

Xin Chen

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EDUCATION

Ph.D., Atmospheric Chemistry, University of Minnesota, USA (advisor: Dylan Millet) 09/2014 – 09/2021
B.S., Atmospheric Physics, Nanjing University of Information Science & Technology, China 05/2014

RESEARCH EXPERIENCE

Postdoctoral Associate, Department of Civil and Environmental Engineering, MIT 10/2021 –
Graduate Research Assistant, Department of Soil, Water, and Climate, UMN 09/2014 – 09/2021
Undergrad Research Intern, Institute of Atmospheric Physics, Chinese Academy of Sciences 07/2013 – 08/2013

PUBLICATIONS

Chen, X., et al. (2021), Constraining methane fluxes from the eastern US using ACT-America airborne data and the GEOS-Chem adjoint model, in prep.

Chen, X., et al. (2021), Quantifying ocean-air VOC fluxes using aircraft measurements in the Western Subarctic Atlantic, in prep.

Chen, X., D.B. Millet, J.A. Neuman, P.R. Veres, et al. (2021), HCOOH in the remote atmosphere: Constraints from Atmospheric Tomography (ATom) airborne observations, *ACS Earth Space Chem.*, <https://doi.org/10.1021/acsearthspacechem.1c00049>.

Bates, K.H., D.J. Jacob, S. Wang, R.S. Hornbrook, E.C. Apel, et al. including **X. Chen** (2021), The global budget of atmospheric methanol: New constraints on secondary, oceanic, and terrestrial sources, *J. Geophys. Res.: Atmospheres*, <https://doi.org/10.1029/2020JD033439>.

Travis, K.R., C.L. Heald, et al. including **X. Chen** (2020), Constraining remote oxidation capacity with ATom observations, *Atmos. Chem. Phys.*, <https://doi.org/10.5194/acp-20-7753-2020>.

Yu, X., D.B. Millet, K.C. Wells, T.J. Griffis, et al. including **X. Chen** (2020), Top-down constraints on methane point source emissions from animal agriculture and waste based on new airborne measurements in the US Upper Midwest, *J. Geophys. Res.: Biogeosciences*, <https://doi.org/10.1029/2019JG005429>.

Chaliyakunnel, S., D.B. Millet, and **X. Chen** (2019), Constraining emissions of volatile organic compounds over the Indian subcontinent using space-based formaldehyde measurements, *J. Geophys. Res.: Atmospheres*, 124, 10,525–10,545, <https://doi.org/10.1029/2019JD031262>.

Chen, X., D.B. Millet, H.B. Singh, A. Wisthaler, et al. (2019), On the sources and sinks of atmospheric VOCs: an integrated analysis of recent aircraft campaigns over North America, *Atmos. Chem. Phys.*, 19, 9097–9123, <http://doi.org/10.5194/acp-19-9097-2019>.

Alwe, H.D., D.B. Millet, **X. Chen**, J.D. Raff, Z.C. Payne, and K. Fledderman (2019), Oxidation of volatile organic compounds as the major source of formic acid in a mixed forest canopy, *Geophys. Res. Lett.*, 46, 2940–2948, <http://doi.org/10.1029/2018GL081526>.

Ackerman, D., D.B. Millet, and **X. Chen** (2019), Global estimates of inorganic nitrogen deposition across four decades, *Global Biogeochem. Cycles*, 33, 100–107, <http://doi.org/10.1029/2018GB005990>.

Millet, D.B., H.D. Alwe, **X. Chen**, M.J. Deventer, T.J. Griffis, et al. (2018), Bidirectional ecosystem-atmosphere fluxes of volatile organic compounds across the mass spectrum: How many matter?, *ACS Earth Space Chem.*, 2, 764–777, <https://doi.org/10.1021/acsearthspacechem.8b00061>.

HONORS AND AWARDS

Doctoral Dissertation Fellowship, UMN 09/2020 – 05/2021
Travel Support: Atmospheric Tomography Mission (11/2019, 12/2019); Gordon Research Conference on Atmospheric Chemistry (08/2019); International GEOS-Chem Meeting (05/2015, 05/2017, 05/2019); Baker/Kuehnast Scholarship, SWAC, UMN (12/2016, 12/2017, 12/2019)
Allmaras/Howe Fellowship, SWAC, UMN 09/2014 – 08/2015