

Stanford



Xueying Yu

Postdoctoral Scholar, Earth System Science

Bio

BIO

I study atmospheric chemistry, greenhouse gas emissions, satellite remote sensing retrievals, and carbon mitigation, using inverse modeling and other data-driven approaches. My current project is quantifying methane emissions from point source level to the global budget.

PROFESSIONAL EDUCATION

- Doctor of Philosophy, University of Minnesota Twin Cities (2022)
- Master of Science, Nanjing University (2017)
- Bachelor of Science, Nanjing University (2014)

STANFORD ADVISORS

- Rob Jackson, Postdoctoral Faculty Sponsor

LINKS

- Google Scholar Profile: <https://scholar.google.com/citations?hl=en&user=xjZnukgAAAAJ>

Publications

PUBLICATIONS

- **A high-resolution satellite-based map of global methane emissions reveals missing wetland, fossil fuel, and monsoon sources** *ATMOSPHERIC CHEMISTRY AND PHYSICS*
Yu, X., Millet, D. B., Henze, D. K., Turner, A. J., Delgado, A., Bloom, A., Sheng, J.
2023; 23 (5): 3325-3346
- **Methane emissions from China: a high-resolution inversion of TROPOMI satellite observations** *ATMOSPHERIC CHEMISTRY AND PHYSICS*
Chen, Z., Jacob, D. J., Nesser, H., Sulprizio, M. P., Lorente, A., Varon, D. J., Lu, X., Shen, L., Qu, Z., Penn, E., Yu, X.
2022; 22 (16): 10809-10826
- **How well can inverse analyses of high-resolution satellite data resolve heterogeneous methane fluxes? Observing system simulation experiments with the GEOS-Chem adjoint model (v35)** *GEOSCIENTIFIC MODEL DEVELOPMENT*
Yu, X., Millet, D. B., Henze, D. K.
2021; 14 (12): 7775-7793
- **Fossil Versus Nonfossil CO Sources in the US: New Airborne Constraints From ACT-America and GEM** *GEOPHYSICAL RESEARCH LETTERS*
Gonzalez, A., Millet, D. B., Yu, X., Wells, K. C., Griffis, T. J., Baier, B. C., Campbell, P. C., Choi, Y., DiGangi, J. P., Gvakharia, A., Halliday, H. S., Kort, E. A., McKain, et al
2021; 48 (11)
- **A Multiyear Constraint on Ammonia Emissions and Deposition Within the US Corn Belt** *GEOPHYSICAL RESEARCH LETTERS*

Hu, C., Griffis, T. J., Frie, A., Baker, J. M., Wood, J. D., Millet, D. B., Yu, Z., Yu, X., Czarnetzki, A. C.

2021; 48 (6)

- **Aircraft-based inversions quantify the importance of wetlands and livestock for Upper Midwest methane emissions** *ATMOSPHERIC CHEMISTRY AND PHYSICS*

Yu, X., Millet, D. B., Wells, K. C., Henze, D. K., Cao, H., Griffis, T. J., Kort, E. A., Plant, G., Deventer, M. J., Kolka, R. K., Roman, D., Davis, K. J., Desai, et al
2021; 21 (2): 951-971

- **Top-Down Constraints on Methane Point Source Emissions From Animal Agriculture and Waste Based on New Airborne Measurements in the US Upper Midwest** *JOURNAL OF GEOPHYSICAL RESEARCH-BIOGEOSCIENCES*

Yu, X., Millet, D. B., Wells, K. C., Griffis, T. J., Chen, X., Baker, J. M., Conley, S. A., Smith, M. L., Gvakharia, A., Kort, E. A., Plant, G., Wood, J. D.
2020; 125 (1)