

Portland State University

PDXScholar

Forest Collaborative Research

Economics

6-2019

Impact of Climate Change on Wildfire Across China, Based on Plot-Level Data From National Forest Inventory - June 2019

Shilei Liu
Peking University

Jintao Xu
Peking University

Follow this and additional works at: https://pdxscholar.library.pdx.edu/fc_research



Part of the [Economic Theory Commons](#), [Environmental Studies Commons](#), and the [International Economics Commons](#)

Let us know how access to this document benefits you.

Citation Details

Liu, Shilei and Xu, Jintao, "Impact of Climate Change on Wildfire Across China, Based on Plot-Level Data From National Forest Inventory - June 2019" (2019). *Forest Collaborative Research*. 22.
https://pdxscholar.library.pdx.edu/fc_research/22

This Spring 2019 Meeting Presentation - Manchester, England is brought to you for free and open access. It has been accepted for inclusion in Forest Collaborative Research by an authorized administrator of PDXScholar. Please contact us if we can make this document more accessible: pdxscholar@pdx.edu.

Impact of climate change on wildfire across China, based on plot-level data from national forest inventory

Shilei Liu
Jintao Xu


Peking University
National School of Development



北京大學



Background, Motivation and Objectives

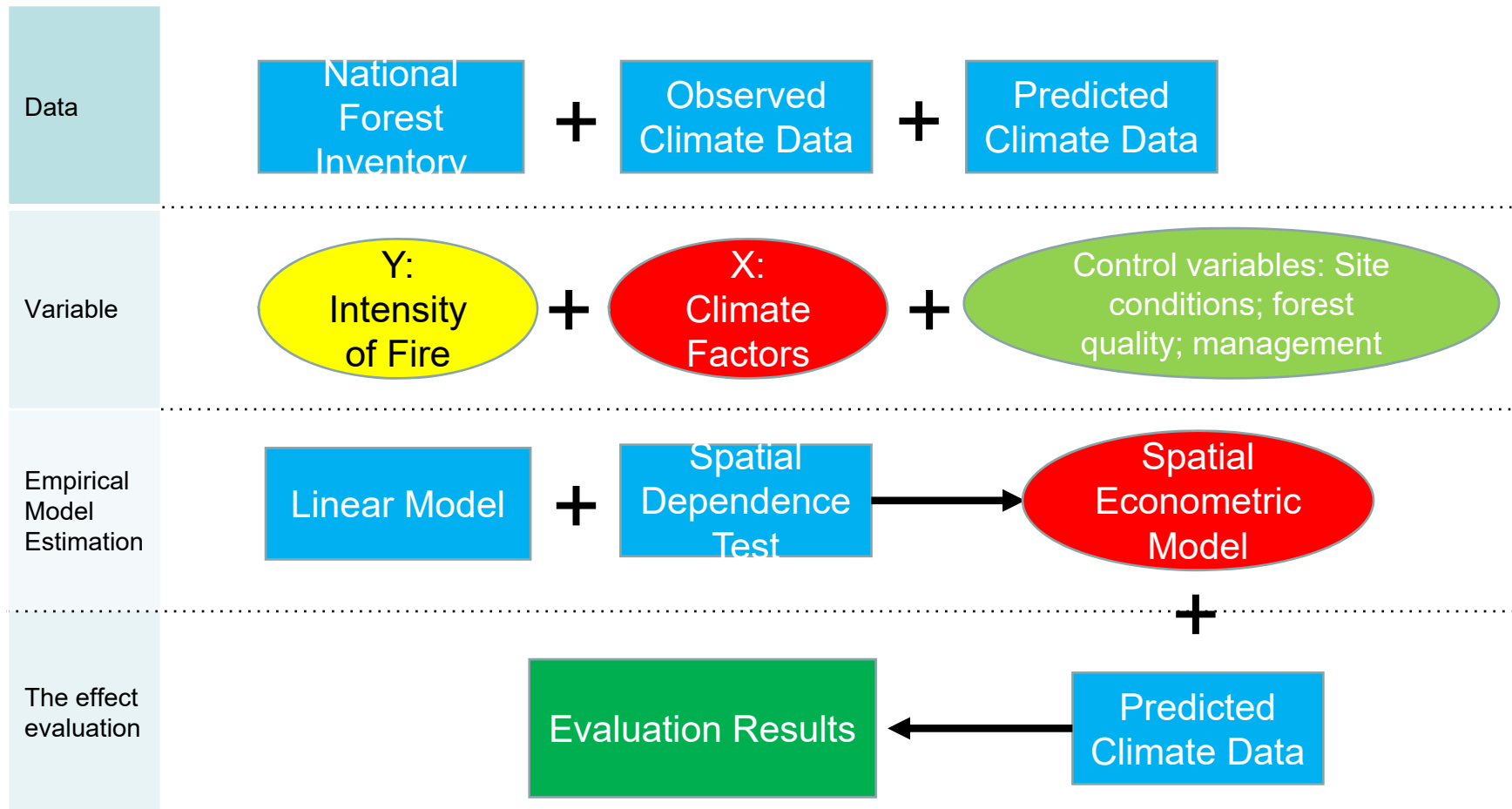
<p>Background</p>	<ul style="list-style-type: none">● Globally, a century of fire suppression and more recent drought had led to higher intensity● Wildfire is an integral element in naturally regulating forest ecosystem	
<p>Motivation</p>	<ul style="list-style-type: none">● Forest fires cost millions of dollars and many lives● Increased fire frequency and intensity may threaten the carbon storage of forest● Increased fire frequency and intensity may threaten human health● Climate change is increasing the uncertainty of fires	



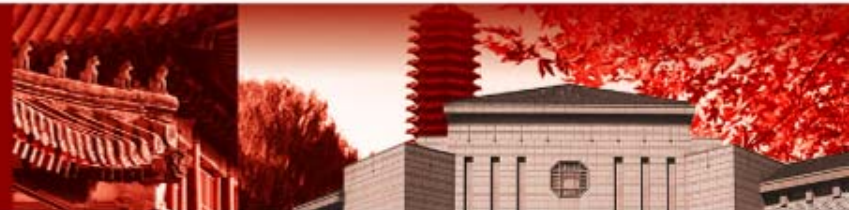
北京大学



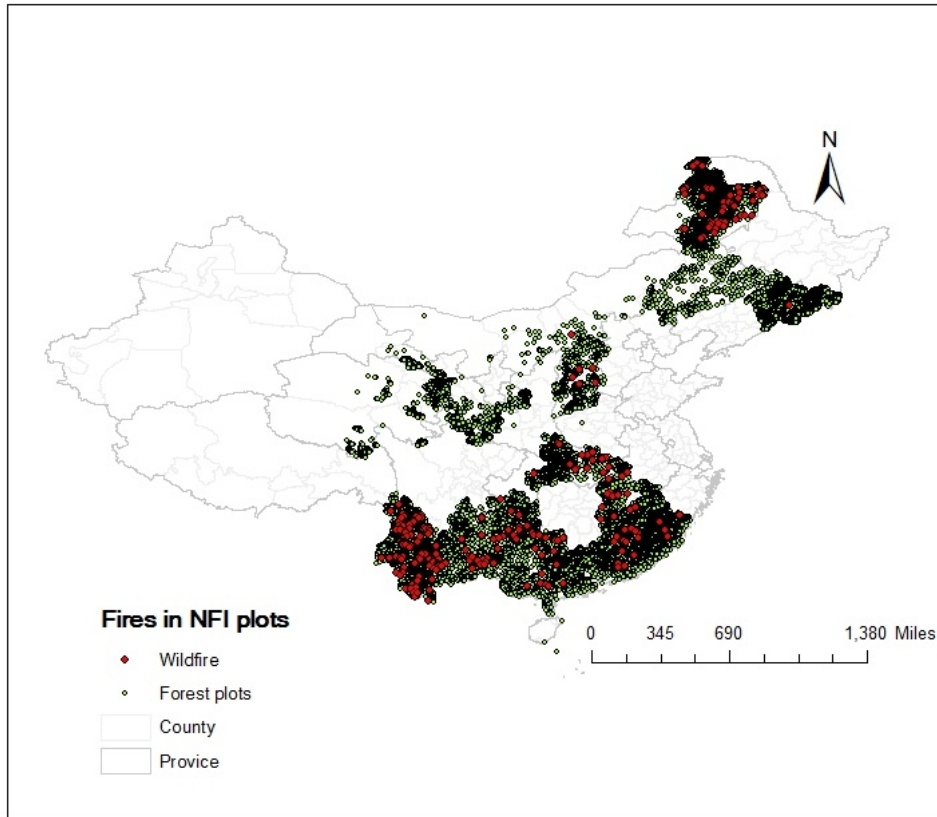
Research design



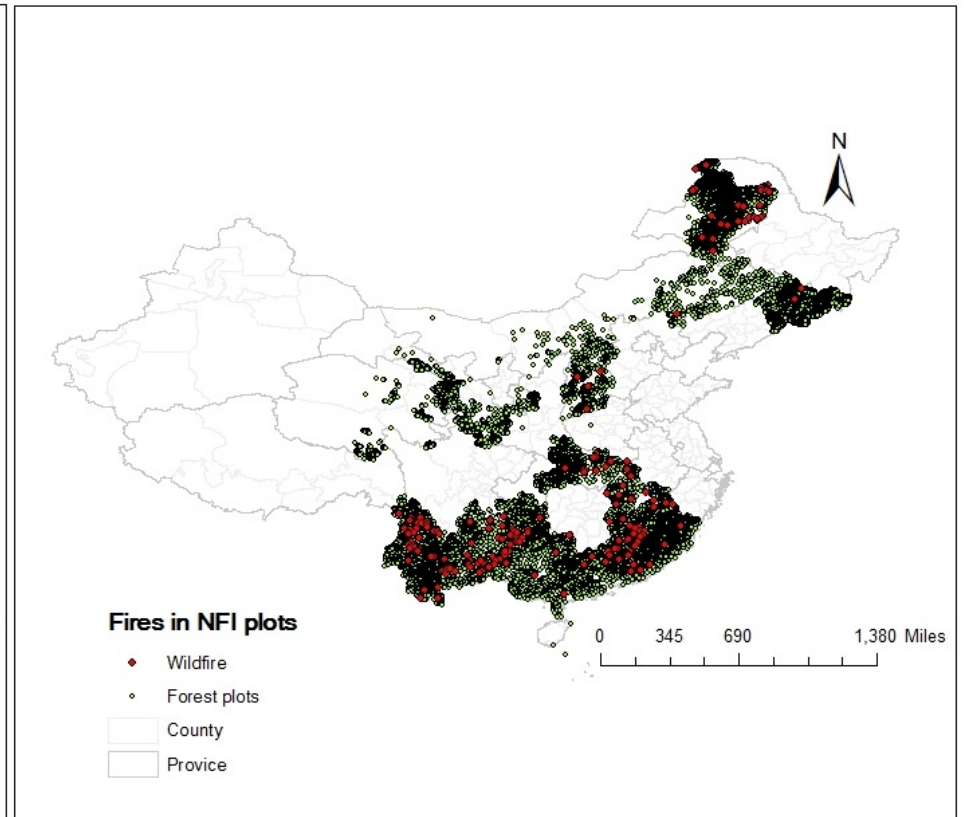
北京大学



Fire data in 2008 and 2013 (from NFI)



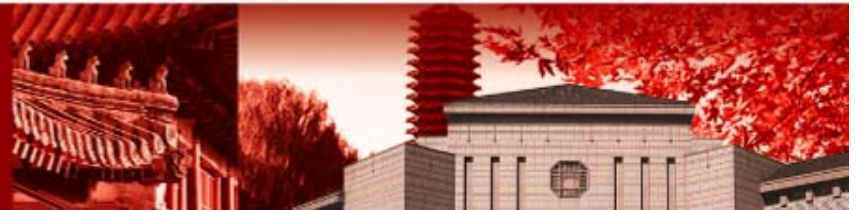
(2008)



(2013)



北京大学

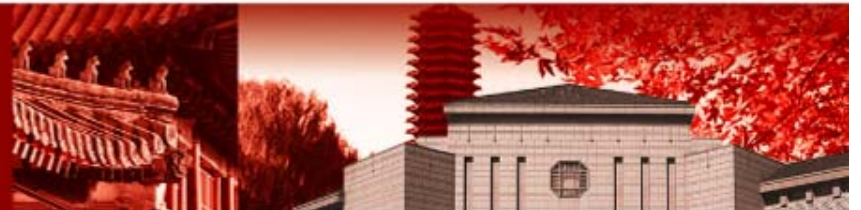


Preliminary conclusions

- The precipitation (average) is the main climate factor that affect wildfire intensity. Under climate change scenarios RCP 2.6 and RCP 8.5 by 2100, the forest fire intensity will decrease by 3.13% and 3.12% respectively due to increased precipitation in the future
- From the historical forest fire data, we can see a clear decrease trend of fire activity in China. However, with our research, this decrease trend may be due to the climate change but not because of improved fire control.



北京大学



谢谢!



北京大學