# Joannes Dyonisius Maasakkers

Curriculum Vitae

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## 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  $\mathrm{NO}_x$  emissions in GEOS-Chem: Implementation of and improvements to the Berkeley-Dalhousie Soil  $\mathrm{NO}_x$  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  $\mathrm{NO}_2$  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., 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.

Van Geffen, J.H.G.M., K.F. Boersma, **J.D. Maasakkers**, and J.P. Veefkind: *TROPOMI ATBD of the total and tropospheric NO*<sub>2</sub> data products, S<sub>5</sub>P-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