Agustí-Panareda, A., S. Massart, F. Chevallier, S. Boussetta, G. Balsamo, A. Beljaars, P. Ciais, et al. 2014. “Forecasting Global Atmospheric CO2.” *Atmospheric Chemistry and Physics Discussions* 14 (9): 13909–62. doi:10.5194/acpd-14-13909-2014.

Alekseychik, P., I. Mammarella, S. Launiainen, Ü. Rannik, and T. Vesala. 2013. “Evolution of the Nocturnal Decoupled Layer in a Pine Forest Canopy.” *Agricultural and Forest Meteorology* 174-175 (June): 15–27. doi:10.1016/j.agrformet.2013.01.011.

Alexe, M., P. Bergamaschi, A. Segers, R. Detmers, A. Butz, O. Hasekamp, S. Guerlet, et al. 2015. “Inverse Modelling of CH4 Emissions for 2010–2011 Using Different Satellite Retrieval Products from GOSAT and SCIAMACHY.” *Atmospheric Chemistry and Physics* 15 (1): 113–33. doi:10.5194/acp-15-113-2015.

Allin, S. J., J. C. Laube, E. Witrant, J. Kaiser, E. McKenna, P. Dennis, R. Mulvaney, et al. 2015. “Chlorine Isotope Composition in Chlorofluorocarbons CFC-11, CFC-12 and CFC-113 in Firn, Stratospheric and Tropospheric Air.” *Atmospheric Chemistry and Physics* 15 (12): 6867–77. doi:10.5194/acp-15-6867-2015.

Arévalo-Martínez, D. L., M. Beyer, M. Krumbholz, I. Piller, A. Kock, T. Steinhoff, A. Körtzinger, and H. W. Bange. 2013. “A New Method for Continuous Measurements of Oceanic and Atmospheric N2O, CO and CO2: Performance of off-Axis Integrated Cavity Output Spectroscopy (OA-ICOS) Coupled to Non-Dispersive Infrared Detection (NDIR).” *Ocean Science* 9 (6): 1071–87. doi:10.5194/os-9-1071-2013.

Arévalo-Martínez, D. L., A. Kock, C. R. Löscher, R. A. Schmitz, and H. W. Bange. 2015. “Massive Nitrous Oxide Emissions from the Tropical South Pacific Ocean.” *Nature Geoscience* 8 (7): 530–33. doi:10.1038/ngeo2469.

Arévalo-Martínez, D. L., A. Kock, C. R. Löscher, R. A. Schmitz, L. Stramma, and H. W. Bange. 2015. “Influence of Mesoscale Eddies on the Distribution of Nitrous Oxide in the Eastern Tropical South Pacific.” *Biogeosciences Discussions* 12 (12): 9243–73. doi:10.5194/bgd-12-9243-2015.

Arias-Navarro, Cristina, Eugenio Díaz-Pinés, Ralf Kiese, Todd S. Rosenstock, Mariana C. Rufino, David Stern, Henry Neufeldt, Louis V. Verchot, and Klaus Butterbach-Bahl. 2013. “Gas Pooling: A Sampling Technique to Overcome Spatial Heterogeneity of Soil Carbon Dioxide and Nitrous Oxide Fluxes.” *Soil Biology and Biochemistry* 67 (December): 20–23. doi:10.1016/j.soilbio.2013.08.011.

Arnold, Tim, Diane J. Ivy, Christina M. Harth, Martin K. Vollmer, Jens Mühle, Peter K. Salameh, L. Paul Steele, et al. 2014. “HFC-43-10mee Atmospheric Abundances and Global Emission Estimates.” *Geophysical Research Letters* 41 (6): 2228–35. doi:10.1002/2013GL059143.

Barton, L., B. Wolf, D. Rowlings, C. Scheer, R. Kiese, P. Grace, K. Stefanova, and K. Butterbach-Bahl. 2015. “Sampling Frequency Affects Estimates of Annual Nitrous Oxide Fluxes.” *Scientific Reports* 5 (November): 15912. doi:10.1038/srep15912.

Berchet, A., I. Pison, F. Chevallier, P. Bousquet, S. Conil, M. Geever, T. Laurila, et al. 2013. “Towards Better Error Statistics for Atmospheric Inversions of Methane Surface Fluxes.” *Atmospheric Chemistry and Physics* 13 (14): 7115–32. doi:10.5194/acp-13-7115-2013.

Bergamaschi, P., M. Corazza, U. Karstens, M. Athanassiadou, R. L. Thompson, I. Pison, A. J. Manning, et al. 2015. “Top-down Estimates of European CH4 and N2O Emissions Based on Four Different Inverse Models.” *Atmospheric Chemistry and Physics* 15 (2): 715–36. doi:10.5194/acp-15-715-2015.

Boesch, H., N. M. Deutscher, T. Warneke, K. Byckling, A. J. Cogan, D. W. T. Griffith, J. Notholt, R. J. Parker, and Z. Wang. 2013. “HDO/H2O Ratio Retrievals from GOSAT.” *Atmospheric Measurement Techniques* 6 (3): 599–612. doi:10.5194/amt-6-599-2013.

Bosco, Simona, Iride Volpi, Nicoletta Nassi o Di Nasso, Federico Triana, Neri Roncucci, Cristiano Tozzini, Ricardo Villani, et al. 2015. “LIFE+IPNOA Mobile Prototype for the Monitoring of Soil N2O Emissions from Arable Crops: First-Year Results on Durum Wheat.” *Italian Journal of Agronomy* 10 (3): 124. doi:10.4081/ija.2015.669.

Brunner, D., S. Henne, C. A. Keller, S. Reimann, M. K. Vollmer, S. O’Doherty, and M. Maione. 2012. “An Extended Kalman-Filter for Regional Scale Inverse Emission Estimation.” *Atmospheric Chemistry and Physics* 12 (7): 3455–78. doi:10.5194/acp-12-3455-2012.

Budishchev, A., Y. Mi, J. van Huissteden, L. Belelli-Marchesini, G. Schaepman-Strub, F. J. W. Parmentier, G. Fratini, A. Gallagher, T. C. Maximov, and A. J. Dolman. 2014. “Evaluation of a Plot-Scale Methane Emission Model Using Eddy Covariance Observations and Footprint Modelling.” *Biogeosciences* 11 (17): 4651–64. doi:10.5194/bg-11-4651-2014.

Cowan, N. J., D. Famulari, P. E. Levy, M. Anderson, D. S. Reay, and U. M. Skiba. 2014. “Investigating Uptake of N2O in Agricultural Soils Using a High-Precision Dynamic Chamber Method.” *Atmospheric Measurement Techniques* 7 (12): 4455–62. doi:10.5194/amt-7-4455-2014.

Cowan, N.J., P.E. Levy, D. Famulari, M. Anderson, J. Drewer, M. Carozzi, D.S. Reay, and U.M. Skiba. 2016. “The Influence of Tillage on N2O Fluxes from an Intensively Managed Grazed Grassland in Scotland.” *Biogeosciences Discussions*, January, 1–22. doi:10.5194/bg-2015-643.

Danielewska, A., E. Paoletti, N. Clarke, J. Olejnik, M. Urbaniak, M. Baran, P. Siedlecki, et al. 2013. “Towards the Integration of Research and Monitoring at Forest Ecosystems in Europe.” *Forest Systems* 22 (3): 535. doi:10.5424/fs/2013223-03675.

Danielewska, A, N Clarke, J Olejnik, K Hansen, W Vries, L Lundin, J Tuovinen, R Fischer, M Urbaniak, and E Paoletti. 2013. “A Meta-Database Comparison from Various European Research and Monitoring Networks Dedicated to Forest Sites.” *iForest - Biogeosciences and Forestry* 6 (1): 1–9. doi:10.3832/ifor0751-006.

de la Paz, M., I.E. Huertas, S. Flecha, A.F. Ríos, and F.F. Pérez. 2015. “Nitrous Oxide and Methane in Atlantic and Mediterranean Waters in the Strait of Gibraltar: Air-Sea Fluxes and Inter-Basin Exchange.” *Progress in Oceanography* 138 (November): 18–31. doi:10.1016/j.pocean.2015.09.009.

Deng, F., D. B. A. Jones, D. K. Henze, N. Bousserez, K. W. Bowman, J. B. Fisher, R. Nassar, et al. 2014. “Inferring Regional Sources and Sinks of Atmospheric CO2 from GOSAT XCO2 Data.” *Atmospheric Chemistry and Physics* 14 (7): 3703–27. doi:10.5194/acp-14-3703-2014.

Dengel, S., D. Zona, T. Sachs, M. Aurela, M. Jammet, F. J. W. Parmentier, W. Oechel, and T. Vesala. 2013. “Testing the Applicability of Neural Networks as a Gap-Filling Method Using CH4 Flux Data from High Latitude Wetlands.” *Biogeosciences* 10 (12): 8185–8200. doi:10.5194/bg-10-8185-2013.

Dils, B., M. Buchwitz, M. Reuter, O. Schneising, H. Boesch, R. Parker, S. Guerlet, et al. 2014. “The Greenhouse Gas Climate Change Initiative (GHG-CCI): Comparative Validation of GHG-CCI SCIAMACHY/ENVISAT and TANSO-FTS/GOSAT CO2 and CH4 Retrieval Algorithm Products with Measurements from the TCCON.” *Atmospheric Measurement Techniques* 7 (6): 1723–44. doi:10.5194/amt-7-1723-2014.

Dvorská, A., P. Sedlák, J. Schwarz, M. Fusek, V. Hanuš, P. Vodička, and J. Trusina. 2015. “Atmospheric Station Křešín U Pacova, Czech Republic – a Central European Research Infrastructure for Studying Greenhouse Gases, Aerosols and Air Quality.” *Advances in Science and Research* 12 (May): 79–83. doi:10.5194/asr-12-79-2015.

Etminan, Maryam, Eleanor Highwood, Johannes Laube, Robert McPheat, George Marston, Keith Shine, and Kevin Smith. 2014. “Infrared Absorption Spectra, Radiative Efficiencies, and Global Warming Potentials of Newly-Detected Halogenated Compounds: CFC-113a, CFC-112 and HCFC-133a.” *Atmosphere* 5 (3): 473–83. doi:10.3390/atmos5030473.

Eyer, S., B. Tuzson, M. E. Popa, C. van der Veen, T. Röckmann, M. Rothe, W. A. Brand, et al. 2015. “Real-Time Analysis of δ13C- and δD-CH4 in Ambient Air with Laser Spectroscopy: Method Development and First Intercomparison Results.” *Atmospheric Measurement Techniques Discussions* 8 (8): 8925–70. doi:10.5194/amtd-8-8925-2015.

Eyer, Simon, Nicholas P. Stadie, Andreas Borgschulte, Lukas Emmenegger, and Joachim Mohn. 2014. “Methane Preconcentration by Adsorption: A Methodology for Materials and Conditions Selection.” *Adsorption* 20 (5-6): 657–66. doi:10.1007/s10450-014-9609-9.

Fady, Bruno, Alain Benard, Christian Pichot, Marianne Peiffer, Jean Michel Leban, and Erwin Dreyer. 2014. “The Open Data Debate: A Need for Accessible and Shared Data in Forest Science.” *Annals of Forest Science* 71 (5): 523–25. doi:10.1007/s13595-014-0375-3.

Feng, L., P. I. Palmer, R. J. Parker, N. M. Deutscher, D. G. Feist, R. Kivi, I. Morino, and R. Sussmann. 2015. “Elevated Uptake of CO2 over Europe Inferred from GOSAT XCO2 Retrievals: A Real Phenomenon or an Artefact of the Analysis?” *Atmospheric Chemistry and Physics Discussions* 15 (2): 1989–2011. doi:10.5194/acpd-15-1989-2015.

Fisher, R. E., S. Sriskantharajah, D. Lowry, M. Lanoisellé, C. M. R. Fowler, R. H. James, O. Hermansen, et al. 2011. “Arctic Methane Sources: Isotopic Evidence for Atmospheric Inputs.” *Geophysical Research Letters* 38 (21): n/a – n/a. doi:10.1029/2011GL049319.

Fraser, A., P. I. Palmer, L. Feng, H. Boesch, A. Cogan, R. Parker, E. J. Dlugokencky, et al. 2013. “Estimating Regional Methane Surface Fluxes: The Relative Importance of Surface and GOSAT Mole Fraction Measurements.” *Atmospheric Chemistry and Physics* 13 (11): 5697–5713. doi:10.5194/acp-13-5697-2013.

Fraser, A., P. I. Palmer, L. Feng, H. Bösch, R. Parker, E. J. Dlugokencky, P. B. Krummel, and R. L. Langenfelds. 2014. “Estimating Regional Fluxes of CO2 and CH4 Using Space-Borne Observations of XCH4 : XCO2.” *Atmospheric Chemistry and Physics Discussions* 14 (11): 15867–94. doi:10.5194/acpd-14-15867-2014.

Fraser, Paul J., Bronwyn L. Dunse, Alistair J. Manning, Sean Walsh, R. Hsiang J. Wang, Paul B. Krummel, L. Paul Steele, et al. 2014. “Australian Carbon Tetrachloride Emissions in a Global Context.” *Environmental Chemistry* 11 (1): 77. doi:10.1071/EN13171.

Galli, A., S. Guerlet, A. Butz, I. Aben, H. Suto, A. Kuze, N. M. Deutscher, et al. 2014. “The Impact of Spectral Resolution on Satellite Retrieval Accuracy of CO2 and CH4.” *Atmospheric Measurement Techniques* 7 (4): 1105–19. doi:10.5194/amt-7-1105-2014.

Ganesan, A. L., A. J. Manning, A. Grant, D. Young, D .E. Oram, W. T. Sturges, J. B. Moncrieff, and S. O’Doherty. 2015. “Quantifying Methane and Nitrous Oxide Emissions from the UK and Ireland Using a National-Scale Monitoring Network.” *Atmospheric Chemistry and Physics* 15 (11): 6393–6406. doi:10.5194/acp-15-6393-2015.

Graziosi, F., J. Arduini, F. Furlani, U. Giostra, L.J.M. Kuijpers, S.A. Montzka, B.R. Miller, et al. 2015. “European Emissions of HCFC-22 Based on Eleven Years of High Frequency Atmospheric Measurements and a Bayesian Inversion Method.” *Atmospheric Environment* 112 (July): 196–207. doi:10.1016/j.atmosenv.2015.04.042.

Guerlet, S., A. Butz, D. Schepers, S. Basu, O. P. Hasekamp, A. Kuze, T. Yokota, et al. 2013. “Impact of Aerosol and Thin Cirrus on Retrieving and Validating XCO 2 from GOSAT Shortwave Infrared Measurements.” *Journal of Geophysical Research: Atmospheres* 118 (10): 4887–4905. doi:10.1002/jgrd.50332.

Hall, B. D., A. Engel, J. Mühle, J. W. Elkins, F. Artuso, E. Atlas, M. Aydin, et al. 2014. “Results from the International Halocarbons in Air Comparison Experiment (IHALACE).” *Atmospheric Measurement Techniques* 7 (2): 469–90. doi:10.5194/amt-7-469-2014.

Hammer, S., D. W. T. Griffith, G. Konrad, S. Vardag, C. Caldow, and I. Levin. 2013. “Assessment of a Multi-Species in Situ FTIR for Precise Atmospheric Greenhouse Gas Observations.” *Atmospheric Measurement Techniques* 6 (5): 1153–70. doi:10.5194/amt-6-1153-2013.

Hari, P., T. Petäjä, J. Bäck, V.-M. Kerminen, H. K. Lappalainen, T. Vihma, T. Laurila, Y. Viisanen, T. Vesala, and M. Kulmala. 2015. “Conceptual Design of a Measurement Network of the Global Change.” *Atmospheric Chemistry and Physics Discussions* 15 (15): 21063–93. doi:10.5194/acpd-15-21063-2015.

Hase, F., B. J. Drouin, C. M. Roehl, G. C. Toon, P. O. Wennberg, D. Wunch, T. Blumenstock, et al. 2013. “Calibration of Sealed HCl Cells Used for TCCON Instrumental Line Shape Monitoring.” *Atmospheric Measurement Techniques* 6 (12): 3527–37. doi:10.5194/amt-6-3527-2013.

Haszpra, L., Z. Barcza, T. Haszpra, Zs. Pátkai, and K. J. Davis. 2015. “How Well Do Tall-Tower Measurements Characterize the CO2 Mole Fraction Distribution in the Planetary Boundary Layer?” *Atmospheric Measurement Techniques* 8 (4): 1657–71. doi:10.5194/amt-8-1657-2015.

Hausmann, P., R. Sussmann, and D. Smale. 2015. “Contribution of Oil and Natural Gas Production to Renewed Increase of Atmospheric Methane (2007&amp;ndash;2014): Top-down Estimate from Ethane and Methane Column Observations.” *Atmospheric Chemistry and Physics Discussions* 15 (24): 35991–28. doi:10.5194/acpd-15-35991-2015.

Heiskanen, JOUNI J., IVAN Mammarella, SAMI Haapanala, JUKKA Pumpanen, TIMO Vesala, SALLY MacIntyre, and ANNE Ojala. 2014. “Effects of Cooling and Internal Wave Motions on Gas Transfer Coefficients in a Boreal Lake.” *Tellus B* 66 (0). doi:10.3402/tellusb.v66.22827.

Heiskanen, Jouni J., Ivan Mammarella, Anne Ojala, Victor Stepanenko, Kukka-Maaria Erkkilä, Heli Miettinen, Heidi Sandström, et al. 2015. “Effects of Water Clarity on Lake Stratification and Lake-Atmosphere Heat Exchange.” *Journal of Geophysical Research: Atmospheres* 120 (15): 7412–28. doi:10.1002/2014JD022938.

Hellsten, Antti, Sofia-M. Luukkonen, Gerald Steinfeld, Farah Kanani-Sühring, Tiina Markkanen, Leena Järvi, Juha Lento, Timo Vesala, and Siegfried Raasch. 2015. “Footprint Evaluation for Flux and Concentration Measurements for an Urban-Like Canopy with Coupled Lagrangian Stochastic and Large-Eddy Simulation Models.” *Boundary-Layer Meteorology* 157 (2): 191–217. doi:10.1007/s10546-015-0062-4.

Hensen, Arjan, Ute Skiba, and Daniela Famulari. 2013. “Low Cost and State of the Art Methods to Measure Nitrous Oxide Emissions.” *Environmental Research Letters* 8 (2): 025022. doi:10.1088/1748-9326/8/2/025022.

Heymann, J., H. Bovensmann, M. Buchwitz, J. P. Burrows, N. M. Deutscher, J. Notholt, M. Rettinger, et al. 2012. “SCIAMACHY WFM-DOAS *X*CO2: Reduction of Scattering Related Errors.” *Atmospheric Measurement Techniques* 5 (10): 2375–90. doi:10.5194/amt-5-2375-2012.

Hirsikko, A., E. J. O’Connor, M. Komppula, K. Korhonen, A. Pfüller, E. Giannakaki, C. R. Wood, et al. 2014. “Observing Wind, Aerosol Particles, Cloud and Precipitation: Finland’s New Ground-Based Remote-Sensing Network.” *Atmospheric Measurement Techniques* 7 (5): 1351–75. doi:10.5194/amt-7-1351-2014.

Hoker, J., F. Obersteiner, H. Bönisch, and A. Engel. 2015. “Comparison of GC/time-of-Flight MS with GC/quadrupole MS for Halocarbon Trace Gas Analysis.” *Atmospheric Measurement Techniques* 8 (5): 2195–2206. doi:10.5194/amt-8-2195-2015.

Hu, Guangcheng, Li Jia, and Massimo Menenti. 2015. “Comparison of MOD16 and LSA-SAF MSG Evapotranspiration Products over Europe for 2011.” *Remote Sensing of Environment* 156 (January): 510–26. doi:10.1016/j.rse.2014.10.017.

Huotari, Jussi, Sami Haapanala, Jukka Pumpanen, Timo Vesala, and Anne Ojala. 2013. “Efficient Gas Exchange between a Boreal River and the Atmosphere.” *Geophysical Research Letters* 40 (21): 5683–86. doi:10.1002/2013GL057705.

Inoue, M., I. Morino, O. Uchino, T. Nakatsuru, Y. Yoshida, T. Yokota, D. Wunch, et al. 2016. “Bias Corrections of GOSAT SWIR XCO2 and XCH4 with TCCON Data and Their Evaluation Using Aircraft Measurement Data.” *Atmospheric Measurement Techniques Discussions*, January, 1–49. doi:10.5194/amt-2015-366.

Juszczak, R. 2013. “Biases in Methane Chamber Measurements in Peatlands.” *International Agrophysics* 27 (2). doi:10.2478/v10247-012-0081-z.

Juszczak, Radosław, and Jürgen Augustin. 2013. “Exchange of the Greenhouse Gases Methane and Nitrous Oxide Between the Atmosphere and a Temperate Peatland in Central Europe.” *Wetlands* 33 (5): 895–907. doi:10.1007/s13157-013-0448-3.

Karstens, U., C. Schwingshackl, D. Schmithüsen, and I. Levin. 2015. “A Process-Based 222radon Flux Map for Europe and Its Comparison to Long-Term Observations.” *Atmospheric Chemistry and Physics* 15 (22): 12845–65. doi:10.5194/acp-15-12845-2015.

Kasurinen, Ville, Knut Alfredsen, Pasi Kolari, Ivan Mammarella, Pavel Alekseychik, Janne Rinne, Timo Vesala, et al. 2014. “Latent Heat Exchange in the Boreal and Arctic Biomes.” *Global Change Biology* 20 (11): 3439–56. doi:10.1111/gcb.12640.

Kiendler-Scharr, A., A. A. Mensah, E. Friese, D. Topping, E. Nemitz, A. S. H. Prevot, M. Äijälä, et al. 2016. “Ubiquity of Organic Nitrates from Nighttime Chemistry in the European Submicron Aerosol.” *Geophysical Research Letters* 43 (14): 7735–44. doi:10.1002/2016GL069239.

Kirschke, Stefanie, Philippe Bousquet, Philippe Ciais, Marielle Saunois, Josep G. Canadell, Edward J. Dlugokencky, Peter Bergamaschi, et al. 2013. “Three Decades of Global Methane Sources and Sinks.” *Nature Geoscience* 6 (10): 813–23. doi:10.1038/ngeo1955.

Koffi, E N, P Bergamaschi, U Karstens, M Krol, A Segers, M Schmidt, I Levin, et al. 2016. “Evaluation of the Boundary Layer Dynamics of the TM5 Model.” *Geoscientific Model Development Discussions* 2016 (March). Copernicus Publications: 1–37. doi:10.5194/gmd-2016-48.

Korhonen, J. F. J., M. Pihlatie, J. Pumpanen, H. Aaltonen, P. Hari, J. Levula, A.-J. Kieloaho, E. Nikinmaa, T. Vesala, and H. Ilvesniemi. 2013. “Nitrogen Balance of a Boreal Scots Pine Forest.” *Biogeosciences* 10 (2): 1083–95. doi:10.5194/bg-10-1083-2013.

Kowalska, N., B.H. Chojnicki, J. Rinne, S. Haapanala, P. Siedlecki, M. Urbaniak, R. Juszczak, and J. Olejnik. 2013. “Measurements of Methane Emission from a Temperate Wetland by the Eddy Covariance Method.” *International Agrophysics* 27 (3). doi:10.2478/v10247-012-0096-5.

Kretschmer, R., C. Gerbig, U. Karstens, G. Biavati, A. Vermeulen, F. Vogel, S. Hammer, and K. U. Totsche. 2014. “Impact of Optimized Mixing Heights on Simulated Regional Atmospheric Transport of CO2.” *Atmospheric Chemistry and Physics* 14 (14): 7149–72. doi:10.5194/acp-14-7149-2014.

Kulmala, Liisa, Hermanni Aaltonen, Frank Berninger, Antti-Jussi Kieloaho, Janne Levula, Jaana Bäck, Pertti Hari, et al. 2014. “Changes in Biogeochemistry and Carbon Fluxes in a Boreal Forest after the Clear-Cutting and Partial Burning of Slash.” *Agricultural and Forest Meteorology* 188 (May): 33–44. doi:10.1016/j.agrformet.2013.12.003.

Langer, M., S. Westermann, K. Walter Anthony, K. Wischnewski, and J. Boike. 2015. “Frozen Ponds: Production and Storage of Methane during the Arctic Winter in a Lowland Tundra Landscape in Northern Siberia, Lena River Delta.” *Biogeosciences* 12 (4): 977–90. doi:10.5194/bg-12-977-2015.

Laube, Johannes C., Mike J. Newland, Christopher Hogan, Carl A. M. Brenninkmeijer, Paul J. Fraser, Patricia Martinerie, David E. Oram, et al. 2014. “Newly Detected Ozone-Depleting Substances in the Atmosphere.” *Nature Geoscience* 7 (4): 266–69. doi:10.1038/ngeo2109.

Lebegue, B., M. Schmidt, M. Ramonet, B. Wastine, C. Yver Kwok, O. Laurent, S. Belviso, et al. 2015. “Comparison of Nitrous Oxide (N2O) Analyzers for High-Precision Measurements of Atmospheric Mole Fractions.” *Atmospheric Measurement Techniques Discussions* 8 (10): 10937–82. doi:10.5194/amtd-8-10937-2015.

Levin, Ingeborg, Dominik Schmithüsen, and Alex Vermeulen. 2016. “Assessment of 222Radon Progeny Loss in Long Tubing Based on Static Filter Measurements in the Laboratory and in the Field.” *Atmospheric Measurement Techniques Discussions* 2016 (June). Copernicus Publications: 1–15. doi:10.5194/amt-2016-112.

Lin, X., N. K. Indira, M. Ramonet, M. Delmotte, P. Ciais, B. C. Bhatt, M. V. Reddy, et al. 2015. “Long-Lived Atmospheric Trace Gases Measurements in Flask Samples from Three Stations in India.” *Atmospheric Chemistry and Physics* 15 (17): 9819–49. doi:10.5194/acp-15-9819-2015.

Lindqvist, H., C. W. O’Dell, S. Basu, H. Boesch, F. Chevallier, N. Deutscher, L. Feng, et al. 2015. “Does GOSAT Capture the True Seasonal Cycle of Carbon Dioxide?” *Atmospheric Chemistry and Physics* 15 (22): 13023–40. doi:10.5194/acp-15-13023-2015.

Locatelli, R., P. Bousquet, F. Hourdin, M. Saunois, A. Cozic, F. Couvreux, J.-Y. Grandpeix, et al. 2015. “Atmospheric Transport and Chemistry of Trace Gases in LMDz5B: Evaluation and Implications for Inverse Modelling.” *Geoscientific Model Development* 8 (2): 129–50. doi:10.5194/gmd-8-129-2015.

Lopez, M., M. Schmidt, M. Ramonet, J.-L. Bonne, A. Colomb, V. Kazan, P. Laj, and J.-M. Pichon. 2015. “Three Years of Semicontinuous Greenhouse Gas Measurements at the Puy de Dôme Station (Central France).” *Atmospheric Measurement Techniques* 8 (9): 3941–58. doi:10.5194/amt-8-3941-2015.

Loubet, Benjamin, Pierre Cellier, Christophe Fléchard, Olivier Zurfluh, Mark Irvine, Eric Lamaud, Patrick Stella, et al. 2013. “Investigating Discrepancies in Heat, CO2 Fluxes and O3 Deposition Velocity over Maize as Measured by the Eddy-Covariance and the Aerodynamic Gradient Methods.” *Agricultural and Forest Meteorology* 169 (February): 35–50. doi:10.1016/j.agrformet.2012.09.010.

Lunt, Mark F., Matthew Rigby, Anita L. Ganesan, Alistair J. Manning, Ronald G. Prinn, Simon O’Doherty, Jens Mühle, et al. 2015. “Reconciling Reported and Unreported HFC Emissions with Atmospheric Observations.” *Proceedings of the National Academy of Sciences* 112 (19): 5927–31. doi:10.1073/pnas.1420247112.

Luo, G. J., R. Kiese, B. Wolf, and K. Butterbach-Bahl. 2013. “Effects of Soil Temperature and Moisture on Methane Uptake and Nitrous Oxide Emissions across Three Different Ecosystem Types.” *Biogeosciences* 10 (5): 3205–19. doi:10.5194/bg-10-3205-2013.

Maksyutov, S., H. Takagi, V. K. Valsala, M. Saito, T. Oda, T. Saeki, D. A. Belikov, et al. 2013. “Regional CO2 Flux Estimates for 2009–2010 Based on GOSAT and Ground-Based CO2 Observations.” *Atmospheric Chemistry and Physics* 13 (18): 9351–73. doi:10.5194/acp-13-9351-2013.

Mammarella, I., O. Peltola, A. Nordbo, L. Järvi, and Ü. Rannik. 2016. “EddyUH: An Advanced Software Package for Eddy Covariance Flux Calculation for a Wide Range of Instrumentation and Ecosystems.” *Atmospheric Measurement Techniques Discussions*, January, 1–33. doi:10.5194/amt-2015-323.

Mammarella, Ivan, Annika Nordbo, Üllar Rannik, Sami Haapanala, Janne Levula, Heikki Laakso, Anne Ojala, et al. 2015. “Carbon Dioxide and Energy Fluxes over a Small Boreal Lake in Southern Finland.” *Journal of Geophysical Research: Biogeosciences* 120 (7): 1296–1314. doi:10.1002/2014JG002873.

Manohar, S.N., H.A.J. Meijer, and M.A. Herber. 2013. “Radon Flux Maps for the Netherlands and Europe Using Terrestrial Gamma Radiation Derived from Soil Radionuclides.” *Atmospheric Environment* 81 (December): 399–412. doi:10.1016/j.atmosenv.2013.09.005.

Müller, D., H. W. Bange, T. Warneke, T. Rixen, M. Müller, A. Mujahid, and J. Notholt. 2016. “Nitrous Oxide and Methane in Two Tropical Estuaries in a Peat-Dominated Region of North-Western Borneo.” *Biogeosciences Discussions*, January, 1–28. doi:10.5194/bg-2016-4.

Müller, D., T. Warneke, T. Rixen, M. Müller, A. Mujahid, H. W. Bange, and J. Notholt. 2016. “Fate of Terrestrial Organic Carbon and Associated CO2 and CO Emissions from Two Southeast Asian Estuaries.” *Biogeosciences* 13 (3): 691–705. doi:10.5194/bg-13-691-2016.

Nauta, Ake L., Monique M. P. D. Heijmans, Daan Blok, Juul Limpens, Bo Elberling, Angela Gallagher, Bingxi Li, et al. 2014. “Permafrost Collapse after Shrub Removal Shifts Tundra Ecosystem to a Methane Source.” *Nature Climate Change* 5 (1): 67–70. doi:10.1038/nclimate2446.

Nęcki, Jarosław M., Michał Gałkowski, Łukasz Chmura, Christoph Gerbig, Mirosław Zimnoch, Damian Zięba, Jakub Bartyzel, Wojciech Wołkowicz, and Kazimierz Różański. 2016. “Regional Representativeness of CH4 and N2O Mixing Ratio Measurements at High-Altitude Mountain Station Kasprowy Wierch, Southern Poland.” *Aerosol and Air Quality Research* 16 (3): 568–80. doi:10.4209/aaqr.2015.05.0357.

Nisbet, E. G., E. J. Dlugokencky, and P. Bousquet. 2014. “Methane on the Rise--Again.” *Science* 343 (6170): 493–95. doi:10.1126/science.1247828.

Obersteiner, F., H. Bönisch, and A. Engel. 2016. “An Automated Gas Chromatography Time-of-Flight Mass Spectrometry Instrument for the Quantitative Analysis of Halocarbons in Air.” *Atmospheric Measurement Techniques* 9 (1): 179–94. doi:10.5194/amt-9-179-2016.

O’Doherty, S., M. Rigby, J. Mühle, D. J. Ivy, B. R. Miller, D. Young, P. G. Simmonds, et al. 2014. “Global Emissions of HFC-143a (CH3CF3) and HFC-32 (CH2F2) from in Situ and Air Archive Atmospheric Observations.” *Atmospheric Chemistry and Physics* 14 (17): 9249–58. doi:10.5194/acp-14-9249-2014.

Oram, D. E., F. S. Mani, J. C. Laube, M. J. Newland, C. E. Reeves, W. T. Sturges, S. A. Penkett, C. A. M. Brenninkmeijer, T. Röckmann, and P. J. Fraser. 2012. “Long-Term Tropospheric Trend of Octafluorocyclobutane (c-C4F8 or PFC-318).” *Atmospheric Chemistry and Physics* 12 (1): 261–69. doi:10.5194/acp-12-261-2012.

Oshchepkov, Sergey, Andrey Bril, Tatsuya Yokota, Isamu Morino, Yukio Yoshida, Tsuneo Matsunaga, Dmitry Belikov, et al. 2012. “Effects of Atmospheric Light Scattering on Spectroscopic Observations of Greenhouse Gases from Space: Validation of PPDF-Based CO 2 Retrievals from GOSAT.” *Journal of Geophysical Research: Atmospheres* 117 (D12): n/a – n/a. doi:10.1029/2012JD017505.

Oshchepkov, Sergey, Andrey Bril, Tatsuya Yokota, Paul O. Wennberg, Nicholas M. Deutscher, Debra Wunch, Geoffrey C. Toon, et al. 2013. “Effects of Atmospheric Light Scattering on Spectroscopic Observations of Greenhouse Gases from Space. Part 2: Algorithm Intercomparison in the GOSAT Data Processing for CO 2 Retrievals over TCCON Sites.” *Journal of Geophysical Research: Atmospheres* 118 (3): 1493–1512. doi:10.1002/jgrd.50146.

Oshchepkov, Sergey, Andrey Bril, Tatsuya Yokota, Yukio Yoshida, Thomas Blumenstock, Nicholas M. Deutscher, Susanne Dohe, et al. 2013. “Simultaneous Retrieval of Atmospheric CO\_2 and Light Path Modification from Space-Based Spectroscopic Observations of Greenhouse Gases: Methodology and Application to GOSAT Measurements over TCCON Sites.” *Applied Optics* 52 (6): 1339. doi:10.1364/AO.52.001339.

O’Shea, S. J., S. J.-B. Bauguitte, M. W. Gallagher, D. Lowry, and C. J. Percival. 2013. “Development of a Cavity-Enhanced Absorption Spectrometer for Airborne Measurements of CH4 and CO2.” *Atmospheric Measurement Techniques* 6 (5): 1095–1109. doi:10.5194/amt-6-1095-2013.

O’Shea, Sebastian J., Grant Allen, Zoë L. Fleming, Stephane J.-B. Bauguitte, Carl J. Percival, Martin W. Gallagher, James Lee, Carole Helfter, and Eiko Nemitz. 2014. “Area Fluxes of Carbon Dioxide, Methane, and Carbon Monoxide Derived from Airborne Measurements around Greater London: A Case Study during Summer 2012.” *Journal of Geophysical Research: Atmospheres* 119 (8): 4940–52. doi:10.1002/2013JD021269.

Ostler, A., R. Sussmann, P. K. Patra, P. O. Wennberg, N. M. Deutscher, D. W. T. Griffith, T. Blumenstock, et al. 2015. “The Imprint of Stratospheric Transport on Column-Averaged Methane.” *Atmospheric Chemistry and Physics Discussions* 15 (14): 20395–447. doi:10.5194/acpd-15-20395-2015.

Ostler, A., R. Sussmann, M. Rettinger, N. M. Deutscher, S. Dohe, F. Hase, N. Jones, M. Palm, and B.-M. Sinnhuber. 2014. “Multistation Intercomparison of Column-Averaged Methane from NDACC and TCCON: Impact of Dynamical Variability.” *Atmospheric Measurement Techniques* 7 (12): 4081–4101. doi:10.5194/amt-7-4081-2014.

Pal, S., M. Lopez, M. Schmidt, M. Ramonet, F. Gibert, I. Xueref-Remy, and P. Ciais. 2015. “Investigation of the Atmospheric Boundary Layer Depth Variability and Its Impact on the 222 Rn Concentration at a Rural Site in France.” *Journal of Geophysical Research: Atmospheres* 120 (2): 623–43. doi:10.1002/2014JD022322.

Parker, R. J., H. Boesch, K. Byckling, A. J. Webb, P. I. Palmer, L. Feng, P. Bergamaschi, et al. 2015. “Assessing 5 Years of GOSAT Proxy XCH4 Data and Associated Uncertainties.” *Atmospheric Measurement Techniques* 8 (11): 4785–4801. doi:10.5194/amt-8-4785-2015.

Patricia Laville, Simone Neri, David Continanza, Luca Ferrante Vero, Simona Bosco, and Giorgio Virgili. 2015. “Cross-Validation of a Mobile N2O Flux Prototype (IPNOA) Using Micrometeorological and Chamber Methods.” *Journal of Energy and Power Engineering* 9 (4). doi:10.17265/1934-8975/2015.04.007.

Peltola, O., A. Hensen, L. Belelli Marchesini, C. Helfter, F.C. Bosveld, W.C.M. van den Bulk, S. Haapanala, et al. 2015. “Studying the Spatial Variability of Methane Flux with Five Eddy Covariance Towers of Varying Height.” *Agricultural and Forest Meteorology* 214-215 (December): 456–72. doi:10.1016/j.agrformet.2015.09.007.

Peltola, O., A. Hensen, C. Helfter, L. Belelli Marchesini, F. C. Bosveld, W. C. M. van den Bulk, J. A. Elbers, et al. 2014. “Evaluating the Performance of Commonly Used Gas Analysers for Methane Eddy Covariance Flux Measurements: The InGOS Inter-Comparison Field Experiment.” *Biogeosciences* 11 (12): 3163–86. doi:10.5194/bg-11-3163-2014.

Peltola, O., I. Mammarella, S. Haapanala, G. Burba, and T. Vesala. 2013. “Field Intercomparison of Four Methane Gas Analyzers Suitable for Eddy Covariance Flux Measurements.” *Biogeosciences* 10 (6): 3749–65. doi:10.5194/bg-10-3749-2013.

Personne, Erwan, Florence Tardy, Sophie Génermont, Céline Decuq, Jean-Christophe Gueudet, Nicolas Mascher, Brigitte Durand, et al. 2015. “Investigating Sources and Sinks for Ammonia Exchanges between the Atmosphere and a Wheat Canopy Following Slurry Application with Trailing Hose.” *Agricultural and Forest Meteorology* 207 (July): 11–23. doi:10.1016/j.agrformet.2015.03.002.

Petrescu, Ana Maria Roxana, Annalea Lohila, Juha-Pekka Tuovinen, Dennis D. Baldocchi, Ankur R. Desai, Nigel T. Roulet, Timo Vesala, et al. 2015. “The Uncertain Climate Footprint of Wetlands under Human Pressure.” *Proceedings of the National Academy of Sciences* 112 (15): 4594–99. doi:10.1073/pnas.1416267112.

Petri, C., T. Warneke, N. Jones, T. Ridder, J. Messerschmidt, T. Weinzierl, M. Geibel, and J. Notholt. 2012. “Remote Sensing of CO2 and CH4 Using Solar Absorption Spectrometry with a Low Resolution Spectrometer.” *Atmospheric Measurement Techniques* 5 (7): 1627–35. doi:10.5194/amt-5-1627-2012.

Pieterse, G., M. C. Krol, A. M. Batenburg, C. A. M. Brenninkmeijer, M. E. Popa, S. O’Doherty, A. Grant, et al. 2013. “Reassessing the Variability in Atmospheric H 2 Using the Two-Way Nested TM5 Model.” *Journal of Geophysical Research: Atmospheres* 118 (9): 3764–80. doi:10.1002/jgrd.50204.

Pihlatie, M., Ü. Rannik, S. Haapanala, O. Peltola, N. Shurpali, P. J. Martikainen, S. Lind, et al. 2016. “Seasonal and Diurnal Variation in CO Fluxes from an Agricultural Bioenergy Crop.” *Biogeosciences Discussions*, January, 1–27. doi:10.5194/bg-2015-622.

Potier, E., J. Ogée, J. Jouanguy, E. Lamaud, P. Stella, E. Personne, B. Durand, N. Mascher, and B. Loubet. 2015. “Multilayer Modelling of Ozone Fluxes on Winter Wheat Reveals Large Deposition on Wet Senescing Leaves.” *Agricultural and Forest Meteorology* 211-212 (October): 58–71. doi:10.1016/j.agrformet.2015.05.006.

Pumpanen, Jukka, Aki Lindén, Heli Miettinen, Pasi Kolari, Hannu Ilvesniemi, Ivan Mammarella, Pertti Hari, et al. 2014. “Precipitation and Net Ecosystem Exchange Are the Most Important Drivers of DOC Flux in Upland Boreal Catchments.” *Journal of Geophysical Research: Biogeosciences* 119 (9): 1861–78. doi:10.1002/2014JG002705.

Rannik, Ü., S. Haapanala, N. J. Shurpali, I. Mammarella, S. Lind, N. Hyvönen, O. Peltola, M. Zahniser, P. J. Martikainen, and T. Vesala. 2014. “Intercomparison of Fast Response Commercial Gas Analysers for Nitrous Oxide Flux Measurements under Field Conditions.” *Biogeosciences Discussions* 11 (8): 11747–83. doi:10.5194/bgd-11-11747-2014.

Rannik, Üllar, Olli Peltola, and Ivan Mammarella. 2016. “Random Uncertainties of Flux Measurements by the Eddy Covariance Technique.” *Atmospheric Measurement Techniques Discussions*, February, 1–31. doi:10.5194/amt-2016-31.

Rantakari, Miitta, Jouni Heiskanen, Ivan Mammarella, Tiina Tulonen, Jessica Linnaluoma, Paula Kankaala, and Anne Ojala. 2015. “Different Apparent Gas Exchange Coefficients for CO 2 and CH 4 : Comparing a Brown-Water and a Clear-Water Lake in the Boreal Zone during the Whole Growing Season.” *Environmental Science & Technology* 49 (19): 11388–94. doi:10.1021/acs.est.5b01261.

Rella, C. W., H. Chen, A. E. Andrews, A. Filges, C. Gerbig, J. Hatakka, A. Karion, et al. 2013. “High Accuracy Measurements of Dry Mole Fractions of Carbon Dioxide and Methane in Humid Air.” *Atmospheric Measurement Techniques* 6 (3): 837–60. doi:10.5194/amt-6-837-2013.

Reuter, M., M. Buchwitz, M. Hilker, J. Heymann, O. Schneising, D. Pillai, H. Bovensmann, et al. 2014. “Satellite-Inferred European Carbon Sink Larger than Expected.” *Atmospheric Chemistry and Physics* 14 (24): 13739–53. doi:10.5194/acp-14-13739-2014.

Rhoderick, George C., Bradley D. Hall, Christina M. Harth, Jin Seog Kim, Jeongsoon Lee, Stephen A. Montzka, Jens Mühle, Stefan Reimann, Martin K. Vollmer, and Ray F. Weiss. 2015. “Comparison of Halocarbon Measurements in an Atmospheric Dry Whole Air Sample.” *Elementa: Science of the Anthropocene* 3 (November): 000075. doi:10.12952/journal.elementa.000075.

RÓŻAŃSKI, Kazimierz, Jarosław NĘCKI, Łukasz CHMURA, Ireneusz ŚLIWKA, Mirosław ZIMNOCH, Jarosław BIELEWSKI, Michał GAŁKOWSKI, Jakub BARTYZEL, and Janusz ROSIEK. 2014. “Anthropogenic Changes of CO2, CH4, N2O, CFCl3, CF2Cl2, CCl2FCClF2, CHCl3, CH3CCl3, CCl4, SF6 and SF5CF3 Mixing Ratios in the Atmosphere over Southern Poland.” *Geological Quarterly*, April. doi:10.7306/gq.1163.

Saad, K. M., D. Wunch, G. C. Toon, P. Bernath, C. Boone, B. Connor, N. M. Deutscher, et al. 2014. “Derivation of Tropospheric Methane from TCCON CH4 and HF Total Column Observations.” *Atmospheric Measurement Techniques* 7 (9): 2907–18. doi:10.5194/amt-7-2907-2014.

Saikawa, E., R. G. Prinn, E. Dlugokencky, K. Ishijima, G. S. Dutton, B. D. Hall, R. Langenfelds, et al. 2014. “Global and Regional Emissions Estimates for N2O.” *Atmospheric Chemistry and Physics* 14 (9): 4617–41. doi:10.5194/acp-14-4617-2014.

Saito, R., P. K. Patra, N. Deutscher, D. Wunch, K. Ishijima, V. Sherlock, T. Blumenstock, et al. 2012. “Technical Note: Latitude-Time Variations of Atmospheric Column-Average Dry Air Mole Fractions of CO2, CH4 and N2O.” *Atmospheric Chemistry and Physics* 12 (16): 7767–77. doi:10.5194/acp-12-7767-2012.

Schoenenberger, Fabian, Martin K. Vollmer, Matt Rigby, Matthias Hill, Paul J. Fraser, Paul B. Krummel, Ray L. Langenfelds, Tae Siek Rhee, Thomas Peter, and Stefan Reimann. 2015. “First Observations, Trends, and Emissions of HCFC-31 (CH 2 ClF) in the Global Atmosphere.” *Geophysical Research Letters* 42 (18): 7817–24. doi:10.1002/2015GL064709.

Sepúlveda, E., M. Schneider, F. Hase, S. Barthlott, D. Dubravica, O. E. García, A. Gomez-Pelaez, et al. 2014. “Tropospheric CH4 Signals as Observed by NDACC FTIR at Globally Distributed Sites and Comparison to GAW Surface in Situ Measurements.” *Atmospheric Measurement Techniques* 7 (7): 2337–60. doi:10.5194/amt-7-2337-2014.

Serrano-Ortiz, P., E. P. Sánchez-Cañete, F. J. Olmo, S. Metzger, O. Pérez-Priego, A. Carrara, L. Alados-Arboledas, and A. S. Kowalski. 2016. “Surface-Parallel Sensor Orientation for Assessing Energy Balance Components on Mountain Slopes.” *Boundary-Layer Meteorology* 158 (3): 489–99. doi:10.1007/s10546-015-0099-4.

Simmonds, P. G., A. J. Manning, M. Athanassiadou, A. A. Scaife, R. G. Derwent, S. O’Doherty, C. M. Harth, et al. 2013. “Interannual Fluctuations in the Seasonal Cycle of Nitrous Oxide and Chlorofluorocarbons due to the Brewer-Dobson Circulation.” *Journal of Geophysical Research: Atmospheres* 118 (19): 10,694–10,706. doi:10.1002/jgrd.50832.

Simmonds, P. G., M. Rigby, A. J. Manning, M. F. Lunt, S. O&apos;Doherty, A. McCulloch, P. J. Fraser, et al. 2016. “Global and Regional Emissions Estimates of 1,1-Difluoroethane (HFC-152a, CH3CHF2) from in Situ and Air Archive Observations.” *Atmospheric Chemistry and Physics* 16 (1): 365–82. doi:10.5194/acp-16-365-2016.

Smallman, T. L., M. Williams, and J. B. Moncrieff. 2014. “Can Seasonal and Interannual Variation in Landscape CO2 Fluxes Be Detected by Atmospheric Observations of CO2 Concentrations Made at a Tall Tower?” *Biogeosciences* 11 (3): 735–47. doi:10.5194/bg-11-735-2014.

Sperlich, P., N. A. M. Uitslag, J. M. Richter, M. Rothe, H. Geilmann, C. van der Veen, T. Röckmann, T. Blunier, and W. A. Brand. 2016. “Development and Evaluation of a Suite of Isotope Reference Gases for Methane in Air.” *Atmospheric Measurement Techniques Discussions*, January, 1–24. doi:10.5194/amt-2016-15.

Sriskantharajah, S., R. E. Fisher, D. Lowry, T. Aalto, J. Hatakka, M. Aurela, T. Laurila, A. Lohila, E. Kuitunen, and E. G. Nisbet. 2012. “Stable Carbon Isotope Signatures of Methane from a Finnish Subarctic Wetland.” *Tellus B* 64 (0). doi:10.3402/tellusb.v64i0.18818.

Sturges, W. T., D. E. Oram, J. C. Laube, C. E. Reeves, M. J. Newland, C. Hogan, P. Martinerie, et al. 2012. “Emissions Halted of the Potent Greenhouse Gas SF5CF3.” *Atmospheric Chemistry and Physics* 12 (8): 3653–58. doi:10.5194/acp-12-3653-2012.

Sundqvist, E., A. Persson, N. Kljun, P. Vestin, L. Chasmer, C. Hopkinson, and A. Lindroth. 2015. “Upscaling of Methane Exchange in a Boreal Forest Using Soil Chamber Measurements and High-Resolution LiDAR Elevation Data.” *Agricultural and Forest Meteorology* 214-215 (December): 393–401. doi:10.1016/j.agrformet.2015.09.003.

Sundqvist, Elin, Meelis Mölder, Patrick Crill, Natascha Kljun, and Anders Lindroth. 2015. “Methane Exchange in a Boreal Forest Estimated by Gradient Method.” *Tellus B* 67 (0). doi:10.3402/tellusb.v67.26688.

Sussmann, R., A. Ostler, F. Forster, M. Rettinger, N. M. Deutscher, D. W. T. Griffith, J. W. Hannigan, N. Jones, and P. K. Patra. 2013. “First Intercalibration of Column-Averaged Methane from the Total Carbon Column Observing Network and the Network for the Detection of Atmospheric Composition Change.” *Atmospheric Measurement Techniques* 6 (2): 397–418. doi:10.5194/amt-6-397-2013.

Thompson, R. L., F. Chevallier, A. M. Crotwell, G. Dutton, R. L. Langenfelds, R. G. Prinn, R. F. Weiss, et al. 2014. “Nitrous Oxide Emissions 1999 to 2009 from a Global Atmospheric Inversion.” *Atmospheric Chemistry and Physics* 14 (4): 1801–17. doi:10.5194/acp-14-1801-2014.

Thompson, R. L., K. Ishijima, E. Saikawa, M. Corazza, U. Karstens, P. K. Patra, P. Bergamaschi, et al. 2014. “TransCom N2O Model Inter-Comparison – Part 2: Atmospheric Inversion Estimates of N2O Emissions.” *Atmospheric Chemistry and Physics* 14 (12): 6177–94. doi:10.5194/acp-14-6177-2014.

Thompson, R. L., P. K. Patra, K. Ishijima, E. Saikawa, M. Corazza, U. Karstens, C. Wilson, et al. 2014. “TransCom N2O Model Inter-Comparison – Part 1: Assessing the Influence of Transport and Surface Fluxes on Tropospheric N2O Variability.” *Atmospheric Chemistry and Physics* 14 (8): 4349–68. doi:10.5194/acp-14-4349-2014.

Tørseth, K., W. Aas, K. Breivik, A. M. Fjæraa, M. Fiebig, A. G. Hjellbrekke, C. Lund Myhre, S. Solberg, and K. E. Yttri. 2012. “Introduction to the European Monitoring and Evaluation Programme (EMEP) and Observed Atmospheric Composition Change during 1972&amp;ndash;2009.” *Atmospheric Chemistry and Physics* 12 (12): 5447–81. doi:10.5194/acp-12-5447-2012.

Turner, A. J., D. J. Jacob, K. J. Wecht, J. D. Maasakkers, E. Lundgren, A. E. Andrews, S. C. Biraud, et al. 2015. “Estimating Global and North American Methane Emissions with High Spatial Resolution Using GOSAT Satellite Data.” *Atmospheric Chemistry and Physics* 15 (12): 7049–69. doi:10.5194/acp-15-7049-2015.

van Asperen, H., T. Warneke, S. Sabbatini, G. Nicolini, D. Papale, and J. Notholt. 2015. “The Role of Photo- and Thermal Degradation for CO2 and CO Fluxes in an Arid Ecosystem.” *Biogeosciences* 12 (13): 4161–74. doi:10.5194/bg-12-4161-2015.

van der Laan, S, S N Manohar, A T Vermeulen, F C Bosveld, H A J Meijer, A C Manning, M K van der Molen, and I T van der Laan-Luijkx. 2016. “Inferring 222Radon Soil Fluxes from Ambient 222Radon Activity and Eddy Covariance Measurements of CO2.” *Atmospheric Measurement Techniques Discussions* 2016 (May). Copernicus Publications: 1–18. doi:10.5194/amt-2016-93.

Vardag, S. N., C. Gerbig, G. Janssens-Maenhout, and I. Levin. 2015. “Estimation of Continuous Anthropogenic CO2: Model-Based Evaluation of CO2, CO, δ13C(CO2) and Δ14C(CO2) Tracer Methods.” *Atmospheric Chemistry and Physics* 15 (22): 12705–29. doi:10.5194/acp-15-12705-2015.

Vardag, S. N., S. Hammer, S. O’Doherty, T. G. Spain, B. Wastine, A. Jordan, and I. Levin. 2014. “Comparisons of Continuous Atmospheric CH4, CO2 and N2O Measurements &ndash; Results from a Travelling Instrument Campaign at Mace Head.” *Atmospheric Chemistry and Physics* 14 (16): 8403–18. doi:10.5194/acp-14-8403-2014.

Vardag, S. N., S. Hammer, M. Sabasch, D. W. T. Griffith, and I. Levin. 2015. “First Continuous Measurements of δ18O-CO2 in Air with a Fourier Transform Infrared Spectrometer.” *Atmospheric Measurement Techniques* 8 (2): 579–92. doi:10.5194/amt-8-579-2015.

Vargas, A., D. Arnold, J.A. Adame, C. Grossi, M.A. Hernández-Ceballos, and J.P. Bolivar. 2015. “Analysis of the Vertical Radon Structure at the Spanish ‘El Arenosillo’ Tower Station.” *Journal of Environmental Radioactivity* 139 (January): 1–17. doi:10.1016/j.jenvrad.2014.09.018.

Vollmer, Martin K., Stefan Reimann, Matthias Hill, and Dominik Brunner. 2015. “First Observations of the Fourth Generation Synthetic Halocarbons HFC-1234yf, HFC-1234ze(E), and HCFC-1233zd(E) in the Atmosphere.” *Environmental Science & Technology* 49 (5): 2703–8. doi:10.1021/es505123x.

Vollmer, Martin K., Tae Siek Rhee, Matt Rigby, Doris Hofstetter, Matthias Hill, Fabian Schoenenberger, and Stefan Reimann. 2015. “Modern Inhalation Anesthetics: Potent Greenhouse Gases in the Global Atmosphere.” *Geophysical Research Letters* 42 (5): 1606–11. doi:10.1002/2014GL062785.

Vollmer, Martin K., Matt Rigby, Johannes C. Laube, Stephan Henne, Tae Siek Rhee, Lauren J. Gooch, Angelina Wenger, et al. 2015. “Abrupt Reversal in Emissions and Atmospheric Abundance of HCFC-133a (CF 3 CH 2 Cl).” *Geophysical Research Letters* 42 (20): 8702–10. doi:10.1002/2015GL065846.

Walter, S., A. Kock, T. Steinhoff, B. Fiedler, P. Fietzek, J. Kaiser, M. Krol, et al. 2016. “Isotopic Evidence for Biogenic Molecular Hydrogen Production in the Atlantic Ocean.” *Biogeosciences* 13 (1): 323–40. doi:10.5194/bg-13-323-2016.

Wang, Kai, Xunhua Zheng, Mari Pihlatie, Timo Vesala, Chunyan Liu, Sami Haapanala, Ivan Mammarella, Üllar Rannik, and Huizhi Liu. 2013. “Comparison between Static Chamber and Tunable Diode Laser-Based Eddy Covariance Techniques for Measuring Nitrous Oxide Fluxes from a Cotton Field.” *Agricultural and Forest Meteorology* 171-172 (April): 9–19. doi:10.1016/j.agrformet.2012.11.009.

Wang, Z., N. M. Deutscher, T. Warneke, J. Notholt, B. Dils, D. W. T. Griffith, M. Schmidt, M. Ramonet, and C. Gerbig. 2014. “Retrieval of Tropospheric Column-Averaged CH4 Mole Fraction by Solar Absorption FTIR-Spectrometry Using N2O as a Proxy.” *Atmospheric Measurement Techniques* 7 (10): 3295–3305. doi:10.5194/amt-7-3295-2014.

Weaver, C., C. Kiemle, S. R. Kawa, T. Aalto, J. Necki, M. Steinbacher, J. Arduini, F. Apadula, H. Berkhout, and J. Hatakka. 2014. “Retrieval of Methane Source Strengths in Europe Using a Simple Modeling Approach to Assess the Potential of Spaceborne Lidar Observations.” *Atmospheric Chemistry and Physics* 14 (5): 2625–37. doi:10.5194/acp-14-2625-2014.

Wecht, K. J., D. J. Jacob, M. P. Sulprizio, G. W. Santoni, S. C. Wofsy, R. Parker, H. Bösch, and J. Worden. 2014. “Spatially Resolving Methane Emissions in California: Constraints from the CalNex Aircraft Campaign and from Present (GOSAT, TES) and Future (TROPOMI, Geostationary) Satellite Observations.” *Atmospheric Chemistry and Physics* 14 (15): 8173–84. doi:10.5194/acp-14-8173-2014.

Yoshida, Y., N. Kikuchi, I. Morino, O. Uchino, S. Oshchepkov, A. Bril, T. Saeki, et al. 2013. “Improvement of the Retrieval Algorithm for GOSAT SWIR XCO2 and XCH4 and Their Validation Using TCCON Data.” *Atmospheric Measurement Techniques* 6 (6): 1533–47. doi:10.5194/amt-6-1533-2013.

Zazzeri, G., D. Lowry, R.E. Fisher, J.L. France, M. Lanoisellé, and E.G. Nisbet. 2015. “Plume Mapping and Isotopic Characterisation of Anthropogenic Methane Sources.” *Atmospheric Environment* 110 (June): 151–62. doi:10.1016/j.atmosenv.2015.03.029.