lauritzen)
- ◇ 2025–2028 Collaborative Research: CAIG: Emulating Water Isotopes in Fully-coupled Global Climate Models using Knowledge-guided Machine Learning. NSF CAIG #2530608, Award Amount \$252,059 (Led by Feng Zhu at NSF NCAR)
- ◇ 2024–2028 paleoWeather: A new paradigm for examining extreme events in past climates. Heising-Simons Foundation #2023-4716, Award Amount \$729,568 (PI: Otto-Bliesner; Co-PI: Zhu, Amrhein, Macarewicz)

- ◇ 2023–2026 Collaborative Research: Reducing Model Uncertainty by Improving Understanding of Pacific Meridional Climate Structure during Past Warm Intervals. NSF P4CLIMATE #2303567, Award Amount \$170,080 (PI)
- ◇ 2022–2025 Collaborative Proposal: Tectonic degassing as a possible solution to the Miocene climate enigma. NSF P2C2 #2202777, Award Amount \$425,904 (PI)
- ◇ 2020–2023 Constraining the Physics that Regulate Equilibrium Climate Sensitivity through Simulation of LGM and Eocene Paleoclimates. NSF P2C2 #2002397, Award Amount \$384,686 (PI: Poulsen at University of Michigan)

## HONORS/AWARDS

- ◇ Nanne Weber Early Career Award, American Geophysical Union (AGU) December 2023
- ◇ Top Cited Article for Zhu et al. (2022), *J. Adv. Model. Earth Syst.* 2024
- ◇ Top Downloaded Article for Zhu et al. (2022), *J. Adv. Model. Earth Syst.* 2024
- ◇ Top Downloaded Article for Zhu et al. (2021), *Geophys. Res. Lett.* 2024

## PUBLICATIONS

101. Ou, Y., Zhang, M., Liu, Y., Zhao, H., Cao, X., & **Zhu, J.** (2026). Sahara greening may have diminished mid-Holocene Atlantic tropical cyclones. *Communications Earth & Environment*. doi:10.1038/s43247-026-03481-4
100. Ding, Q., Shaw, T., Wang, H., Baxter, I., & **Zhu, J.** (2026). Regional drying over the Western U.S. driven by enhanced atmospheric subsidence amid global moistening from 1980 to 2020. *Nature Communications*. doi:10.1038/s41467-026-71818-w
99. Bhattacharya, T., Fastovich, D., Maupin, C. R., Thompson, A. E., Feng, R., **Zhu, J.**, McClymont, E. L., Bong, H., LeGrande, A., Dee, S., & Fiorella, R. P. (2026). Leaf Wax Hydrogen Isotopes Reflect Storm Track Position Over Western North America. *Paleoceanography and Paleoclimatology*, 41(4), e2025PA005342. doi:10.1029/2025PA005342
98. Kelemen, F. D., Lohmann, R., **Zhu, J.**, & Ahrens, B. (2026). Role of paleogeography on large-scale circulation during the early Eocene. *Clim. Past*, 22(3), 505–516. doi:10.5194/cp-22-505-2026
97. Bong, H., LeGrande, A. N., Dee, S., **Zhu, J.**, Cauquoin, A., Fiorella, R. P., Ding, Q., Dutrievoz, N., Tanoue, M., Frazer, M., Sarkar, M., Agosta, C., Yoshimura, K., Werner, M., Okazaki, A., Risi, C., Steen-Larsen, H. C., Casado, M., Wahl, S., ... Schmidt, G. A. (2026). Water Isotope Model Intercomparison Project (WisomIP): Present-Day Climate. *Journal of Geophysical Research: Atmospheres*, 131(3), e2025JD044985. doi:10.1029/2025JD044985
96. Baxter, I., Ding, Q., Ballinger, T., Wang, Hailong, Holland, M., Wang, Hailan, Li, Z., Wu, Y., Feldl, N., Kay, J. E., Guan, B., & **Zhu, J.** (2025). Water sources and land capacitor effects stimulate observed summer Arctic moistening and warming. *Communications Earth & Environment*, 6(1), 1027. doi:10.1038/s43247-025-03000-x
95. Riquelme-Barraza, F. M., Gómez-Contreras, Á., Cosentino, N. J., **Zhu, J.**, Sagredo, E. A., Puentes-Nazal, M. J., Rupper, S., & Lambert, F. (2025). Patagonian Ice Sheet shaped regional climate during the Last Glacial Maximum. *Communications Earth & Environment*, 6(1), 798. doi:10.1038/s43247-025-02762-8

94. Baek, S. H., Lora, J. M., Skinner, C. B., Fu, M., & **Zhu, J.** (2025). Atmospheric and oceanic energy transport during North Atlantic freshening events: Influences of moisture transport and hydrologic cycle feedbacks. *Climate Dynamics*, 63(8), 301. doi:10.1007/s00382-025-07761-1
93. Todd, V. L., Shanahan, T. M., DiNezio, P. N., Klavans, J. M., Fawcett, P. J., Anderson, R. S., Jiménez-Moreno, G., LeGrande, A. N., Pausata, F. S. R., Thompson, A. J., & **Zhu, J.** (2025). North Pacific ocean–atmosphere responses to Holocene and future warming drive Southwest US drought. *Nature Geoscience*. doi:10.1038/s41561-025-01726-z
92. **Zhu, J.**, Otto-Bliesner, B. L., Brady, E., Eidhammer, T., Gettelman, A., Feng, R., McCluskey, C. (2025) Investigating the State Dependence of Cloud Feedback Using a Suite of Perturbed Parameter Ensembles. *Journal of Climate*. doi:10.1175/JCLI-D-24-0686.1
91. Duffy, M. L., Simpson, I. R., Medeiros, B., **Zhu, J.**, McCluskey, C. S., Herrington, A. R., Gettelman, A., Otto-Bliesner, B. L., Fasullo, J. T., Lauritzen, P. H., Neale, R. B., & Lawrence, D. M. (2026). Is the High ECS in CESM2 Degrading Transient Climate Change Projections Over the 21st Century? *Journal of Advances in Modeling Earth Systems*, 18(1), e2025MS004967. doi:10.1029/2025MS004967
90. Leger, T. P. M., Ely, J. C., Clark, C. D., Bradley, S. L., Archer, R. E., & **Zhu, J.** (2025). The Greenland-Ice-Sheet evolution over the last 24 000 years: Insights from model simulations evaluated against ice-extent markers. *The Cryosphere*, 19(11), 5719–5761. doi:10.5194/tc-19-5719-2025
89. Dvorak, M., Armour, K. C., Feng, R., Cooper, V. T., **Zhu, J.**, Burls, N., & Proistosescu, C. (2025). Mid-Pliocene climate forcing, sea-surface temperature patterns, and implications for modern-day climate sensitivity. *Journal of Climate*. doi:10.1175/JCLI-D-24-0410.1
88. Salazar, A. M., Medeiros, B., **Zhu, J.**, & Tziperman, E. (2025). Investigating the Effects of a Subtropical Stratocumulus Cloud Breakup in Warm Climates Using Cloud-Locking Experiments. *Journal of Climate*, 38(17), 4315–4330. doi:10.1175/JCLI-D-24-0371.1
87. Abhik, S., Dommengot, D., McGregor, S., Hutchinson, D. K., Steinig, S., **Zhu, J.**, Capitanio, F. A., Lunt, D. J., Niezgodzki, I., Knorr, G., Chan, W.-L., & Abe-Ouchi, A. (2025). Stronger and prolonged El Niño-Southern Oscillation in the Early Eocene warmth. *Nature Communications*, 16(1), 4053. doi:10.1038/s41467-025-59263-7
86. Hao, S., Zhang, X., Duan, Y., Gowan, E. J., **Zhu, J.**, Cauquoin, A., Chen, J., Werner, M., & Chen, F. (2025). Model seasonal and proxy spatial biases revealed by assimilated mid-Holocene seasonal temperatures. *Science Bulletin*. doi:10.1016/j.scib.2025.03.039
85. Liu, Z., Cheng, J., Zheng, Y., Zhang, W., Liu, H., Wu, H., **Zhu, J.**, & Xie, S. (2025). The seasonal temperature conundrum for the Holocene. *Science Advances*, 11(17), eadt8950. doi:10.1126/sciadv.adt8950
84. Howard, C., Penman, D. E., **Zhu, J.**, Harper, D. T., Newell, D. L., & Norris, R. D. (2025). Tropical Atlantic Temperature and Hydrologic Change During the Paleocene-Eocene Thermal Maximum. *Paleoceanography and Paleoclimatology*, 40(4), e2024PA004939. doi:10.1029/2024PA004939
83. Kageyama, M., Braconnot, P., Chiessi, C. M., Rehfeld, K., Ait Brahim, Y., Dütsch, M., Gwineth, B., Hou, A., Loutre, M.-F., Hendrizan, M., Meissner, K., Mongwe, P., Otto-Bliesner, B., Pezzi, L. P., Rovere, A., Seltzer, A., Sime, L., & **Zhu, J.** (2024). Lessons from paleoclimates for recent and future climate change: Opportunities and insights. *Frontiers in Climate*, 6. doi:10.3389/fclim.2024.1511997
82. Lunt, D. J., **Zhu, J.**, & Wood, R. A. (2024). Ocean drilling makes for more robust climate modelling of the future. *Nature Geoscience*. doi:10.1038/s41561-024-01604-0

81. Li, M., Kump, L. R., Ridgwell, A., Tierney, J. E., Hakim, G. J., Malevich, S. B., Poulsen, C. J., Tardif, R., Zhang, H., & **Zhu, J.** (2024). Coupled decline in ocean pH and carbonate saturation during the Palaeocene–Eocene Thermal Maximum. *Nature Geoscience*. doi:10.1038/s41561-024-01579-y
80. Steinig, S., Abe-Ouchi, A., de Boer, A. M., Chan, W.-L., Donnadieu, Y., Hutchinson, D. K., Knorr, G., Ladant, J.-B., Morozova, P., Niezgodzki, I., Poulsen, C. J., Volodin, E. M., Zhang, Z., **Zhu, J.**, Evans, D., Inglis, G. N., Meckler, A. N., & Lunt, D. J. (2024). DeepMIP-Eocene-p1: Multi-model dataset and interactive web application for Eocene climate research. *Scientific Data*, 11(1), 970. doi:10.1038/s41597-024-03773-4
79. Bonan, D. B., Schneider, T., & **Zhu, J.** (2024). Precipitation Over a Wide Range of Climates Simulated With Comprehensive GCMs. *Geophysical Research Letters*, 51(16), e2024GL109892. doi:10.1029/2024GL109892
78. Lunt, D. J., Otto-Bliesner, B. L., Brierley, C., Haywood, A., Inglis, G. N., Izumi, K., Kageyama, M., Kaufman, D., Mauritsen, T., McClymont, E. L., Salzmann, U., Steinig, S., Tierney, J. E., Zhao, A., & **Zhu, J.** (2024). Paleoclimate data provide constraints on climate models' large-scale response to past CO<sub>2</sub> changes. *Communications Earth & Environment*, 5(1), 419. doi:10.1038/s43247-024-01531-3
77. Zhang, X., Tipple, B. J., **Zhu, J.**, Rush, W. D., Shields, C. A., Novak, J. B., & Zachos, J. C. (2024). Response of coastal California hydroclimate to the Paleocene–Eocene Thermal Maximum. *Clim. Past*, 20(7), 1615–1626. doi:10.5194/cp-20-1615-2024
76. Cooper, V. T., Armour, K. C., Hakim, G. J., Tierney, J. E., Osman, M. B., Proistosescu, C., Dong, Y., Burls, N. J., Andrews, T., Amrhein, D. E., **Zhu, J.**, Dong, W., Ming, Y., & Chmielowiec, P. (2024). Last Glacial Maximum pattern effects reduce climate sensitivity estimates. *Science Advances*, 10(16), eadk9461. doi:10.1126/sciadv.adk9461
75. Campbell, J., Poulsen, C. J., **Zhu, J.**, Tierney, J. E., & Keeler, J. (2024). CO<sub>2</sub>-driven and orbitally driven oxygen isotope variability in the Early Eocene. *Clim. Past*, 20(3), 495–522. doi:10.5194/cp-20-495-2024
74. Zhao, X., Liu, X., Lin, L., Qin, Y., Zelinka, M. D., Klein, S. A., Zhang, M., Zhang, K., Ma, P.-L., **Zhu, J.**, Lu, Z., & Saravanan, R. (2024). Larger Cloud Liquid Water Enhances Both Aerosol Indirect Forcing and Cloud Radiative Feedback in Two Earth System Models. *Geophysical Research Letters*, 51(2), e2023GL105529. doi:10.1029/2023GL105529
73. Bradley, S. L., Sellevold, R., Petrini, M., Vizcaino, M., Georgiou, S., **Zhu, J.**, Otto-Bliesner, B. L., & Lofverstrom, M. (2024). Surface mass balance and climate of the Last Glacial Maximum Northern Hemisphere ice sheets: simulations with CESM2.1. *Clim. Past*, 20(1), 211–235. doi:10.5194/cp-20-211-2024
72. **Zhu, J.**, Poulsen, C. J., & Otto-Bliesner, B. L. (2024). Modeling Past Hothouse Climates as a Means for Assessing Earth System Models and Improving the Understanding of Warm Climates. *Annual Review of Earth and Planetary Sciences*. doi:10.1146/annurev-earth-032320-100333
71. Inglis, G. N., Bhatia, R., Evans, D., **Zhu, J.**, Müller, W., Matthey, D., Thornalley, D. J. R., Stockey, R. G., & Wade, B. S. (2023). Surface Ocean Cooling in the Eocene North Atlantic Coincides With Declining Atmospheric CO<sub>2</sub>. *Geophysical Research Letters*, 50(24), e2023GL105448. doi:10.1029/2023GL105448
70. Dutta, D., Jucker, M., Sherwood, S. C., Meissner, K. J., Sen Gupta, A., & **Zhu, J.** (2023). Early Eocene low orography and high methane enhance Arctic warming via polar stratospheric clouds. *Nature Geoscience*, 16(11), 1027–1032. doi:10.1038/s41561-023-01298-w

69. Lofverstrom, M., & **Zhu, J.** (2023). Tropical Precipitation Woes in the Community Earth System Model Version 2. *Geophysical Research Letters*, 50(21), e2023GL104416. doi:10.1029/2023GL104416
68. Kelemen, F. D., Steinig, S., de Boer, A., **Zhu, J.**, Chan, W.-L., Niezgodzki, I., Hutchinson, D. K., Knorr, G., Abe-Ouchi, A., Ahrens, B. (2023). Meridional Heat Transport in the DeepMIP Eocene Ensemble: Non-CO2 and CO2 Effects. *Paleoceanography and Paleoclimatology*, 38(8), e2022PA004607. doi:10.1029/2022PA004607
67. Walters, A. P., Tierney, J. E., **Zhu, J.**, Meyers, S. R., Graves, K., & Carroll, A. R. (2023). Climate system asymmetries drive eccentricity pacing of hydroclimate during the early Eocene greenhouse. *Science Advances*, 9(31), eadg8022. doi:10.1126/sciadv.adg8022
66. Cramwinckel, M. J., Burls, N. J., Fahad, A. A., Knapp, S., West, C. K., Reichgelt, T., Greenwood, D. R., Chan, W.-L., Donnadiou, Y., Hutchinson, D. K., de Boer, A. M., Ladant, J.-B., Morozova, P. A., Niezgodzki, I., Knorr, G., Steinig, S., Zhang, Z., **Zhu, J.**, Feng, R., ... Inglis, G. N. (2023). Global and Zonal-Mean Hydrological Response to Early Eocene Warmth. *Paleoceanography and Paleoclimatology*, 38(6), e2022PA004542. doi:10.1029/2022PA004542 (*Wiley Top Cited Article*)
65. Liu, W., Duarte Cavalcante Pinto, D., Fedorov, A., & **Zhu, J.** (2023). The Impacts of a Weakened Atlantic Meridional Overturning Circulation on ENSO in a Warmer Climate. *Geophysical Research Letters*, 50(8), e2023GL103025. doi:10.1029/2023GL103025
64. Gettelman, A., Morrison, H., Eidhammer, T., Thayer-Calder, K., Sun, J., Forbes, R., McGraw, Z., **Zhu, J.**, Storelvmo, T., & Dennis, J. (2023). Importance of ice nucleation and precipitation on climate with the Parameterization of Unified Microphysics Across Scales version 1 (PUMASv1). *Geosci. Model Dev.*, 16(6), 1735–1754. doi:10.5194/gmd-16-1735-2023
63. Goudsmit-Harzevoort, B., Lansu, A., Baatsen, M. L. J., von der Heydt, A. S., de Winter, N. J., Zhang, Y., Abe-Ouchi, A., de Boer, A., Chan, W.-L., Donnadiou, Y., Hutchinson, D. K., Knorr, G., Ladant, J.-B., Morozova, P., Niezgodzki, I., Steinig, S., Tripathi, A., Zhang, Z., **Zhu, J.**, & Ziegler, M. (2023). The Relationship Between the Global Mean Deep-Sea and Surface Temperature During the Early Eocene. *Paleoceanography and Paleoclimatology*, 38(3), e2022PA004532. doi:10.1029/2022PA004532
62. Renoult, M., Sagoo, N., **Zhu, J.**, & Mauritsen, T. (2023). Causes of the weak emergent constraint on climate sensitivity at the Last Glacial Maximum. *Clim. Past*, 19(2), 323–356. doi:10.5194/cp-19-323-2023
61. Skinner, C. B., Lora, J. M., Tabor, C., & **Zhu, J.** (2023). Atmospheric River Contributions to Ice Sheet Hydroclimate at the Last Glacial Maximum. *Geophysical Research Letters*, 50(1), e2022GL101750. doi:10.1029/2022GL101750
60. Pratik, K., Blau, M. T., Ha, K.-J., & **Zhu, J.** (2022). Elevation-dependent temperature response in early Eocene using paleoclimate model experiment. *Environmental Research Letters*. doi:10.1088/1748-9326/ac9c74
59. Tierney, J. E., **Zhu, J.**, Li, M., Ridgwell, A., Hakim, G. J., Poulsen, C. J., Whiteford, R. D. M., Rae, J. W. B., & Kump, L. R. (2022). Spatial patterns of climate change across the Paleocene–Eocene Thermal Maximum. *Proceedings of the National Academy of Sciences*, 119(42), e2205326119. doi:10.1073/pnas.2205326119
58. Zhang, Z., Zhang, Z., He, Z., Tan, N., Guo, Z., **Zhu, J.**, Steinig, S., Donnadiou, Y., Ladant, J.-B., Chan, W.-L., Abe-Ouchi, A., Niezgodzki, I., Knorr, G., Hutchinson, D. K., & de Boer, A. M. (2022). Impact of mountains in Southern China on the Eocene climates of East Asia. *Journal of Geophysical Research: Atmospheres*, n/a(n/a), e2022JD036510. doi:10.1029/2022JD036510

57. Acosta, R. P., Ladant, J.-B., **Zhu, J.**, & Poulsen, C. J. (2022). Evolution of the Atlantic Intertropical Convergence Zone, and the South American and African Monsoons Over the Past 95-Myr and Their Impact on the Tropical Rainforests. *Paleoceanography and Paleoclimatology*, 37(7), e2021PA004383. doi:10.1029/2021PA004383
56. **Zhu, J.**, Otto-Bliesner, B. L., Garcia, R., Brady, E. C., Mills, M., Kinnison, D., & Lamarque, J.-F. (2022). Small Impact of Stratospheric Dynamics and Chemistry on the Surface Temperature of the Last Glacial Maximum in CESM2(WACCM6ma). *Geophysical Research Letters*, 49(20), e2022GL099875. doi:10.1029/2022GL099875
55. Green, R. A., Menviel, L., Meissner, K. J., Crosta, X., Chandan, D., Lohmann, G., Peltier, W. R., Shi, X., & **Zhu, J.** (2022). Evaluating seasonal sea-ice cover over the Southern Ocean at the Last Glacial Maximum. *Clim. Past*, 18(4), 845–862. doi:10.5194/cp-18-845-2022
54. Niezgodzki, I., Knorr, G., Lohmann, G., Lunt, D. J., Poulsen, C. J., Steinig, S., **Zhu, J.**, de Boer, A., Chan, W.-L., Donnadieu, Y., Hutchinson, D. K., Ladant, J.-B., & Morozova, P. (2022). Simulation of Arctic sea ice within the DeepMIP Eocene ensemble: Thresholds, seasonality and factors controlling sea ice development. *Global and Planetary Change*, 214, 103848. doi:10.1016/j.gloplacha.2022.103848
53. Kumar, D. M., Tierney, J. E., Bhattacharya, T., **Zhu, J.**, & Murray, J. W. (2022). Glacial warming in the Eastern Pacific Warm Pool. *Geophysical Research Letters*, n/a(n/a), e2022GL098830. doi:10.1029/2022GL098830
52. Reichgelt, T., Greenwood, D. R., Steinig, S., Conran, J. G., Hutchinson, D. K., Lunt, D. J., Scriven, L. J., & **Zhu, J.** (2022). Plant Proxy Evidence for High Rainfall and Productivity in the Eocene of Australia. *Paleoceanography and Paleoclimatology*, n/a(n/a), e2022PA004418. doi:10.1029/2022PA004418
51. Williams, C. J. R., Lunt, D. J., Salzmann, U., Reichgelt, T., Inglis, G. N., Greenwood, D. R., Chan, W.-L., Abe-Ouchi, A., Donnadieu, Y., Hutchinson, D. K., de Boer, A. M., Ladant, J.-B., Morozova, P. A., Niezgodzki, I., Knorr, G., Steinig, S., Zhang, Z., **Zhu, J.**, Huber, M., & Otto-Bliesner, B. L. (2022). African hydroclimate during the early Eocene from the DeepMIP simulations. *Paleoceanography and Paleoclimatology*, n/a(n/a), e2022PA004419. doi:10.1029/2022PA004419
50. Thompson, A. J., **Zhu, J.**, Poulsen, C. J., Tierney, J. E., & Skinner, C. B. (2022). Northern Hemisphere vegetation change drives a Holocene thermal maximum. *Science Advances*, 8(15), eabj6535. doi:10.1126/sciadv.abj6535
49. **Zhu, J.**, Otto-Bliesner, B. L., Brady, E. C., Gettelman, A., Bacmeister, J. T., Neale, R. B., Poulsen, C. J., Shaw, J. K., McGraw, Z. S., & Kay, J. E. (2022). LGM paleoclimate constraints inform cloud parameterizations and equilibrium climate sensitivity in CESM2. *Journal of Advances in Modeling Earth Systems*, n/a(n/a), e2021MS002776. doi:10.1029/2021MS002776 ([Wiley Top Downloaded Article](#)) ([Wiley Top Cited Article](#))
48. Wen, Q., Liu, Z., **Zhu, J.**, Yan, M., He, C., Han, J., Liu, J., & Liang, Y. (2022). Local insolation drives Afro-Asian monsoon at orbital-scale in Holocene. *Geophysical Research Letters*, n/a(n/a), e2021GL097661. doi:10.1029/2021GL097661
47. Zhang, M., Liu, Y., **Zhu, J.**, Wang, Z., & Liu, Z. (2022). Impact of Dust on climate and AMOC during the Last Glacial Maximum Simulated by CESM1.2. *Geophysical Research Letters*, n/a(n/a), e2021GL096672. doi:10.1029/2021GL096672
46. Zhang, Y., de Boer, A. M., Lunt, D. J., Hutchinson, D. K., Ross, P., van de Flierdt, T., Sexton, P.,

- Coxall, H. K., Steinig, S., Ladant, J.-B., **Zhu, J.**, Donnadieu, Y., Zhang, Z., Chan, W.-L., Abe-Ouchi, A., Niezgodzki, I., Lohmann, G., Knorr, G., Poulsen, C. J., & Huber, M. (2022). Early Eocene ocean meridional overturning circulation: the roles of atmospheric forcing and strait geometry. *Paleoceanography and Paleoclimatology*, n/a(n/a), e2021PA004329. doi:10.1029/2021PA004329
45. Inglis, G. N., Toney, J. L., **Zhu, J.**, Poulsen, C. J., Röhl, U., Jamieson, S. S. R., Pross, J., Cramwinckel, M., Krishnan, S., Pagani, M., Bijl, P. K., & Bendle, J. (2022). Enhanced terrestrial carbon export from East Antarctica during the early Eocene. *Paleoceanography and Paleoclimatology*, n/a(n/a), e2021PA004348. doi:10.1029/2021PA004348
44. Meegan Kumar, D., Tierney, J. E., Bhattacharya, T., **Zhu, J.**, McCarty, L., & Murray, J. W. (2021). Climatic Drivers of Deglacial SST Variability in the Eastern Pacific. *Paleoceanography and Paleoclimatology*, 36(10), e2021PA004264. doi:10.1029/2021PA004264
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1. Qian, W., **Zhu, J.**, Wang, Y., & Fu, J. (2009). Regional relationship between the Jiang-Huai Meiyu and the equatorial surface-subsurface temperature anomalies. *Chinese Science Bulletin*, 54(1), 113–119. [doi:10.1007/s11434-008-0410-6](https://doi.org/10.1007/s11434-008-0410-6)

## INVITED SEMINARS & COLLOQUIA

- ◇ *Program on Climate Change Summer Institute*, University of Washington, San Juan, WA, US. September 2025.
- ◇ *Department of Atmospheric and Oceanic Sciences Seminar*, Fudan University, Shanghai, China. April 2025.
- ◇ *Department of Atmospheric Science Seminar*, Colorado State University, Fort Collins, US. November 2024.
- ◇ *Earth & Climate Sciences Seminar series, Nicholas School of the Environment*, Duke University, Durham, US. October 2024.
- ◇ *Climate Variability Across Scales Seminar Series. Past Global Changes (PAGES)*. Virtual. July 2024.
- ◇ *ClimaTea*. Harvard University, Cambridge, US. April 2024.
- ◇ *Geophysical Fluid Dynamics Laboratory Seminar*. Princeton University, Princeton, US. February 2024.
- ◇ *Department of Atmospheric and Oceanic Sciences Colloquium*. University of Colorado Boulder, Boulder, US. January 2024.
- ◇ *Bristol Research Initiative for the Dynamic Global Environment (BRIDGE) seminar*. Bristol University, Virtual. January 2024.

- ◇ *Department of Earth, Atmospheric, and Planetary Sciences Colloquium*. Purdue University, West Lafayette, US. November 2023.
- ◇ *School of Engineering and Applied Science Colloquium in Climate Science*. Columbia University, New York, US. September 2023.
- ◇ *School of Geography and Ocean Science Colloquium*. Nanjing University, Nanjing, China. August 2023.
- ◇ *Atmosphere, Oceans, Climate Dynamics Seminars*. Yale University, Virtual. April 2023.
- ◇ *Atmospheric and Oceanic Sciences Seminars*. Peking University, Beijing, China. March 2023.
- ◇ *Climate Dynamics Seminars*. George Mason University, Fairfax, US. September 2022.
- ◇ *Atmospheric Physics Group Noble Seminar*. University of Toronto, Virtual. November 2021.
- ◇ *Atmospheric Science Seminar*. University of California, Davis, Virtual. October 2020.
- ◇ *Department of Earth, Environmental and Planetary Sciences Colloquium*. Brown University, Virtual. October 2020.

## CONFERENCE PRESENTATIONS

### *INVITED*

- ◇ **Zhu, J.**, Otto-Bliesner, B., Brady, E., Gettelman, A., Eidhammer, T., *Can perturbing physical parameters in climate models solve classical paleoclimate questions?*, AGU Fall Meeting, San Francisco, US. December 2023.
- ◇ **Zhu, J.**, Otto-Bliesner, B., Brady, E., Poulsen, C., Tierney, J., *Clearing clouds of uncertainty with the help of paleoclimate*, The 14th International Conference on Paleoceanography, Bergen, Norway. September 2022.
- ◇ **Zhu, J.**, Otto-Bliesner, B., Brady, E., Poulsen, C., Tierney, J., *Using past climates to develop Earth system models: how a simple paleoclimate metric can help greatly*, AGU Fall Meeting, New Orleans, US. December 2021.
- ◇ **Zhu, J.**, Otto-Bliesner, B., Brady, E., Poulsen, C., Tierney, J., *Informing cloud parameterizations through simulation of past extreme climates*, Laboratory for Atmospheric and Space Physics Science Team Meetings, University of Colorado-Boulder, Boulder, US. November 2021.
- ◇ **Zhu, J.**, *The PhanTASTIC project will be fantastic for climate dynamics*, Phanerozoic Technique Averaged Surface Temperature Integrated Curve Workshop, Virtual. September 2021.
- ◇ **Zhu, J.**, *Informing cloud parameterizations in CESM2 through simulation of the Last Glacial Maximum*, ECS and Cloud Feedback Symposium, Virtual. July 2021.
- ◇ **Zhu, J.**, The National Academies of Sciences, Engineering, and Medicine: Identifying New Community-Driven Science Themes for NSF's Support of Paleoclimate Research: A Workshop, Virtual. June 2021.
- ◇ **Zhu, J.**, *Implications of paleoclimate modeling for future climate change*, Deep-time Extreme Climates and Biodiversity Changes Forum, Nanjing University, Nanjing, China. March 2021.
- ◇ **Zhu, J.**, *Assessment of equilibrium climate sensitivity of CESM2 through simulation of the Last Glacial Maximum*, CESM Atmosphere Working Group Meeting, Boulder, US. February 2021.
- ◇ **Zhu, J.**, Poulsen, C., Tierney, J., Otto-Bliesner, B., *Constraining equilibrium climate sensitivity through simulation of Eocene extreme warmth*, AGU Fall Meeting, San Francisco, US. December 2019.

## ***OTHERS***

- ◇ **Zhu, J.**, Otto-Bliesner, B., Tierney, J., Brady, E., Simpson, I., Bonan, D., Lunt, D., Macarewicz, S., *More equable past and future warm climates in unprecedented high-resolution simulations*, Workshop on High and Ultra-high Resolution Modeling of the Earth System, Texas A&M University, College Station, US. April 2026. (*ORAL*)
- ◇ **Zhu, J.** [A New Set of Recipes for CESM3 for Near-Modern Paleoclimate Applications](#). CESM Paleoclimate Working Group Meeting, Boulder, US. February 2026. (*ORAL*)
- ◇ **Zhu, J.**, Otto-Bliesner, B., Brady, E., Eidhammer, T., Gettelman, A., Feng R., McCluskey, C. *A Perturbed Parameter Ensemble Dataset for State-Dependent Climate Forcing, Feedbacks, and Extremes*. AGU Fall Meeting, New Orleans, US. December 2025. (*POSTER*)
- ◇ **Zhu, J.**, Otto-Bliesner, et al. *Examining the State Dependence of Cloud Feedback Using a Perturbed Parameter Ensemble (PPE)*. CESM Workshop, Boulder, US. June 2025. (*POSTER*)
- ◇ **Zhu, J.**, Otto-Bliesner, B., Brady, E., Poulsen, C., Tierney, J., *Clearing clouds of uncertainty with the help of paleoclimate*, PAGES 2025 Open Science Meeting, Shanghai, China. May 2025. (*POSTER*)
- ◇ **Zhu, J.** [Simulating Past Climates with CESM3-MOM6: The Last Glacial Maximum and Beyond](#). CESM Ocean Model Working Group Meeting, Boulder, US. February 2025. (*ORAL*)
- ◇ **Zhu, J.** *Paleoclimate Working Group and CESM3 Updates*. CESM Paleoclimate Working Group Meeting, Boulder, US. January 2025. (*ORAL*)
- ◇ **Zhu, J.**, Otto-Bliesner, B., Brady, E., Eidhammer, T., Gettelman, A., Feng R., McCluskey, C. *Investigating the state dependence of cloud feedback using a suite of perturbed parameter ensemble*. AGU Fall Meeting, Washington, D.C., US. December 2024. (*POSTER*)
- ◇ **Zhu, J.**, Otto-Bliesner, B., Guo, Z., Herrington, A., Larson, V., Medeiros, B., Raghuraman, S. P. *The Runaway Problem in the Community Earth System Model Version 2 and Climate Sensitivity Over a Wide Temperature Range*. AGU Fall Meeting, Washington, D.C., US. December 2024. (*POSTER*)
- ◇ **Zhu, J.**, Otto-Bliesner, et al. *Resolving ocean eddies could lead to warmer temperatures in CESM simulations of past and future warm climates*. OMDP Commodore Workshop 2024, Boulder, US. September 2024. (*POSTER*)
- ◇ **Zhu, J.**, Otto-Bliesner, B., Brady, E., Guo, Z., Larson, V., Medeiros, B., Raghuraman, S. P. *Does your model run away under high CO<sub>2</sub>? — An investigation with CESM2*. Workshop — Climate evolution from early Eocene to mid-Pliocene, Storrs, US. August 2024. (*ORAL*)
- ◇ **Zhu, J.**, Otto-Bliesner, et al. *A Suite of Unprecedented High-resolution Paleoclimate Simulations for Weather and Climate Research*. CESM Workshop 2024, Boulder, US. June 2024. (*POSTER*)
- ◇ **Zhu, J.**, Otto-Bliesner, B., Brady, E., Guo, Z., Larson, V., Medeiros, B., Raghuraman, S. P. *Investigating the runaway of CESM under extreme warm conditions*. CESM Atmosphere Working Group Meeting, Boulder, US. February 2024. (*ORAL*)
- ◇ **Zhu, J.**, Otto-Bliesner, B., *Polar Amplification Over A Wide Range Of Warming In The Community Earth System Models (CESMs)*, Polar Amplification of Climate Change Across Hemispheres and Seasons: Causes and Constraints Workshop, Boulder, US. January 2024. (*POSTER*)
- ◇ **Zhu, J.**, Otto-Bliesner, B., Brady, E., Tierney, J., Poulsen, C., Feng, R., Tabor, C., Walters, A., *Early*

- Eocene surface temperatures in an unprecedented high-resolution Earth system simulation*, AGU Fall Meeting, San Francisco, US. December 2023. (ORAL)
- ◇ **Zhu, J.** *Clearing clouds of uncertainty with the help of paleoclimate*. World Climate Research Programme Open Science Conference, Kigali, Rwanda. October 2023. (ORAL)
  - ◇ **Zhu, J.**, Otto-Bliesner, B., Brady, E., Guo, Z., Larson, V., Medeiros, B. *Simulation of the Eocene hothouse climate using CESM2*. CESM Workshop, Boulder, US. June 2023. (ORAL)
  - ◇ **Zhu, J.**, Otto-Bliesner, B., Brady, E., Gettelman, A., Eidhammer, T., *Examining state dependence of the cloud feedback using a perturbed parameter ensemble*. AGU Fall Meeting, Chicago, US. December 2022. (ORAL)
  - ◇ **Zhu, J.**, *Paleoclimate Working Group Update*. CESM Workshop, Boulder, US. June 2022. (ORAL)
  - ◇ **Zhu, J.**, Otto-Bliesner, B., Brady, E., Gettelman A., Eidhammer T., *Examining state dependence of the cloud feedback using a perturbed parameter ensemble*. The Pattern Effect: Coupling of SST Patterns, Radiative Feedbacks, and Climate Sensitivity Workshop, Boulder, US. May 2022. (POSTER)
  - ◇ **Zhu, J.**, Otto-Bliesner, B., Brady, E., Garcia, R., Miles, M., Lamarque, J.F., *Effects of the stratospheric dynamics and chemistry on the surface climate of the Last Glacial Maximum in CESM2(WACCM6ma)*. CESM Paleoclimate Working Group Meeting, Boulder, US. February 2022. (ORAL)
  - ◇ **Zhu, J.**, Otto-Bliesner, B., Brady, E., Garcia, R., Mills, M., *Effects of the stratospheric dynamics and chemistry on the surface climate of the Last Glacial Maximum in CESM2(WACCM6ma)*. AGU Fall Meeting, New Orleans, US. December 2021. (ORAL)
  - ◇ **Zhu, J.**, Otto-Bliesner, B., Brady, E., Poulsen, C.J., Shaw, J.K., Kay, J.E., *Why does CESM2 simulate unrealistic ECS and LGM?* The Cloud Feedback Model Intercomparison Project Meeting. Virtual. September 2021. (POSTER)
  - ◇ **Zhu, J.**, Otto-Bliesner, B., Brady, E., Poulsen, C.J., *An LGM-calibrated CESM2(CAM6) for paleoclimate studies*. CESM Workshop - Paleoclimate Working Group, Boulder, US. June 2021. (ORAL)
  - ◇ **Zhu, J.**, Otto-Bliesner, B., Brady, E., Poulsen, C.J., *Inform cloud parameterizations in CESM2 through simulation of the Last Glacial Maximum*. CESM Workshop - Atmosphere Modeling Working Group, Boulder, US. June 2021. (ORAL)
  - ◇ **Zhu, J.**, Otto-Bliesner, B., Brady, E., Poulsen, C.J., Tierney, J.E., Lofverstrom, M., DiNezio, P., *Update on the simulation of the Last Glacial Maximum using CESM2*. CESM Paleoclimate Working Group Meeting, Boulder, US. February 2021. (ORAL)
  - ◇ **Zhu, J.**, Otto-Bliesner, B., Brady, E., Poulsen, C.J., Tierney, J.E., Lofverstrom, M., DiNezio, P., *Assessing equilibrium climate sensitivity of the Community Earth System Model version 2 through simulation of the Last Glacial Maximum*. AGU Fall Meeting, San Francisco, US. December 2020. (ORAL)
  - ◇ **Zhu, J.**, C. Poulsen, *LGM climate forcing and ocean dynamical feedback and their implications for estimating climate sensitivity*. Paleoclimate Modelling Intercomparison Project PMIP2020, Nanjing, China. October 2020. (ORAL)
  - ◇ **Zhu, J.**, C. Poulsen, *Can we directly estimate ECS using reconstructions of the LGM?*. CESM Workshop, Boulder, US. June 2020. (ORAL)
  - ◇ **Zhu, J.**, C. Poulsen, B. Otto-Bliesner, and J. Tierney, *Constraining equilibrium climate sensitivity through simulation of past warm and cold climates*. CESM Paleoclimate Working Group Meeting, Boulder, US.

February 2020. (ORAL)

- ◇ **Zhu, J.** and C. Poulsen, *On the temperature dependence of equilibrium climate sensitivity and cloud feedback*. AGU Fall Meeting, San Francisco, US. December 2019. (POSTER)
- ◇ **Zhu, J.**, C. Poulsen, J. Tierney, and P. DiNezio, *Investigating the Holocene ENSO variability through isotope-enabled modeling and model-data comparisons*. Water Isotopes and Climate Workshop, Boulder, US. October 2019. (ORAL)
- ◇ **Zhu, J.** and C. Poulsen, *Modeling water isotopes during the PETM and the implications for global temperature and hydrological changes*. Terrestrial and Coastal Climates of the Paleocene Eocene Thermal Maximum, Santa Cruz, US. September 2019. (ORAL)
- ◇ **Zhu, J.** and C. Poulsen, *Constraining future warming from past climates*. Aspen Global Change Institute workshop on 'The Future of Past Climate', Aspen, US. May 2019. (ORAL)
- ◇ **Zhu, J.**, C. Poulsen, and J. Tierney, *Simulation of Eocene extreme warmth and high climate sensitivity through cloud feedbacks*. CESM Paleoclimate Working Group Meeting, Boulder, US. February 2019. (ORAL)
- ◇ **Zhu, J.**, C. Poulsen, and J. Tierney, *Simulating Eocene extreme warmth and high climate sensitivity through low-cloud feedbacks*. AGU Fall Meeting, Washington, D.C., US. December 2018. (ORAL)
- ◇ **Zhu, J.**, C. Poulsen, Z. Liu, E. Brady, B. Otto-Bliesner, and D. Noone, *Modeling the oxygen isotope in the early Eocene hothouse climate using an isotope-enabled Earth system model*. Goldschmidt Conference, Boston, US. August 2018. (POSTER)
- ◇ **Zhu, J.**, C. Poulsen, *Simulating the Eocene hothouse climate using the water isotope-enabled Community Earth System Model (CESM1.2)*. DeepMIP Conference, Bristol, UK. July 2018. (ORAL)
- ◇ **Zhu, J.**, Z. Liu, E. Brady, B. Otto-Bliesner, S. Marcott, J. Zhang, X. Wang, J. Nusbaumer, T. Wong, A. Jahn, and D. Noone, *Investigating the direct meltwater effect in terrestrial oxygen-isotope records using an isotope-enabled Earth system model*. CESM Paleoclimate Working Group Meeting, Boulder, US. March 2018. (ORAL)
- ◇ **Zhu, J.**, Z. Liu, E. Brady, B. Otto-Bliesner, S. Marcott, J. Zhang, X. Wang, J. Nusbaumer, T. Wong, A. Jahn, and D. Noone, *Investigating the direct meltwater effect in terrestrial oxygen-isotope records using an isotope-enabled Earth system model*. AGU Fall Meeting, New Orleans, US. December 2017. (ORAL)
- ◇ **Zhu, J.**, Z. Liu, B. Otto-Bliesner, E. Brady, D. Noone, J. Zhang, R. Tomas, A. Jahn, J. Nusbaumer, and T. Wong. *Reduced ENSO Variability at the LGM Revealed by an Isotope-enabled Earth System Model*. CESM PaleoClimate Working Group Meeting, Boulder, US. March 2017. (ORAL)
- ◇ **Zhu, J.**, Z. Liu, B. Otto-Bliesner, E. Brady, D. Noone, J. Zhang, R. Tomas, A. Jahn, J. Nusbaumer, and T. Wong. *Reduced ENSO Variability at the LGM Revealed by an Isotope-enabled Earth System Model*. AGU Fall Meeting, San Francisco, US. December 2016. (ORAL)
- ◇ **Zhu, J.**, Z. Liu, B. Otto-Bliesner, E. Brady, D. Noone, J. Zhang, R. Tomas, A. Jahn, J. Nusbaumer, and T. Wong. *Reduced ENSO Variability at the LGM Revealed by an Isotope-enabled Earth System Model*. CLIVAR Open Science Conference, Qingdao, China. September 2016. (ORAL)
- ◇ **Zhu, J.**, Z. Liu, X. Zhang, I. Eisenman, and W. Liu. *Linear Weakening of the AMOC in Response to Lowering Ice-sheet Topography in CCSM3*. High-Resolution Proxies of Paleoclimate Workshop, Madison, US. May 2015. (POSTER)

- ◇ **Zhu, J.**, Z. Liu, J. Zhang, and W. Liu. *AMOC response to global warming: dependence on the background climate and response timescale*. CESM Workshop, Breckenridge, US. June 2014. (POSTER)
- ◇ **Zhu, J.**, Z. Liu, X. Zhang, I. Eisenman, and W. Liu. *Transient weakening of the AMOC to a receding glacial ice sheet in CCSM3 and its physical mechanisms*. CESM Workshop, Breckenridge, US. June 2014. (ORAL)

## LEADERSHIP & SERVICES

- ◇ **Organizer:** *Climate and Global Dynamics Laboratory (CGD) Seminar Series*, NSF NCAR  
October 2025–present
- ◇ **Co-chair:** *Community Earth System Model Paleoclimate Working Group*, NSF NCAR  
April 2022–present
- ◇ **Leadership Team:** *The Deep-Time Model Intercomparison Project (DeepMIP)*  
February 2024–present
- ◇ **Leadership Certificate:** *UCAR Leadership, Exploration, and Development (LEAD)*, University Corporation for Atmospheric Research (UCAR)  
February–December 2025
- ◇ **Committee Member:** *Council for Representation, Engagement, and Well-being (CREW) of CGD*, NSF NCAR  
March 2022–March 2024
- ◇ **Founding Steering Committee:** *Paleoclimate Advances Webinar Series (PAWS)*  
March 2022–December 2023
- ◇ **Leadership Certificate:** *Early Career Leadership Program*, NSF NCAR  
January–August 2022
- ◇ **Peer Review (n=103):** Nature, Nature Climate Change, Nature Geoscience, Proceedings of the National Academy of Sciences, Science Advances, AGU Advances, Nature Communications, Scientific Data, Science Bulletin, Communications Earth & Environment, Geophysical Research Letters, Earth and Planetary Science Letters, Journal of Advances in Modeling Earth Systems, Journal of Geophysical Research–Oceans, Journal of Geophysical Research–Atmospheres, Journal of Climate, Climate Dynamics, Global and Planetary Change, Earth System Dynamics, Earth System Science Data, Quaternary Science Reviews, Climate of the Past, Paleoceanography and Paleoclimatology, Geology, Journal of Quaternary Science, Earth and Space Science, Environmental Research: Climate, Frontiers in Climate, Frontiers in Marine Science, Atmosphere, Climate, Water, Sustainability
- ◇ **Proposal Review (n=9):** US National Science Foundation, Swiss National Science Foundation, Poland National Science Center, KU Leuven
- ◇ **Convener (n=7):** 2025 AGU Fall Meeting Session A33C: *Climate Forcing, Response, and Recovery in a State-Dependent System*; 2025 PAGES Open Science Meeting Session 23: *Advancing climate prediction with paleoclimate data and models*; 2025, 2024 & 2023 AGU Fall Meeting Session PP43C: *Water Isotope Systematics: Improving Modern and Paleoclimate Interpretations*; 2021 AGU Fall Meeting Session PP002: *A high-temporal-resolution view of deep-time greenhouse climates*; 2018 Goldschmidt Conference Session 08a: *Understanding Past and Present Climate with Water Isotopes*

## TEACHING & MENTORING

- ◇ **Lecturer:** *paleoCAMP–Paleoclimate Training in Climate Archives, Models, and Proxies*, Sierra Nevada Aquatic Research Laboratory, California  
June 18–July 1 2024; June 16–30 2025

- ◇ **Guest Lecturer:** *ATOC 4740: Dynamics of Past Climate Changes: Lessons for the Future*, Department of Atmospheric & Oceanic Sciences, University of Colorado Boulder, Boulder April 22, 2026
- ◇ **Postdoctoral Mentor:** *Feng Zhu*, NSF NCAR February 2023–May 2024
- ◇ **Postdoctoral co-Mentor:** *Chijun Sun*, NSF NCAR Advanced Study Program October 2021–November 2023
- ◇ **PhD Committee Member:** *Po Ju Chen*, George Mason University; *Mary Grace Albright*, University of Connecticut; *Pratik Kad*, Pusan National University, PhD defended in June 2023
- ◇ **NCAR SOARS co-Mentor:** *Emily Nigro*, Stanford University, *NSF Significant Opportunities in Atmospheric Research and Science (SOARS)* May–August 2024; May–August 2025
- ◇ **NCAR Graduate Visitor Program (GVP) Mentor:** *Qingting Wu*, Montclair State University, July–September 2025; *Joseph Mayala Nsingi*, Montclair State University, April–August 2024
- ◇ **Visitor Mentor:** *Hanchen Song*, China University of Geosciences, December 2024–June 2025; *Fen Zhang*, Chinese Academy of Sciences, April 2023–November 2024
- ◇ **Visitor Host:** *Chandler Morris*, Brown University, July 2025; *Yilin Zhang*, Nanyang Technological University, December 2024; *Kirstin Koepnick & Andrea Salazar*, Harvard University, June 2024; *Venkata Siva Subrahmanyam Kattamuri*, University of Bremen, November 2023; *Adam Aleksinski*, Purdue University, May 2022.
- ◇ **Lecturer** of *CESM Tutorial: Water Isotope Modeling with CESM*, NSF NCAR August 2021, 2022
- ◇ **Certificate** in *Postdoctoral Short Course on College Teaching in Science and Engineering*, University of Michigan January 2019–April 2019
- ◇ **Teaching Assistant** of *Introduction of Atmospheric Science*, School of Physics, Peking University September 2009–January 2010
- ◇ **Teaching Assistant** of *Descriptive Physical Oceanography*, School of Physics, Peking University September 2008–January 2009

## PROFESSIONAL AFFILIATIONS

American Geophysical Union

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