Joannes Dyonisius Maasakkers

Curriculum Vitae

maasakkers@fas.harvard.edu

Research Experience

Ph.D. Candidate — Aug 2013 – Present
Harvard University

Faculty Advisor: Prof. Daniel J. Jacob
Project: Improved understanding of US methane emissions: Combination of bottom-up and top-down methods

M.Sc. Final Research Project — 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, 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.

Turner, A.J., D.J. Jacob, J. Benmergui, S.C. Wofsy, **J.D. Maasakkers**, A. Butz, O. Hasekamp, S.C. Biraud, and E. Duglokencky: *A large increase in US methane emissions over the past decade inferred from satellite data*, Geophys. Res. Lett. (2016)

Turner, A.J., D.J. Jacob, K.J. Wecht, **J.D. Maasakkers**, E. Lundgren, A.E. Andrews, S.C. Biraud, H. Boesch, K.W. Bowman, N.M. Deutscher, M.K. Dubey, D.W.T. Griffith, F. Hase, A. Kuze, J. Notholt, H. Ohyama, R. Parker, V.H. Payne, R. Sussmann, C. Sweeney, V.A. Velazco, T. Warneke, P.O. Wennberg, and D. Wunch: *Estimating global and North American methane emissions with high spatial resolution using GOSAT satellite data*, Atmos. Chem. Phys. (2015)

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

Van Geffen, J.H.G.M., Boersma, K.F., **Maasakkers, J.D.**, and Veefkind, J.P.: *TROPOMI ATBD of the total and tropospheric NO_2 data products*, S5P-KNMI-L2-0005-RP (2013)

Education

2013 – Present — **Ph.D. Student**
Environmental Engineering
Harvard University

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

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

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

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

Computer Skills

Programming	FORTRAN 90, MATLAB, R, IDL, Python, and Mathematica
Computing tools	Microsoft Office, LaTeX, Adobe CS, ArcGIS, and Origin

Language

Dutch	Native speaker
English	Proficient user
German	Intermediate user