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胡中民

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胡中民，男，博士生导师，国家优青项目主持者。从事全球变化对陆地生态系统影响研究。长期以来，借助长期定位监测、野外控制实验、模型模拟以及遥感观测等多种技术手段，从不同时间尺度与空间尺度揭示气候变化对生态系统结构的影响，在气候变化对陆地生态系统碳水循环影响方面取得了重要进展。以第一或通讯作者在前沿 SCI 刊物发表论文 30 余篇，含 Ecology Letters, Global Change Biology, Global Ecology and Biogeography, Agricultural and

Forest Meteorology, Journal of Climate, JGR Biogeosciences, Journal of Hydrology 等生态学与地学主流期刊论文。曾获中国科学院优秀博士论文、中国科学院青年创新促进会会员、中国生态学会青年科技奖等荣誉，2019 年获批国家自然科学基金优秀青年基金项目。热诚欢迎有志于从事全球变化生态学、生态系统生态学、生态水文、生态模型、生态遥感等方向研究的学生报考，团队提供一流的研究平台和广阔的发展机会（联系方式：huzm@igsnr.ac.cn）。



教育背景

1999 年 9 月-2003 年 6 月：北京林业大学水土保持学院，水土保持学，学士；

2003 年 9 月-2008 年 6 月：中国科学院地理科学与资源研究所，生态学，博士。

工作经历

2008 年 7 月-2012 年 10 月：中国科学院地理科学与资源研究所，助理研究员；

2012 年 12 月-2013 年 5 月：University of Montana, 访问学者；

2012年9月-2017年4月：中国科学院地理科学与资源研究所，副研究员；

2015年10月-2017年5月：中国科学院大学岗位教授；2017年8月-2018年9月：
Colorado State University, 访问学者；

2017年4月至今：华南师范大学地理科学学院，研究员。

科研项目

主要从事陆地生态系统碳水循环及其对全球变化响应研究。近年来主持项目如下：

2010-2012：国家自然科学基金面上项目，中国典型草地生态系统水碳耦合指标对气候变化响应的样带研究（40万元），主持；

2010-2014：973项目子课题，中国典型生态系统碳汇关键过程与机理研究（70万元），主持；

2011-2015：中科院科技先导专项专题，内蒙古森林生态系统固碳现状、速率、机制和潜力研究（232万元），主持；

2014-2016：国家自然科学基金青年科学基金项目，气候与土地利用变化对中国陆地生态系统蒸散的影响研究（26万元），主持；

2014-2017：中科院地理所优秀青年人才基金项目，中国陆地生态系统水分利用效率时空变异特征（40万元），主持；

2015-2018：特色研究培育建设服务项目课题，张家口-承德地区防护林体系生态效益评估与生态建设方案（80万元），主持；

2016-2017：地方委托项目，鄱阳湖水生态综合模型研究及开发-湿地景观动态模型的植物生物量模块（57万元），主持；

2016-2018：中科院重点实验室青年创新研究团队项目，草地降水-生产力关系对气候变化的响应（60万元），主持；

2016-2019: 国家自然科学基金面上项目, 草地生态系统水分利用效率对降水模式改变的响应机制 (75 万元), 主持;

2017-2021: 国家重点科技研发项目子课题, 黄土高原地表蒸散时空变异格局研究 (52 万元), 主持;

2017-2021: 国家重点科技研发项目子课题, 中国北方生态脆弱区生态系统生产力形成机制研究 (120 万元), 主持;

2020-2022: 国家自然科学基金优秀青年基金项目, 全球变化与生态系统响应 (130 万元), 主持. 2020-2024: 国家重大专项 “第二次青藏高原综合科学考察研究” 任务, 青藏高原碳汇关键区调查 (220 万元), 主持.

学术成果

围绕全球变化背景下生态系统生产力, 生态系统碳水循环相互关系, 生态系统蒸散, 生态系统水分利用效率, 生态模型与遥感等主题, 发表科研论文 40 余篇, 主要发表于 Ecology Letters, Global Change Biology, Global Ecology and Biogeography 等前沿刊物。Publications (*corresponding author):

2020:

Kai-li Cheng, Zhong-min Hu*, Sheng-gong Li*, Qun Guo, Yan-bin Hao, Wen-ping Yuan. 2020. Improvement of predicting ecosystem productivity by modifying carbon-water- nitrogen coupling processes in a temperate grassland. Journal of Plant Ecology, <https://doi.org/10.1093/jpe/rtaa072>

Genan Wu, XitianCai, Trevor F. Keenan, Shenggong Li*, Xiangzhong Luo, Ruochen Cao, Fa Li, Adam J Purdy, Wei Zhao, Xiaomin Sun, Zhongmin Hu*. 2020. Evaluating three evapotranspiration estimates from model of different complexity over China using the ILAMB benchmarking system. Journal of Hydrology, <https://doi.org/10.1016/j.jhydrol.2020.125553>

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Genan Wu, Zhongmin Hu*, Trevor F. Keenan, Shenggong Li*, Wei Zhao, Ruochen Cao, Yuzhe Li, Qun, Guo, Xiaomin Sun. 2020. Incorporating spatial variations in parameters for improvements of an evapotranspiration model, *Journal of Geophysical Research–Biogeosciences*, doi/10.1029/2019JG005504

Guangcun Hao, Zhongmin Hu*, Kai Di, Shenggong Li. 2020. Rainfall pulse response of carbon exchange to the timing of natural intra-annual rainfall in a temperate grass ecosystem. *Ecological Indicators*, 118, 106730
Ruochen Cao, Zhongmin Hu*, Zhiyun Jiang, Yuting Yang, Wei Zhao, Genan Wu, Xiaoming Feng, Ruru Chen, Guangcun Hao. 2020. Shifts in ecosystem water use efficiency on China's Loess Plateau caused by the interaction of climatic and biotic factors over 1985-2015. *Agricultural and Forest Meteorology*, 291, 108100

Peilin Li, Zhongmin Hu*, Yongwen Liu. Shift in the trend of browning in Southwestern Tibetan Plateau in the past two decades. *Agricultural and Forest Meteorology*, 2020. 287, doi.org/10.1016/j.agrformet.2020.107950

Zhi-Yun Jiang, Zhi-Guang Yang, Si-Yi Zhang, Chao-Ming Liao, Zhong-Min Hu*, Ruochen Cao, Hua-Wu Wu. Revealing the spatio-temporal variability of evapotranspiration and its components based on an improved Shuttleworth-Wallace model in the Yellow River Basin. *Journal of Environmental Management*. 2020. <https://doi.org/10.1016/j.jenvman.2020.110310>

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2018:

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different land use types in an agro-pastoral ecotone of northern China. *Science of The Total Environment*, 2017, 599–600: 891–898

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郭群, 胡中民*, 李轩然, 李胜功.降水时间对内蒙古温带草原地上净初级生产力的影响[J].生态学报 (Acta Ecologica Sinica) ,2013,33(15):4808-4817.2012:

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Xue-Fa Wen, Xuhui Lee, Xiao-Min Sun, Jian-Lin Wang, Zhong-Min Hu, Sheng-Gong Li, and Gui-Rui Yu. Dew water isotopic ratios and their relationships to ecosystem water pools and fluxes in a cropland and a grassland in China. Oecologia, 2012, 168(2): 549-561.

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Liu Shuai, Li Shenggong, Yu Guirui, Asanuma Jun, Sugita M, Zhang Leiming, Hu Zhongmin, Wei Yafen. Seasonal and interannual variations in water vapor exchange and surface water balance over a grazed steppe in central Mongolia. *Agricultural Water Management*, 2010, 97(6):857-864.2009:

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and among four grassland ecosystems in China. *Global Change Biology*, 2008, 14(7): 1609-1619.

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Hu Zhongmin, Fan Jiangwen, Zhong Huaping Yu Guirui. Spatiotemporal dynamics of boveground primary productivity along a precipitation gradient in Chinese temperate grassland. *Science in China Series D-Earth Sciences*, 2007, 50(5): 754-764.社会兼职

亚洲通量网执委会成员 (Steering committee member of AsiaFlux) , 中国林学会气象专业委员会常务理事, 广东省可持续发展协会理事, 美国地球物理学会 (AGU) 会员, 中国生态学会会员, 中国草地学会会员。 *Journal of Plant Ecology* 编委, 《热带生物学报》副主编。 *Global Change Biology*, *Remote*

Sensing of Environment, *Agriculture and Forest Meteorology*, *Climatic Change*, *Water Resources Research*, *Functional Ecology*, *Journal of Hydrology* 等领域主流刊物审稿人。



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