J.D. Maasakkers

Curriculum Vitae

Research Experience

Scientist C (Postdoc) Oct 2018 – Present
SRON Netherlands Institute for Space Research

Project: Interpretation of TROPOMI Carbon Monoxide and Methane data

Ph.D. Candidate Aug 2013 – Sep 2018
Harvard University

Faculty Advisor: Prof. Daniel J. Jacob
Project: Improved Understanding of Methane Emissions by Combination of Bottom-Up and Top-Down Methods

M.Sc. Thesis Oct 2012 – Aug 2013
Royal Dutch Meteorological Institute (KNMI)

Project: Vital improvements to the retrieval of tropospheric columns from the Ozone Monitoring Instrument

M.Sc. Internship May 2012 – Sep 2012
Harvard University

Project: Soil NO_x emissions in GEOS-Chem: Implementation of and improvements to the Berkeley-Dalhousie Soil NO_x Parameterization

B.Sc. Thesis May 2011 – Aug 2011
Eindhoven University of Technology

Project: Examining human activity from space by analyzing OMI and GOME-2 tropospheric NO_2 columns

Selected Publications

Maasakkers, J.D., D.J. Jacob, M.P. Sulprizio, T.R. Scarpelli, H. Nesser, J.X. Sheng, Y. Zhang, M. Hersher, A.A. Bloom, K.W. Bowman, J.R. Worden, G. Janssens-Maenhout, R.J. Parker: *Global distribution of methane emissions, emission trends, and OH concentrations and trends inferred from an inversion of GOSAT satellite data for 2010-2015*, Atmos. Chem. Phys., 2019.

Maasakkers, J.D., D.J. Jacob, M.P. Sulprizio, A.J. Turner, M. Weitz, T. Wirth, C. Hight, M. DeFigueiredo, R. Schmeltz, M. Desai, L. Hockstad, A.A. Bloom, K.W. Bowman, S. Jeong, and M.L. Fischer: *Gridded national inventory of U.S. methane emissions*, Environ. Sci. Technol., 2016.

Jacob, D.J., A.J. Turner, **J.D. Maasakkers**, J. Sheng, K. Sun, X. Liu, K. Chance, I. Aben, J. McKeever, and C. Frankenberg: Satellite observations of atmospheric methane and their value for quantifying methane emissions, Atmos. Chem. Phys., 2016.

Vinken, G.C.M., K.F. Boersma, **J.D. Maasakkers**, M. Adon, and R.V. Martin: *Worldwide biogenic soil NO_x emissions inferred from OMI NO_2 observations*, Atmos. Chem. Phys., 2014.

Complete overview including presentations available on `jdmaasakkers.github.io`.

Education

2013 – 2018 **Ph.D.**
Environmental Engineering
Harvard University
Secondary: Computational Science and Engineering
Completed: Graduate Consortium on Energy & Environment

2013 – 2015 **Master of Science**
Environmental Engineering
Harvard University
GPA: 4.0

2011 – 2013 **Master of Science**
Applied Physics
Eindhoven University of Technology
Cum laude

2008 – 2011 **Bachelor of Science**
Applied Physics
Eindhoven University of Technology
Minor: Technology and International Sustainable Development

Educational Experience

2015 – 2018 **Member of the SEAS Graduate Council**

2015 – 2017 **Undergraduates mentored:**
Pat Dowling & Monica Hersher

2014 **Teaching Fellow for EPS 200: Atmospheric Chemistry and Physics**
Harvard University

2011 – 2012 **Student Representative on the Department's Committee for Educational Affairs**
Eindhoven University of Technology

Awards

2017 **First runner up for Environmental Science & Technology's best policy paper of 2016**

2013 **Fulbright Scholarship**
Sponsored by the Netherland-America Foundation

2013 **Prins Bernhard Cultuurfonds**
Sponsored by De Breed Kreiken Innovatiefonds

Skills

Programming	FORTRAN, MATLAB, R, IDL, Python, and C
Computing tools	Microsoft Office, LaTeX, Adobe CS, ArcGIS, and Origin
Languages	Dutch (Native), English (Near native), and German (Intermediate)