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南京大学大气科学学院

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杨犇，男，江苏高邮人，南京大学大气科学学院副教授，硕士生导师。2007年南京大学大气科学系本科毕业，2012年获南京大学气象学专业博士学位，后留校任职，曾多次赴美国能源部太平洋西北国家实验室访问。

主要研究领域为气候模式发展与应用，研究热情主要集中在气候模式降水多尺度模拟的不确定性及其气候系统多过程间的相互作用，重点使用参数优化和参数不确定性量化分析等方法剖析对流湿过程和边界层过程中的次网格特征，研究局地尺度物理过程和跨尺度动力过程间的相互作用和反馈机制。

研究方向

降水多尺度模拟不确定性

边界层-云-降水相互作用

区域气候变化与模拟

受教育经历

2007.9-2012.6 南京大学大气科学学院气象学专业 理学博士学位

2010.9-2012.4 美国太平洋西北国家实验室 访问学生

2003.9-2007.6 南京大学大气科学系大气科学专业 理学学士学位

工作经历

2015.9-今 南京大学大气科学学院 副教授

2014.6-2015.8 美国太平洋西北国家实验室 访问学者

2012.7-2015.8 南京大学大气科学学院 助理研究员

主要科研项目

国家自然科学基金面上基金“气候模式不同对流参数化方案结构性差异研究” (2017.1-2020.12) , 主持

国家重点研发计划课题“次季节到年代际尺度的气候可预测性研究”, 2016.7-2021.6, 骨干

国家重点研发计划课题“边界层湍流、低云及浅对流一体化参数化方案研发”, 2017.7-2022.6, 骨干

国家自然科学基金青年基金“东亚季风区对流和层云降水模拟不确定性及其对季风环流模拟的影响研究” (2014.1-2016.12) , 主持

国家自然科学基金重大研究计划培育项目“夏季青藏高原湖泊群区域气候效应及作用机理的数值模拟研究” (91537102) , 2016.1-2018.12, 骨干

中央高校基本科研业务费—苗圃项目 (2014.1-2014.12) , 主持

中国气象局国家气候中心合作项目“BCC-CSM模式参数优化对东亚季风降水模拟的影响研究” (2014.1-2014.12) , 主持

国家自然科学基金面上基金“基于中纬度瞬变动力学的模式评估研究” (2015.1-2017.12) , 参与

公益性行业 (气象) 科研专项“气候系统模式关键物理过程不确定性对东亚气候的影响研究” (2013.1—2015.12) , 参与

中国气象局国家气候中心合作项目“评估提高BCC-CSM模式中气溶胶, 云和降水参数化” (2015.1—2015.12) , 参与

发表文章

2018

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Zhou, Y., B. Yang, Y. Zhao, J. Jiang, A. Huang, M. La (2018), Effects of the ground surface temperature anomalies over the Tibetan Plateau on the rainfall over northwestern China and western Mongolia in July, *Theor Appl Climatol*, <https://doi.org/10.1007/s00704-017-2298-z>

2017

Yang, B., Y. Qian, L. K. Berg, P.-L. Ma, S. Wharton, V. Bulaevskaya, H. Yan, Z. Hou, and W. J. Shaw (2017), Sensitivity of Turbine-Height Wind Speeds to Parameters in Planetary Boundary-Layer and Surface-Layer Schemes in the Weather Research and Forecasting Model, *Boundary-Layer Meteorology*, 162, 117–142, doi: 10.1007/s10546-016-0185-2

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Qian, Y., M. Huang, B. Yang, and L. Berg (2013): A modeling study of irrigation effects on surface fluxes and land-air-cloud interactions in the Southern Great Plains, *J. Hydrometeorology*, 14, 700-721, doi:<http://dx.doi.org/10.1175/JHM-D-12-0134.1>.

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Yang, B., Y. Zhang, and Y. Qian (2012): Simulation of urban climate with high-resolution WRF model: A case study in Nanjing, China, *Asia-Pacific J. Atmos. Sci.*, 48, 227-241, DOI:10.1007/s13143-012-0023-5.

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