Honglin Zhong

(Curriculum Vitae)

EDUCATION & WORKING EXPERIENCE

2018.06 - : Postdoctoral researcher, Department of Geographical Sciences, University of Maryland, College Park, MD, United States.

2013.09 - 2018.05: Ph.D., Department of Geographical Sciences, University of Maryland, College Park, MD, United States.

2012.05: DSSAT 2012 International Training Program, University of Georgia, Griffin Campus, Atlanta, Georgia, United States.

2011.09 - 2013.07: Research assistant, Shanghai Climate Center, Shanghai, China

2008.09 - 2011.07: MSc. study in Environment Remote Sensing, East China Normal University, Shanghai, China.

2004.09 - 2008.07: B.S. study in Geo-Information System, Shandong Jianzhu University, Jinan, China.

AWARDS

2018 Department of Geographical Sciences Excellence in Graduate Research Award

2017 Ann G. Wylie Dissertation Fellowship, University of Maryland

2016 International Institute for Applied Systems Analysis (IIASA) YSSP (Yong Scientists Summer Program) fellowship

2015 Dean's fellowship, College of Behavioral & Social Sciences, University of Maryland

2012 IIASA Peccei Award

2011 National Natural Science Fund of China (NSFC) fellowship for IIASA YSSP

2008 - 2011, East China Normal University, three times Master Scholarship

2004 - 2008, Shandong Jianzhu University, two times Bachelor Scholarship

PROFESSIONAL EXPERIENCES

2019.06 - : MRIO analysis of water footprint in the Inter-American Development Bank funded research project of "*Managing Water Footprint and Virtual Water of Main Economic Sectors in Latin America and Caribbean: A Water-Energy-Food Nexus Analysis Using a Coupled Physical and Socio-Economic Accounting Framework*"

2018.06 - : Postdoctoral researcher in crop prediction using remote sensing data in the NASA Earth Observations for Food Security and Agricultural Program.

2018.06 - : Postdoctoral researcher in econometric land-use change modelling and short-term projection for the NASA-IDS project (*Integrating remote sensing observations with NASA's GEOS-5 modeling framework in support of retrospective analyses and seasonal prediction of biosphere-atmosphere CO_2 flux*)

2016.06-08: IIASA funded YSSP program, focused on maintaining regional grain production level and recovering local groundwater table by cropping system adaptation across the North China Plain.

2012.06-08: Research program funded by IIASA YSSP Peccei Award, targeted at developing multi-scale agro-ecosystem framework and estimating the rice planting adaptations in the North China Plain.

2011.09-2013.08: Research assistant in Shanghai Climate Center, Shanghai, China. Participated in the NSFC funded international joint project "*Assessing the Impact of Climate Change and Intensive Human Activities on China's Agro-Ecosystem and its Supply Potentials*" and the research project of "*Multi-scale Data Fusion and Cross-scale Modeling of Climate Change Impact on Crop Productivity*", responsible for dynamic crop model up-scaling and estimating the climate change impact on Chinese agriculture.

2011.07-2013.06: Research team member in the project "*Estimating climate change impact on crop productivity by assimilating remote sensing data into DSSAT model*", Key Laboratory of Geographic Information Science (KLGIS), Ministry of Education, East China Normal University (ECNU), Shanghai, China. Responsible for remote sensing data processing and assimilation.

2011.06-08: NSFC funded IIASA YSSP, Laxenburg, Austria. Research focused on the crop model fusion between the site-specific crop model (DSSAT) and the IIASA regional agro-ecological model (AEZ).

2008.09-2011.07: Research assistant and M.Sc. student at KLGIS, ECNU. Participated in National Basic Research Program of China funded project - "*Assessment, Assimilation, Recompilation and Applications of Fundamental and Thematic Climate Data Records*", responsible for the greenhouse gas data collection and analysis, system development. Shanghai Natural Science Fund supported project "*Regional bio-process oriented land surface data retrieve from remote sensing research*". Major work includes remote sensing data processing, ecological information retrieve algorithms and desktop system development.

JOURNAL PUBLICATIONS

Zhong, H., Sun, L., Fischer, G., et al. (2019) Optimizing regional cropping systems with a dynamic adaptation strategy for water sustainable agriculture in the Hebei Plain. Agricultural Systems 173: 94-106.

Lee S., Wallace C., Sadeghi A., McCarty G., **Zhong H.,** Yeo I. (2018). Impacts of Global Circulation Model (GCM) bias and WXGEN on Modeling Hydrologic Variables. Water 10(6), 764; https://doi.org/10.3390/w10060764

Tian Z., Niu Y., Fan D., Sun L., Ficsher G., **Zhong H.,** Deng J., Tubiello F. (2018). Maintaining Rice Production while Mitigating Methane and Nitrous Oxide Emissions from Paddy Fields in China: Evaluating Tradeoffs by Using Coupled Agricultural Systems Models. Agricultural Systems 159, 175–186. https://doi.org/10.1016/j.agsy.2017.04.006.

Zhong H., Sun L., Fischer G., et al. (2017). Mission Impossible? Maintaining regional grain production level and recovering local groundwater table by cropping system adaptation across the North China Plain. Agricultural Water Management 193: 1-12.

Liang Z., Tian Z., Sun L., Feng K., **Zhong H.,** Gu T., Liu X. (2016). Heat wave, electricity rationing, and trade-offs between environmental gains and economic losses: The example of Shanghai. Applied Energy, 184, 951-959. http://dx.doi.org/10.1016/j.apenergy.2016.06.045.

Tian Z., Liang Z., Sun L., **Zhong H.,** Qiu H., Fischer G., Zhao S. (2015). Agriculture under climate change in China: mitigate the risks by grasping the emerging opportunities. Human and Ecological Risk Assessment 21 (5): 1259-1276. DOI:10.1080/10807039.2014.955392

Tian Z., **Zhong H.**, Sun L., Fischer G. et al. (2014). Improving performance of Agro-Ecological Zone (AEZ) modeling by cross-scale model coupling: An application to japonica rice production in Northeast China. Ecological Modelling. Vol.290, pp. 155-164.

Tian Z., **Zhong H.**, Shi R. et al. (2012). Estimating potential yield of wheat production in China based on cross-scale data-model fusion, Frontiers of Earth Science, Vol.6, Issue 4, pp. 364-372.

Zhong H., Shi R., Gao W. (2011). The Modification of the Abnormal Remote Sensing Data from DVB-S system Based on MODIS. *Remote Sensing for Land and Resources*, Vol.22, Issue 1, pp.73-76. (In Chinese)

Zhong H., Shi R., Qu P., et al. (2010). The Regional Local Cloud-cover Metadata Extraction Based on MODIS Image. *Journal of Geo-information Science*, Vol. 12, Issue 4, pp. 587-592. (In Chinese)