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个人信息 1972 年 1 月出生于湖北省松滋市

工作地址： 复旦大学大气与海洋科学系

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工作简历

2020.3 –	复旦大学，大气与海洋科学系，特聘教授
2018.1 – 2020.2	北京大学，大气与海洋科学系，博雅特聘教授
2009.8 – 2017.12	北京大学，大气与海洋科学系，教授
2007.9 – 2008.6	瑞典斯德哥尔摩大学，气象系，访问学者
2003.8 – 2009.7	北京大学，大气与海洋科学系，副教授
2000.8 – 2003.7	美国威斯康辛-麦迪逊大学，大气与海洋科学系/气候研究中心，博士后
1999.1 – 2000.5	美国威斯康辛-麦迪逊大学，大气与海洋科学系，研究助理

教育简历

1996.9 – 2000.7	中国海洋大学，物理海洋学，博士
1993.9 – 1996.7	中国科学院兰州高原大气物理研究所，气象学，硕士
1989.9 – 1993.7	云南大学地球科学系，气象学，学士

教学课程

2020 –	本科生课：描述性物理海洋学（复旦大学）
2020 –	本科生课：海洋气象学（复旦大学）
2004 – 2020	研究生课：地球物理流体动力学（北京大学）
2005 – 2020	本科生课：描述性物理海洋学（北京大学）
2004 – 2007	本科生课：海洋、气候和我们的星球（北京大学）
2005 – 2020	研究生课：物理海洋学（中国科学院研究生院；中国科学院大学）
2013 – 2020	本科生课：海洋科学导论（参与）（北京大学）

研究领域

全新世以来的气候变化及全球变暖；大尺度海洋－大气相互作用

大洋风生环流和热盐环流理论及模拟；区域海洋学及南海环流

指导学生

博士：王璐 2011，王富瑶 2011，王宇星 2013，戴海晋 2015，王坤 2017，赵莹莹 2018，沈星辰 2020，温琴 2020，杨千姿 2020，石佳琪 2021，李洋 2022，姜睿 2023，王莉萍 2024，杨昆鹏 2025，佟明鎏 2026，周湘莹 2027，安丰利 2027，王鈥祥 2028

硕士：雷雾 2007，张云涛 2008，袁为 2009，陈昌明 2009，朱江 2009，李庆 2013，李昕容 2013，孙瑜 2014，孙道勋 2014，殷杰 2017，姚杰 2018，邵星 2020，陈志宏 2021，刘亚 2022，亢一博 2023，王鈥祥 2024，颜楚荞 2025，刘梦宇 2026

注：黑色表示实际毕业年份；灰色表示预计毕业年份

研究项目

国家自然科学基金重点项目，42230403，大西洋热盐环流多百年际振荡机理及模拟研究，2023/01－2027/12，在研，主持

国家杰出青年科学基金，41725021，海气相互作用与全球气候变化，2018/01－2022/12，已结题，主持

国家自然科学基金重大研究计划重点项目，91737204，探究青藏高原在全球海洋经圈环流形成中的角色，2018/01－2021/12，已结题，主持

国家自然科学基金面上项目，41376007，大气-海洋经向热量输送机制及结构研究，2014/01－2017/12，已结题，主持

国家自然科学基金重大研究计划培育项目，91337106，青藏高原对热带辐合带影响的耦合模式研究，2014/01－2016/12，已结题，主持

国家重大科学研究计划，2012CB955201，东亚季风区年际-年代际气候变率机理与预测研究，2012/01－2016/12，已结题，参加

国家自然科学基金面上项目，41176002，气候系统响应时间尺度及可逆性研究，2012/01－2015/12，已结题，主持

国家自然科学基金面上项目，40976007，估计变动气候中大气和海洋经向热量输送，2010/01－2012/12，已结题，主持

国家重大科学研究计划，2007CB411801，北太平洋副热带内区环流变异及调整机理，2007/09－2011/08，已结题，参加

国家自然科学基金面上项目，40576004，热带外海温异常对热带气候平均态及 ENSO 的影响，2006/01－2008/12，已结题，主持

国家自然科学基金面上项目，40306002，热带太平洋温跃层年代际变化模式研究，2004/01－2006/12，已结题，主持

国家自然科学基金重点项目，49636230，南海海洋环流时－空结构及其形成机制的研究，1997/01－2000/12，已结题，参加

主要文章

2023-2027

1. *Tong, M., **H. Yang**, R. Jiang, and P. Wu, 2024: Determinant Role of the Tibetan Plateau and the Antarctic in the AMOC Formation. *J. Climate*, in press.
2. *Zhou, X., K. Yang, and **H. Yang**, 2024: Self-sustained multicentennial oscillation of the AMOC in global box models. *J. Climate*, in press.
3. 王鈥祥，**杨海军**，2024：大西洋经圈翻转流多百年际变率的 2 维海洋模式研究．北京大学学报（自然科学版），已接受.

4. 亢一博，**杨海军**，2024：定量研究地球轨道参数和温室气体浓度变化对中全新世气候的影响．北京大学学报（自然科学版），已接受.
5. ***Yang, H.**, R. Jiang, Q. Wen, and co-authors, 2024: The role of mountains in shaping the global meridional overturning circulation. *Nat. Commun.*, **15**, 2602, https://doi.org/10.1038/s41467-024-46856-x.
6. *Yang, K., **H. Yang**, Y. Li, and Q. Zhang, 2024: North Atlantic Ocean-originated multicentennial oscillation of the AMOC: a coupled model study. *J. Climate*, **37**(9), 2789-2807, doi: 10.1175/JCLI-D-23-0422.1.
7. *Yang, K., **H. Yang**, and Y. Li, 2024: A theory for self-sustained multicentennial oscillation of the Atlantic meridional overturning circulation. Part II: Role of Temperature. *J. Climate*, **37**(3), 913-926, doi: 10.1175/JCLI-D-22-0755.1.
8. *Wang, L., and **H. Yang**, 2023: Tibetan Plateau increases the snowfall in southern China. *Scientific Reports*, **13**: 12796, https://doi.org/10.1038/s41598-023-39990-x.
9. *Kang, Y., and **H. Yang**, 2023: Quantifying effects of Earth orbital parameters and greenhouse gases on Mid-Holocene climate. *Climate of Past*, **19**, 2013-2026, https://doi.org/10.5194/cp-19-2013-2023.
10. 刘亚，**杨海军**，2023：夏季热带印度洋季节内振荡的北向传播特征．北京大学学报（自然科学版），**59**（4），569-580，doi：10.13209/j.0479-8023.2023.044.
11. **杨海军**，石佳琪，李洋，周湘莹，Qiong ZHANG，2023：多百年际气候变率：观测、理论与模式研究。科学通报，**68**：1-9，doi：10.1360/TB-2022-1026.
12. *Wang, L., **H. Yang**, Q. Wen, Y. Liu and G. Wu, 2023: The Tibetan Plateau's far-reaching impacts on Arctic and Antarctic climate: seasonality and pathways. *J. Climate*. **36**(5), 1399-1414, doi: 10.1175/JCLI-D-22-0175.1.
13. *Wu, G. X., X. Zhou, X. Xu, and co-authors, 2023: An integrated research plan for the Tibetan Plateau land-air coupled system and its impacts on the global climate. *Bulletin of the American Meteorological Society*. **104**(1), E158-E177, doi: 10.1175/BAMS-D-21-0293.1.
14. Yan, C., X. Shen, H. Yang, and Z. Liu, 2023: Investigating the effect of Tibetan Plateau on the ITCZ using a coupled Earth system model. *Atmospheric and Oceanic Sciences Letter*, 16, 100294, https://doi.org/10.1016/j.aosl.2022.100294.

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15. *Askjar, T. G., Q. Zhang and co-authors, 2022: Multi-centennial Holocene climate variability in proxy records and transient model simulations. *Quaternary Science Reviews*. 296, 107801.
16. *Li, Y., and **H. Yang**, 2022: A theory for self-sustained multi-centennial oscillation of the Atlantic meridional overturning circulation. *J. Climate*, **35**(18), 5883-5896. doi: 10.1175/JCLI-D-21-0685.1.
17. ***Yang, H.**, X. Zhou, Q. Yang, and Y. Li, 2022: Roles of climate feedback and ocean vertical mixing in modulating global warming rate. *Climate Dynamics*, doi: 10.1007/s00382-022-06374-2.
18. *Wen, Q., **H. Yang**, and co-authors, 2022: Possible thermal effect of Tibetan Plateau on the Atlantic meridional overturning circulation. *Geophys. Res. Lett.*, **49**, e2021GL095771. doi: 10.1029/2021GL095771.
19. *Shi, J., and **H. Yang**, 2021: Bjerknes compensation in a coupled global box model. *Climate Dynamics*. doi: 10.1007/s00382-021-05881-y.
20. 邵星，**杨海军**，2021：青藏高原对北大西洋深水形成影响机制的季节差异．北京大学学报（自然科学版）. https://doi.org/10.13209/j.0479-8023.2021.062.
21. *Wen, Q., Z. Han, **H. Yang**, J. Cheng, Z. Liu, and J. Liu, 2021: Influence of Tibetan Plateau on the North American summer monsoon precipitation. *Climate Dynamics*. doi: 10.1007/s00382-021-05857-y.
22. *Wen, Q., C. Zhu, Z. Han, Z. Liu, and **H. Yang**, 2021: Can the Tibetan Plateau affect the Antarctic Bottom Water? *Geophys. Res. Lett.*, **48**, e2021GL092448. doi: 10.1029/2021GL092448.

23. *Chen, Z., and **H. Yang**, 2021: Impact of the Tibetan Plateau on North African precipitation. *Climate Dynamics*. doi: 10.1007/s00382-021-05837-2.
24. *Jiang, R., and **H. Yang**, 2021: Roles of the Rocky Mountains in the Atlantic and Pacific meridional overturning circulations. *J. Climate*, **34** (16), 6691-6703, doi: 10.1175/JCLI-D-20-0819.1.
25. *Wen, Q., K. Doos, Z. Lu, Z. Han, and **H. Yang**, 2020: Investigating the role of the Tibetan Plateau in ENSO variability. *J. Climate*, **33**, doi: 10.1175/JCLI-D-19-0422.1.
26. 邵星，**杨海军**，李洋，姜睿，姚杰，杨千姿，2020：不同分辨率下青藏高原对大西洋经向翻转流影响的耦合模式研究．北京大学学报（自然科学版），https://doi.org/10.13209/j.0479-8023.2020.092
27. 陈志宏，**杨海军**，2020：青藏高原对非洲北部降水影响的模拟研究。北京大学学报（自然科学版），https://doi.org/10.13209/j.0479-8023.2020.063.
28. *Liu, Y., M. Lu, **H. Yang**, A. Duan, B. He, S. Yang and G. Wu, 2020: Land-Atmosphere-Ocean coupling associated with the Tibetan Plateau and its climate impact. *National Science Review*, **7**, 534-552, doi: 10.1093/nsr/nwaa011.
29. *Wen, Q., and **H. Yang**, 2020: Investigating the role of the Tibetan Plateau in the formation of Pacific meridional overturning circulation. *J. Climate*, **33**(9), 3603-3617, doi: 10.1175/JCLI-D-19-0206.1.
30. ***Yang, H.**, and Q. Wen, 2020: Investigating the role of the Tibetan Plateau in the formation of Atlantic meridional overturning circulation. *J. Climate*, **33**(9), 3585-3601, doi: 10.1175/JCLI-D-19-0205.1.
31. ***Yang, H.**, X. Shen, J. Yao and Q. Wen, 2020: Portraying the impact of the Tibetan Plateau on global climate. *J. Climate*, **33**(9), 3565-3583, doi: 10.1175/JCLI-D-18-0734.1.
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33. ***Yang, Q.**, Y. Zhao, Q. Wen, J. Yao, and H. Yang, 2018: Understanding Bjerknes compensation in meridional heat transports and the role of freshwater in a warming climate. *J. Climate*, **31**(12), 4791-4806, doi: 10.1175/JCLI-D-17-0587.1.

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37. ***Yang, H.**, Y. Zhao, and Z. Liu, 2016a: Understanding Bjerknes compensation in atmosphere and ocean heat transports using a coupled box model. *J. Climate*, **29**(6), 2145-2160, doi: 10.1175/JCLI-D-15-0281.1.
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41. ***Yang, H.**, and H. Dai, 2015: Effect of wind forcing on the meridional heat transport in a coupled model: equilibrium response. *Climate* Dynamics, **45**(5): 1451-1470, doi: 10.1007/s00382-014-2393-0.
42. ***Yang, H.**, Q. Li, K. Wang, Y. Sun and D. Sun, 2015: Decomposing the meridional heat transport in the climate system. *Climate Dynamics*, doi: 10.1007/s00382-014-2380-5, 44: 2751-2768.
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44. *Huang, B., J. Zhu, and **H. Yang**, 2014: Mechanisms of Atlantic meridional overturning circulation (AMOC) variability in a coupled ocean--atmosphere GCM. *Adv. Atmos. Sci.*, **31**(2), 241-251, doi: 10.1007/s00376-013-3021-3.
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2008-2012

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49. ***Yang, H.**, and J. Zhu, 2011: Equilibrium Thermal Response Timescale of Global Oceans. *Geophys. Res. Lett.*, **38**, L14711, doi:10.1029/2011GL048076.
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***: SCI paper**