

Curriculum Vitae

Mengtian HUANG

Chinese Academy of Meteorological Sciences
46 Zhongguancun South Street, Haidian, Beijing 100081, China
Tel: +86-10-68408249
Email: huang_mengtian@126.com
mengtianhuang@foxmail.com



Education

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| Ph.D. | 2014.09 – 2019.07 | College of Urban and Environmental Sciences, Peking University |
| | 2017.10 - 2018.10 | Lawrence Berkeley National Laboratory (Joint Ph.D. Student) |
| B.S. | 2010.09 - 2014.07 | School of Geography, Beijing Normal University |
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Recent peer-reviewed publications

- 1 **Huang M**, Piao S, Ciais P, *et al.* Air temperature optima of vegetation productivity across global biomes. *Nature ecology & evolution* **3**, 772-779 (2019).
- 2 **Huang M**, Wang X, Keenan T, *et al.* Drought timing influences the legacy of tree growth recovery. *Global change biology* **24**, 3546-3559 (2018).
- 3 **Huang M**, Piao S, Janssens I, *et al.* Velocity of change in vegetation productivity over northern high latitudes. *Nature ecology & evolution* **1**, 1649 (2017).
- 4 **Huang M**, Piao S, Zeng Z, *et al.* Seasonal responses of terrestrial ecosystem water-use efficiency to climate change. *Global change biology* **22**, 2165-2177 (2016).
- 5 **Huang M**, Piao S, Sun Y, *et al.* Change in terrestrial ecosystem water-use efficiency over the last three decades. *Global change biology* **21**, 2366-2378 (2015).
- 6 Piao S, **Huang M**, Liu Z, *et al.* Lower land-use emissions responsible for increased net land carbon sink during the slow warming period. *Nature Geoscience* **11**, 739 (2018).
- 7 Wang T, Liu D, Piao S, Wang Y, Wang X, Guo H, Lian X, Burkhardt J, Ciais P, **Huang M**, Janssens I, Li Y, Liu Y, Peñuelas J, Peng S, Yang H, Yao Y, Zhao Y. Emerging negative impact of warming on summer carbon uptake in northern ecosystems. *Nature Communications* **9**, 5391 (2018).
- 8 Goll D, Joetzer E, **Huang M**, Ciais P. Low phosphorus availability decreases susceptibility of tropical primary productivity to droughts. *Geophysical Research Letters* **45**, 8231-8240 (2018).
- 9 Zhao C, Piao S, Wang X, Huang Y, Ciais P, Elliott J, **Huang M**, Janssens I, Li T, Lian X, Liu Y, Müller C, Peng S, Wang T, Zeng Z, Peñuelas J. Plausible rice yield losses under future climate warming. *Nature plants* **3**, 16202 (2017).
- 10 Zhao C, Liu B, Piao S, Wang X, Lobell D, Huang Y, **Huang M**, Yao Y, Bassu S, Ciais P, Durand J, Elliott J *et al.* Temperature increase reduces global yields of major crops in four independent estimates. *Proceedings of the National Academy of Sciences* **114**, 9326-9331 (2017).
- 11 Yang H, Zhou F, Piao S, **Huang M**, Chen A, Ciais P, Li Y, Lian X, Peng S, Zeng Z. Regional patterns of future runoff changes from Earth system models constrained by observation. *Geophysical Research Letters*

- 44, 5540-5549 (2017).
- 12 Piao S, Liu Z, Wang T, Peng S, Ciais P, **Huang M**, Ahlstrom A, Burkhanr J, Chevallier F, Janssens I, Jeong S, Lin X *et al.* Weakening temperature control on the interannual variations of spring carbon uptake across northern lands. *Nature Climate Change* **7**, 359 (2017).
 - 13 Zhu Z, Piao S, Myneni R, **Huang M**, Zeng Z, Canadell J, Ciais P, Sitch S, Friedlingstein P, Arneth A, Cao C, Cheng L *et al.* Greening of the Earth and its drivers. *Nature climate change* **6**, 791-795 (2016).
 - 14 Zhao C, Piao S, Huang Y, Wang X, Ciais P, **Huang M**, Zeng Z, Peng S. Field warming experiments shed light on the wheat yield response to temperature in China. *Nature communications* **7**, 13530 (2016).
 - 15 Zhang Y, Zhu Z, Liu Z, Zeng Z, Ciais P, **Huang M**, Liu Y, Piao S. Seasonal and interannual changes in vegetation activity of tropical forests in Southeast Asia. *Agricultural and forest meteorology* **224**, 1-10 (2016).
 - 16 Yue Y, Ni J, Ciais P, Piao S, Wang T, **Huang M**, Borthwick A, Li T, Wang Y, Chappell A, Oost K. Lateral transport of soil carbon and land-atmosphere CO₂ flux induced by water erosion in China. *Proceedings of the National Academy of Sciences*, 201523358 (2016).
 - 17 Sun Y, Piao S, **Huang M**, Ciais P, Zeng Z, Cheng L, Li X, Zhang X, Mao J, Peng S, Poulter B, Shi X, Wang X, Wang Y-P, Zeng H. Global patterns and climate drivers of water-use efficiency in terrestrial ecosystems deduced from satellite - based datasets and carbon cycle models. *Global ecology and biogeography* **25**, 311-323 (2016).
 - 18 Mao J, Ribes A, Yan B, Shi X, Thornton P, Séférian R, Ciais P, Myneni R, Douville H, Piao S, Zhu Z, Dickinson R, Dai Y, Ricciuto D, Jin M, Hoffman F, Wang B, **Huang M**, Lian X. Human-induced greening of the northern extratropical land surface. *Nature Climate Change* **6**, 959 (2016).
 - 19 Liu Y, Wang T, **Huang M**, Yao Y, Ciais P, Piao S. Changes in interannual climate sensitivities of terrestrial carbon fluxes during the 21st century predicted by CMIP5 Earth System Models. *Journal of Geophysical Research: Biogeosciences* **121**, 903-918 (2016).
 - 20 Liu Q, Fu Y, Zhu Z, Liu Y, Liu Z, **Huang M**, Janssens I, Piao S. Delayed autumn phenology in the Northern Hemisphere is related to change in both climate and spring phenology. *Global change biology* **22**, 3702-3711 (2016).
 - 21 Liu Q, Fu Y, Zeng Z, **Huang M**, Li X, Piao S. Temperature, precipitation, and insolation effects on autumn vegetation phenology in temperate China. *Global change biology* **22**, 644-655 (2016).
 - 22 Fu Y, Piao S, Ciais P, **Huang M**, Mensel A, Peaucelle M, Peng S, Song Y, Vitasse Y, Zeng Z, Zhao H, Zhou G, Peñuelas J, Janssens I. Long-term linear trends mask phenological shifts. *International journal of biometeorology* **60**, 1611-1613 (2016).
 - 23 Zeng Z, Chen A, Ciais P, Li Y, Li L, Vautard R, Zhou L, Yang H, **Huang M**, Piao S. Regional air pollution brightening reverses the greenhouse gases induced warming-elevation relationship. *Geophysical Research Letters* **42**, 4563-4572 (2015).
 - 24 Shen M, Piao S, Jeong S, Zhou L, Zeng Z, Ciais P, Chen D, **Huang M**, Jin C, Li L, Li Y, Myneni R, Yang K, Zhang G, Zhang Y, Yao T. Evaporative cooling over the Tibetan Plateau induced by vegetation growth. *Proceedings of the National Academy of Sciences* **112**, 9299-9304 (2015).
 - 25 Piao S, Yin G, Tan J, Cheng L, **Huang M**, Li Y, Liu R, Mao J, Myneni R, Peng S, Poulter B, Shi X. Detection and attribution of vegetation greening trend in China over the last 30 years. *Global change biology* **21**, 1601-1609 (2015).
 - 26 Fu Y, Zhao H, Piao S, Peaucelle M, Peng S, Zhou G, Ciais P, **Huang M**, Menzel A, Peñuelas J, Song Y, Vitasse Y, Zeng Z, Janssens I. Declining global warming effects on the phenology of spring leaf unfolding.

International Conferences

- 2017.08* **10th International Carbon Dioxide Conference, Interlaken, Swiss** (Poster)
- 2016.12* **AGU fall meeting, San Francisco, USA** (Poster)
- 2015.12* **AGU fall meeting, San Francisco, USA** (Poster)
- 2015.08* **ESA Annual Meeting, Baltimore, USA** (Poster)
- 2015.07* **FLUXNET Synthesis Workshop** (oral)