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研究领域

气候动力、影响与模拟
热带气旋，火山喷发与气候，水汽输送与北极气候，东非降水与干旱
ITCZ与ENSO，季风，中纬度风暴路径

教育背景

2014 博士，哥伦比亚大学(Columbia University)
博士论文：*The Hydroclimate of East Africa: Seasonal Cycle, Decadal Variability, and Human-induced Climate Change*. 导师：Richard Seager 教授，Mark A. Cane 教授
2007 硕士，北京大学
2004 学士，北京大学

工作经历

2019 – 今，研究员，普林斯顿大学
2017 – 2019，博士后，普林斯顿大学
2015 – 2017，博士后，加州大学

获奖经历

2019 Editors' Citation for Excellence in Refereeing for *Geophysical Research Letters*
2007 哥伦比亚大学艺术与科学研究生院奖学金(Faculty Fellowship)
北京大学物理学院钟盛标研究生学术论坛二等奖
2005 北京大学五四奖学金
2004 北京市优秀毕业生
北京大学优秀毕业生
2002 北京大学三好学生
2001 北京大学三好学生
2001 – 2004，北京大学唐仲英基金会奖学金
2000 江苏省三好学生
1999 全国高中数学联赛江苏省一等奖
全国高中生物奥林匹克竞赛江苏省二等奖
全国高中物理奥林匹克竞赛江苏省三等奖

学术组织

美国地球物理学会(AGU) 会员
美国气象学会(AMS) 会员

学术兼职

审稿杂志

Nature Climate Change, Nature Communications, Scientific Reports
Journal of Climate, Journal of the Atmospheric Sciences, Climate Dynamics
Geophysical Research Letters, Journal of Geophysical Research-Atmospheres, Earth's Future
Quarterly Journal of the Royal Meteorological Society, International Journal of Climatology
Journal of Applied Meteorology and Climatology, Advances in Atmospheric Sciences
Bulletin of the American Meteorological Society

其它兼职

2015 Judge for the Outstanding Student Paper Awards in the AGU Fall Meeting

2010 – 2011, Coordinator for the Division of Ocean and Climate Physics Seminars at Lamont, Columbia University

学术论文

2023 [31] Mariam Zachariah et al. (2023): Attribution of 2022 early-spring heatwave in India and Pakistan to climate change: lessons in assessing vulnerability and preparedness in reducing impacts. *Environmental Research: Climate*, doi: 10.1088/2752-5295/acf4b6 .

[30] Juan Antonio Rivera et al. (2023): T2022 early-summer heatwave in Southern South America: 60 times more likely due to climate change. *Climatic Change*, doi: 10.1007/s10584-023-03576-3 .

[29] Hsieh TL, B Zhang, **W Yang**, GA Vecchi, M Zhao, BJ Soden, C Wang (2023): The Influence of Large-Scale Radiation Anomalies on Tropical Cyclone Frequency. *J. Clim.*, doi: 10.1175/JCLI-D-22-0449.1 .

[28] Friederike EL Otto et al. (2023): Climate change increased extreme monsoon rainfall, flooding highly vulnerable communities in Pakistan. *Environmental Research: Climate*, doi: 10.1088/2752-5295/acbfd5 .

2022 [27] Philip SY et al. (2022): Rapid attribution analysis of the extraordinary heatwave on the Pacific Coast of the US and Canada June 2021. *Earth Syst. Dynam.*, doi: 10.5194/esd-13-1689-2022 .

[26] Harrington LJ et al. (2022): Limited role of climate change in extreme low rainfall associated with southern Madagascar food insecurity, 2019-21. *Environmental Research: Climate*, doi: 10.1088/2752-5295/aca695 .

[25] Bhatia K, A Baker, **W Yang**, G Vecchi, T Knutson, H Murakami, J Kossin, K Hodges, K Dixon, B Bronselaer, C Whitlock (2022): A potential explanation for the global increase in tropical cyclone rapid intensification. *Nat. Commun.*, doi: 10.1038/s41467-022-34321-6 .

[24] Hsieh TL, **W Yang**, GA Vecchi, M Zhao (2022): Model spread in the tropical cyclone

frequency and seed propensity index across global warming and ENSO-like perturbations. *Geophys. Res. Lett.* doi: 10.1029/2021GL097157 .

2021 [23] **Yang W**, TL Hsieh, GA Vecchi (2021): Hurricane annual cycle controlled by both seeds and genesis probability. *Proc. Natl. Acad. Sci.* doi: 10.1073/pnas.2108397118 .

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[20] Chan D, GA Vecchi, **W Yang**, P Huybers (2021): Improved simulation of 19th- and 20th-century North Atlantic hurricane frequency after correcting historical sea surface temperatures. *Sci. Adv.* doi: 10.1126/sciadv.abg6931 .

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[18] Baker RE, **W Yang**, G Vecchi, CJE Metcalf, BT Grenfell (2021): Assessing the influence of climate on wintertime SARS-CoV-2 outbreaks. *Nat. Commun.*, doi: 10.1038/s41467-021-20991-1 .

[17] Zhang B, BJ Soden, GA Vecchi, **W Yang** (2021): The role of radiative interactions in tropical cyclone development under realistic boundary conditions. *J. Clim.*, doi: 10.1175/JCLI-D-20-0574.1

2020 [16] Baker RE, SW Park, **W Yang**, GA Vecchi, CJE Metcalf, BT Grenfell (2020): The impact of COVID-19 non-pharmaceutical interventions on the future dynamics of endemic infections. *Proc. Natl. Acad. Sci.*, doi: 10.1073/pnas.2013182117

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[13] Wagner CE, M Hooshyar, RE Baker, **W Yang**, N Arinaminpathy, G Vecchi, CJE Metcalf, BT Grenfell (2020): Climatological, virological and sociological drivers of current and projected dengue fever outbreak dynamics in Sri Lanka. *J. R. Soc. Interface*, doi: 10.1098/rsif.2020.0075

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the role of climate in the early SARS-CoV-2 pandemic. *Science*, doi: 10.1098/rsif.2020.0075

2019 [11] Baker RE, A Mahmud, C Wagner, **W Yang**, V Pitzer, C Viboud, G Vecchi, CJE Metcalf, B Grenfell(2019): Epidemic dynamics of respiratory syncytial virus in current and future climates. *Nat. Commun.*, doi: 10.1038/s41467-019-13562-y

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2018 [09] **Yang W**, G Magnusdottir (2018): Year-to-year variability in Arctic minimum sea ice extent and its preconditions in observations and the CESM large ensemble simulations. *Sci. Rep.*, doi: 10.1038/s41598-018-27149-y

2017 [08] **Yang W**, G Magnusdottir (2017): Springtime extreme moisture transport into the Arctic and its impact on sea ice concentration. *J. Geophys. Res. Atmos.*, doi: 10.1002/2016JD026324

2016 [07] **Yang W**, G Magnusdottir (2016): Interannual Signature in daily ITCZ states in the east Pacific in boreal spring, *J. Clim.*, doi: 10.1175/JCLI-D-16-0395.1

2015 [06] **Yang W**, R Seager, MA Cane, B Lyon (2015): The rainfall annual cycle bias over East Africa in CMIP5 coupled climate models. *J. Clim.*, **28**, doi: 10.1175/JCLI-D-15-0323.1

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2014 [04] **Yang W**, R Seager, MA Cane, B Lyon (2014): The East African long rains in observations and models. *J. Clim.*, doi: 10.1175/JCLI-D-13-00447.1

2013 [03] **Yang W**, R Seager, MA Cane (2013): Zonal momentum balance in the tropical atmospheric circulation during the global monsoon mature months. *J. Atmos. Sci.*, doi: 10.1175/JAS-D-12-0140.1

2008 [02] Nie J, P Wang, **W Yang**, BK Tan (2008): Northern Hemisphere storm tracks in strong AO anomaly winters. *Atmos. Sci. Lett.*, doi: 10.1002/asl.186

2007 [01] **Yang W**, J Nie, P Lin, BK Tan (2007): Baroclinic wave packets in an extended quasi-geostrophic two-layer model. *Geophys. Res. Lett.*, doi: 10.1029/2006GL029077