Marc AUBINET Curriculum Vitae

|  |  |
| --- | --- |
| **NAME** : | AUBINET |
| **FIRST NAMES :** | Marc, Félix, Anne, Ghislain |
| **BIRTH DATE :** | Brussels, 02 October 1956 |
| **MARITAL STATUS :** | Married to Pascale SAINTROND  Two children: Suzanne (1985) and François (1988). |
| **PROFESSIONAL ADDRESS :** | University of Liège, Gembloux Agro-Bio Tech  2 Passage des Déportés, B-5030 GEMBLOUX, BELGIUM  E mail : [marc.aubinet@ulg.ac.be](file:///C:\\Documents%20and%20Settings\\aubinet.m\\Mes%20documents\\Users\\K.Berghmans\\AppData\\Local\\Temp\\marc.aubinet@ulg.ac.be) |

# DIPLOMAS:

* Master in Sciences (Physics)  
  University of Liège, July 1984, Great Distinction.
* **PhD in Agricultural Sciences**Faculty of Agricultural Science, Gembloux, May 1991, The Greatest Distinction.

# MAIN CURRENT FONCTIONS :

* Retired since 2016.
* Professor, then Ordinary professor, from 2001 to 2016.
* Director of the axis Ecosystem Atmosphere Exchanges (formerly. Unit of Biosystem Physics), from 2001 to 2016.

# FIELD OF EXPERTISE:

**Teaching:** General Physics, Environmental Physics, Modelling Biosystem exchanges, Bioclimatology.

**Research: M**icrometeorology, Ecosystem Atmosphere Exchanges, Eddy covariance methodology, Ecosystem carbon budget.

# PUBLICATIONS:

~ 110 papers in IF journals, 10 books or book chapters (see list in Annex);

**Citations:** over 12500 in SCOPUS; over 20000 in Google Scholar;

**h factor:** 43 in Scopus ; 51 in Google Scholar .

# AWARDS:

* World Meteorological Organization : Gerbier-Mumm Price 2012 (co-award).
* Web of Science : Highly Cited researcher 2000-2012 (domain : Agronomy) (<http://highlycited.com/>).
* American Meteorological Society: Award For Outstanding Achievement In Biometeorology, 2017.

# PhD (CO-)PROMOTIONS

Bernard LONGDOZ (2002), Souleymane TOURE (2002), Dominique PERRIN (2005), Bernard HEINESCH (2007), Christine MOUREAUX (2008), Marie SULEAU (2010), Quentin LAFFINEUR (2012), Pauline BUYSSE (2013), Stéphanie GOFFIN (2014), Elisabeth JEROME (2014), Expédit AGO (2016).

**RESEARCH GROUP/PROJECT COORDINATION:**

* 1996 – 1998: Working group on software inter-comparison and measurement methodology (6 European teams in the frame of EUROFLUX). Led to the publication, in 2000, of the EUROFLUX methodology paper (1800 citations in Google Scholar).
* 2000 – 2003: Task force group on Data Quality (6 European teams in the frame of CARBOEUROFLUX).
* 2004 – 2008: ADVEX group (7 European teams in the frame of CARBOEUROPE). Led to the publication of 11 papers and one special issue in Agricultural and Forest Meteorology).
* 1996 – Present: Vielsalm Terrestrial Observatory: Forest site equipped with Eddy covariance measurements (data requested by several hundreds of teams from all the world, data presented in more than 60 papers).
* 2004 – Present: Lonzée Terrestrial Observatory: Crop site equipped with Eddy covariance measurements (data requested by several hundreds of teams from all the world, data presented in more than 20 papers).
* 2010 – Present: Dorinne Terrestrial Observatory: Grazed grassland site equipped with Eddy covariance measurements (one published paper, 3 submitted papers).

- 2009 – 2011: Coordination (with Dario Papale and Timo Vesala) of the writing of the book: Eddy covariance: A practical guide to measurement and data analysis (over 430 citations in Google Scholar).

- 2013: Coordination of the writing of the ICOS protocol for high frequency concentrations.

- 2013 – Present: Coordination of the network ICOS-Wallonia (3 sites, 7 Walloon teams).

**ORGANISATION AND CHAIR OF INTERNATIONAL WORKSHOPS**

* 1996: 4th EUROFLUX meeting, Antwerpen (Belgique). Organisation in collaboration with the University of Antwerpen.
* 2004: CARBOEUROPE workshop on gap filling and partitioning, Viterbo (Italy), Chair.
* 2004 à 2008 : CARBOEUROPE-IP Advection group meetings : six meetings in Italy, Czech Republic, Ireland, Finland, Germany and Crete. Chair.
* 2006 : ILEAPS meeting “Flux measurement in difficult conditions”, Boulder (Colorado).

Member of steering committee and chair.

* 2006 : International Summer school on eddy covariance, Wépion (Belgium). Organization, coordination, teaching.

2007 : Lessons of ten years of eddy covariance measurements, (in the frame of the attribution of the title of Doctor Honoris Causa to Riccardo Valentini, Gembloux, Belgium). Chair.

* 2008: Final ADVEX conference, Gembloux (Belgium). Organization and Chair.
* 2010 : Chaire Francqui in Gembloux Agro-Bio Tech (invited professor : Philippe Ciais). Organization.
* 2013 : ICOS-France Winter school on eddy covariance, Gembloux (Belgium), organization, coordination and chair.
* 2015 : ICOS workshop on ancillary measurements, Gembloux (Belgium), organization in collaboration with University of Antwerpen.
* From 2017 : co Convener of the session “Air – land interactions”, European Geophysical Union, Vienna.

**INVITED CONFERENCES/TALKS (INTERNATIONAL AUDIENCE)**

* Advanced approaches for evaluating sinks of global warming gases - Global Environment Tsukuba 1999 », Tsukuba (Japan), 1999.
* Unaccounted Flux in Long-term Studies of Carbon and Energy Exchanges, Boulder, Colorado (USA), 2000.
* Invited professor at school AGRHYMET, Niamey, Niger, 2001.
* Invited professor at Université Henry Poincaré, Nancy, France, 2006.
* Flux measurement in difficult conditions, ILEAPS meeting, Boulder, Colorado, 2006.
* Integrating and scaling processes: from plot to landscape ecosystem study, Sateco conference, Gifu, Japan, 2008.
* Water (Hydro) Science seminars, Technical University of Dresden, Germany, 2010.
* Seminar in the frame of the PhD defense of Petra Kroon, Technical University of Delft, Delft, The Netherlands, 2010.
* Informal meeting of the working party on the environment, Belgian presidency of the Council of the European Union, Spa, Belgium, 2010.

**REVIEWS**

* Member of the Commissie voor Toegepaste Biologie, FWO (Belgium), 2000 to 2009.
* Editor for « Agricultural and Forest Meteorology » (2012-2014), 215 treated assignments.
* Member of « Agricultural and Forest Meteorology » editorial board (2010-2012).
* Guest editor for « Agricultural and Forest Meteorology » (2010).
* Subject matter editor pour “Ecological Application” (2008).
* Reviews for Nature, Biogeochemistry, Agricultural and Forest Meteorology, Atmospheric Environment, BASE, Boundary Layer Meteorology, Global Change Biology, Journal of Geophysical Research, Tellus, Theoretical and Applied Climatology, …50 to 100 treated manuscripts.
* Project evaluation for the Natural Environment Research Council (UK).
* Candidate evaluation for the University of Corvallis (Oregon, USA).
* PhD reporter or jury member of about 20 PhD Theses in France, Germany, Benin, The Netherlands and Belgium.

**OTHER PAST FUNCTIONS**

* President of the Department BIOSystem Engineering (2014 - 2016)
* 2013-2014 : President of the ICOS Monitoring System Assembly for Ecosystems
* Vice president of the Unit TERRA, Gembloux Agro-Bio Tech, since 2015.

​

Marc Aubinet – List of publications

​

​Articles

1. Arriga,N, Rannik, Ü, Aubinet, M, Carrara, A, Vesala,T, Papale, D (2017). Experimental validation of footprint models for eddy covariance CO2 flux measurements above grassland by means of natural and artifi cial tracers. Agricultural and Forest Meteorology 242 75–84.
2. Buysse,P, Bodson, B, Debacq, A, De Ligne, A, Heinesch, B, Manise, T, Moureaux, C, Aubinet, M (2017). Carbon budget measurement over 12 years at a crop production site in thesilty-loam region in Belgium. Agricultural and Forest Meteorology 246 241–255
3. Lognoul, M., Theodorakopoulos, N., Hiel, M.-P., Broux, F., Regaert, D., Heinesch, B., Bodson, B., Vandenbol, M., Aubinet, M.(2017). Impact of tillage on greenhouse gas emissions by an agricultural crop and dynamics of N2O fluxes: Insights from automated closed chamber measurements. Soil & Tillage Research, 167, 80-89.
4. Dumortier, P., Aubinet, M., Beckers, Y., Chopin, H., Debacq, A., Gourlez de la Motte, L., Jérome, E., Wilmus, F., Heinesch,B. (2017). Methane balance of an intensively grazed pasture and estimation of the enteric methane emissions from cattle. Agricultural and Forest Meteorology, 232, 527–535.
5. Mozaffar, A., Schoon, N., Digrado, A., Bachy, A., Delaplace, P., du Jardin, P., Fauconnier, M.-L., Aubinet, M., Heinesch, B., Amelynck, C. (2017). Methanol emissions from maize: Ontogenetic dependence to varying light conditions and guttation as an additional factor constraining the flux. Atmospheric Environment, 152, 405-417.
6. Theodorakopoulos, N., Lognoul, M., Degrune, F., Broux, F., Regaert, D., Muys, C., Heinesch, B., Bodson, B., Aubinet, M.,& Vandenbol, M. (2017). Increased expression of bacterial amoA during an N2O emission peak in an agricultural field. Agriculture, Ecosystems & Environment, 236, 212-220.
7. Soubie,R, Heinesch, B, Granier, A, Aubinet, M, Vincke, C (2016). Evapotranspiration assessment of a mixed temperate forest by fourmethods: Eddy covariance, soil water budget, analytical and model. Agricultural and Forest Meteorology 228–229 191–204
8. Gourlez de la Motte, L., Jérôme, E., Mamadou, O., Bodson, B., Beckers, Y., Heinesch, B., Aubinet, M. (2016). Carbon balance of an intensively grazed grassland in southern Belgium. Agricultural and Forest Meteorology, 228-229, 370-383.
9. Bachy, A., Aubinet, M., Schoon, N., Amelynck, C., Bodson, B., Moureaux, C., & Heinesch, B. (2016). Are BVOC exchanges in agricultural ecosystems overestimated? Insights from fluxes measured in a maize field over a whole growing season. Atmospheric Chemistry and Physics, 16 (8).
10. Aubinet, M., Joly, L., Loustau, D., De Ligne, A., Chopin, H., Cousin, J., Chauvin, N., Decarpenterie, T., Gross, P. (2016). Dimensioning IRGA Gas Sampling System : Laboratory And Field Experiments. *Atmospheric Measurement Technology*, 9, in press.
11. Mamadou, O., Gourlez de la Motte, L., De Ligne, A., Heinesch, B., Aubinet, M. (2016). Sensitivity of the annual net ecosystem exchange to the cospectral model used for high frequency loss corrections at a grazed grassland site. Agricultural and Forest Meteorology, 228-229
12. Ago, E. E., Agbossou, E. K., Ozer, P., & Aubinet, M. (2016). Mesure des flux de CO2 et séquestration de carbone dans les écosystèmes terrestres ouest-africains (Synthèse Bibliographique). *Biotechnology, Agronomy, Society and Environment, 20*(1), 68-82.
13. Ago, E. E., Serça, D., Agbossou, E. K., Galle, S., & Aubinet, M. (2015). Carbon dioxide fluxes from a degraded Woodland in West Arica and their responses to main environmental factors. *Carbon Balance and Management, 10*, DOI 10.1186/s13021-015-0033-6.
14. Goffin, S., Wylock, C., Haut, B., Maier, M., Longdoz, B., & Aubinet, M. (2015). Modeling soil CO2 production and transport to investigate the intra-day variability of surface efflux and soil CO2 concentration measurements in a Scots Pine Forest (Pinus Sylvestris, L.). *Plant and Soil*, 390(1), 195-211.
15. Ago, E. E., Agbossou, E. K., Galle, S., Cohard, J.-M., Heinesch, B., & Aubinet, M. (2014). Long term observations of carbon dioxide exchange over cultivated savanna under a Sudanian climate in Benin (West Africa). *Agricultural and Forest Meteorology, 197*, 13-25.
16. Goffin, S., Aubinet, M., Maier, M., Plain, C., Schack-Kirchner, H., & Longdoz, B. (2014). Characterization of the soil CO2 production and its carbon isotope composition in forest soil layers using the flux-gradient approach. *Agricultural and Forest Meteorology, 188*, 45-57.
17. Jerome, E., Beckers, Y., Bodson, B., Heinesch, B., Moureaux, C., & Aubinet, M. (2014). Impact of grazing on carbon dioxide exchanges in an intensively managed Belgian grassland. *Agriculture, Ecosystems & Environment, 194*, 7-16.
18. Vranken, I., Baudry, J., Aubinet, M., Visser, M., & Bogaert, J. (2014). A review on the use of entropy in landscape ecology: heterogeneity, unpredictability, scale dependence and their links with thermodynamics. *Landscape Ecology,* 30, 51-65.
19. Buysse, P., Schnepf-Kiss, A.-C., Carnol, M., Malchair, S., Roisin, C., & Aubinet, M. (2013). Fifty years of crop residue management have a limited impact on soil heterotrophic respiration. *Agricultural and Forest Meteorology, 180*, 102-111.
20. Simpraga, M., Verbeeck, H., Bloemen, J., Vanhaecke, L., Demarcke, M., Joó, E., Pokorska, O., Amelynck, C., Schoon, N., Dewulf, J., Van Langenhove, H., Heinesch, B., Aubinet, M., & Steppe, K. (2013). Vertical canopy gradient in photosynthesis and monoterpenoid emissions: An insight into the chemistry and physiology behind. *Atmospheric Environment, 80*, 85-95.
21. Laffineur, Q., Aubinet, M., Schoon, N., Amelynck, C., Müller, J.-F., Dewulf, J., Steppe, K., & Heinesch, B. (2013). Impact of diffuse light on isoprene and monoterpene emissions from a mixed temperate forest. *Atmospheric Environment, 46*(74), 385-392.
22. Buysse, P., Goffin, S., Carnol, M., Malchair, S., Debacq, A., Longdoz, B., & Aubinet, M. (2013). Short-term temperature impact on soil heterotrophic respiration in limed agricultural soil samples. *Biogeochemistry, 112*(1-3), 441-455.
23. Buysse, P., Roisin, C., & Aubinet, M. (2013). Fifty years of contrasted residue management of an agricultural crop: impacts on the soil carbon budget and on heterotrophic respiration. *Agriculture, Ecosystems & Environment, 167*, 52-59.
24. Zona, D., Janssens, I. A., Aubinet, M., Gioli, B., Vicca, S., Fichot, R., & Ceulemans, R. (2013). Fluxes of the greenhouse gases (CO2, CH4 and N2O) above a short-rotation poplar plantation after conversion from agricultural land. *Agricultural and Forest Meteorology, 169*, 100-110.
25. Hmimina, G., Dufrêne, E., Pontailler, J.-Y., Delpierre, N., Aubinet, M., Caquet, B., de Grandcourt, A., Burban, B., Flechard, C., Granier, A., Gross, P., Heinesch, B., Longdoz, B., Moureaux, C., Ourcival, J.-M., Rambal, S., Saint André, L., & Soudani, K. (2013). Evaluation of the potential of MODIS satellite data to predict vegetation phenology in different biomes: An investigation using ground-based NDVI measurements. *Remote Sensing of Environment*, (132), 145-158.
26. Laffineur, Q., Aubinet, M., Schoon, N., Amelynck, C., Müller, J.-F., Dewulf, J., Van Langenhove, H., Steppe, K., & Heinesch, B. (2012). Abiotic and biotic control of methanol exchanges in a temperate mixed forest. *Atmospheric Chemistry and Physics, 12*, 577-590.
27. Maier, M., Schack-Kirchner, H., Aubinet, M., Goffin, S., Longdoz, B., & Parent, F. (2012). Turbulence effect on gas transport in three contrasting forest soils. *Soil Science Society of America Journal, 76*, 1518-1528.
28. Niu, S., Fei, S., Yuan, W., Schimel, D., Ammann, C., Arain, A., Arneth, A., Aubinet, M., Barr, A., Beringer, J., Bernhofer, C., Black, T. A., Buchmann, N., Cescatti, A., Chen, J., Davis, K. J., Dellwik, E., Desai, A. R., Etzold, S., François, L., Gianelle, D., Gielen, B., Goldstein, A., Groenendijk, M., Gu, L., & et al. (2012). Thermal optimality of net ecosystem exchange of carbon dioxide and underlying mechanisms. *New Phytologist, 194*, 775-783.
29. Soudani, K., Hmimina, K., Delpierre, N., Pontailler, J.-Y., Aubinet, M., Bonal, D., Caquet, B., de Grandcourt, A., Burban, B., Flechard, C., Guyon, D., Granier, A., Gross, P., Heinesch, B., Longdoz, B., Loustau, D., Moureaux, C., Ourcival, J.-M., Rambal, S., Saint André, L., & Defrêne, E. (2012). Ground-based Network of NDVI measurements for tracking temporal dynamics of canopy structure and vegetation phenology in different biomes. *Remote Sensing of Environment, 123*, 234-245.
30. Goffin, S., Longdoz, B., & Aubinet, M. (2011). Apport de l’approche multicouche et du signal isotopique pour la compréhension de la respiration du sol en écosystème forestier. *Biotechnology, Agronomy, Society and Environment [=BASE], 15*(4), 575-584.
31. Šimpraga, M., Verbeeck, H., Demarcke, M., Joó, T., Pokorska, O., Amelynck, C., Schoon, N., Dewulf, J., van Langenhove, H., Heinesch, B., Aubinet, M., Laffineur, Q., Müller, J.-F., & Steppe, K. (2011). Clear link between drought stress, photosynthesis and biogenic volatile organic compounds in Fagus sylvatica L. *Atmospheric Environment, 45*(30), 5254-5259.
32. Joó, É., Dewulf, J., Amelynck, C., Schoon, N., Pokorska, O., Šimpraga, M., Steppe, K., Aubinet, M., & van Langenhove, H. (2011). Constitutive versus heat and biotic stress induced BVOC emissions in Pseudotsuga menziesii. *Atmospheric Environment, 45*(22), 3655-3662.
33. Šimpraga, Verbeeck, H., Demarcke, M., Joó, É., Amelynck, C., Schoon, N., Dewulf, J., van Langenhove, H., Heinesch, B., Aubinet, M., Müller, J.-F., & Steppe, K. (2011). Comparing monoterpenoid emissions and net photosynthesis of beech (Fagus sylvatica L.) in controlled and natural conditions. *Atmospheric Environment, 45*(17), 2922-2928.
34. Foken, T., Aubinet, M., Finnigan, J. J., Leclerc, M. Y., Mauder, M., & Pau U, K. T. (2011). Results Of A Panel Discussion About The Energy Balance Closure Correction For Trace Gases. *Bulletin of the American Meteorological Society, 92*(4), 13-18.
35. Dufranne, D., Moureaux, C., Vancutsem, F., Bodson, B., & Aubinet, M. (2011). Comparison of carbon fluxes, growth and productivity of a winter wheat crop in three contrasting growing seasons. *Agriculture, Ecosystems & Environment, 141*, 133-142.
36. Laffineur, Q., Aubinet, M., Schoon, N., Amelynck, C., Müller, J.-F., Dewulf, J., Van Langenhove, H., Steppe, K., Simpraga, M., & Heinesch, B. (2011). Isoprene and monoterpene emissions from a mixed temperate forest. *Atmospheric Environment, 45*, 3157-3168.
37. Stavrakou, T., Guenther, A., Razavi, A., Clarisse, L., Clerbaux, C., Coheur, P.-F., Hurtmans, D., Karagulian, F., De Mazière, M., Vigouroux, C., Amelynck, C., Schoon, N., Laffineur, Q., Heinesch, B., Aubinet, M., Rinsland, C., & Müller, J.-F. (2011). First space-based derivation of the global atmospheric methanol emission fluxes. *Atmospheric Chemistry and Physics, 11*, 4873-4898.
38. Suleau, M., Moureaux, C., Dufranne, D., Buysse, P., Bodson, B., Destain, J.-P., Heinesch, B., Debacq, A., & Aubinet, M. (2011). Respiration of three Belgian crops: Partitioning of total ecosystem respiration in its heterotrophic, above- and below-ground autotrophic components. *Agricultural and Forest Meteorology*, (151), 633-643.
39. Buysse, P., & Aubinet, M. (2010). La respiration hétérotrophe dans les sols agricoles :description des facteurs importants et comparaison de modèles semi-mécanistes existants. *Biotechnology, Agronomy, Society and Environment [=BASE], 14*(4), 707-717.
40. Smith, P., Lanigan, G., Kutsch, W. L., Buchmann, N., Eugster, W., Aubinet, M., Ceschia, E., Béziat, P., Yeluripati, J. B., Osborne, B., Moors, E. J., Brut, A., Wattenbach, M., Saunders, M., & Jones, M. (2010). Measurements necessary for assessing the net ecosystem carbon budget of croplands. *Agriculture, Ecosystems & Environment, 139*(3), 302-315.
41. Wattenbach, M., Sus, O., Vuichard, N., Lehuger, S., Gottschalk, P., Li, L., Leip, A., Williams, M., Tomelleri, E., Kutsch, W. L., Buchmann, N., Eugster, W., Dietiker, D., Aubinet, M., Ceschia, E., Béziat, P., Grünwald, T., Hastings, A., Osborne, B., Ciais, P., Cellier, P., & Smith, P. (2010). The carbon balance of European croplands: A cross-site comparison of simulation models. *Agriculture, Ecosystems & Environment, 139*(3), 419-453.
42. Aubinet, M., & Feigenwinter, C. (2010). Direct CO2 advection measurements and the night flux problem. *Agricultural and Forest Meteorology, 150*(5), 651-654.
43. Aubinet, M., Feigenwinter, C., Heinesch, B., Bernhofer, C., Canepa, E., Lindroth, A., Montagnani, L., Rebmann, C., Sedlak, P., & Van Gorsel, E. (2010). Direct advection measurements do not help to solve the night-time CO2 closure problem: Evidence from three different forests. *Agricultural and Forest Meteorology, 150*(5), 655-664.
44. Feigenwinter, C., Molder, M., Lindroth, A., & Aubinet, M. (2010). Spatiotemporal evolution of CO2 concentration, temperature, and wind field during stable nights at the Norunda forest site. *Agricultural and Forest Meteorology, 150*(5), 692-701.
45. Feigenwinter, C., Montagnani, L., & Aubinet, M. (2010). Plot-scale vertical and horizontal transport of CO2 modified by a persistent slope wind system in and above an alpine forest. *Agricultural and Forest Meteorology, 150*(5), 665-673.
46. Sedlak, P., Aubinet, M., Heinesch, B., Janous, D., Pavelka, M., Potuznikova, K., & Yernaux, M. (2010). Night-time airflow in a forest canopy near a mountain crest. *Agricultural and Forest Meteorology, 150*(5), 736-744.
47. Ceschia, E., Beziat, P., Dejoux, J. F., Aubinet, M., Bernhofer, C., Bodson, B., Buchmann, N., Carrara, A., Cellier, P., Di Tommasi, P., Elbers, J. A., Eugster, W., Grünwald, T., Jacobs, C. M. J., Jans, W. W. P., Jones, M., Kutsch, W., Lanigan, G., Magliulo, E., Marloie, O., Moors, E. J., Moureaux, C., Olioso, A., Osborne, B., Sanz, M. J., Saunders, M., Smith, P., Soegaard, H., & Wattenbach, M. (2010). Management effects on net ecosystem carbon and GHG budgets at European crop sites. *Agriculture, Ecosystems & Environment, 139*, 363-383.
48. De Ligne, A., Heinesch, B., & Aubinet, M. (2010). New Transfer Functions for Correcting Turbulent Water Vapour Fluxes. *Boundary-Layer Meteorology, 137*(2), 205-221.
49. Demarcke, M., Schoon, N., Van Langenhove, H., Dewulf, J., Joo, E., Steppe, K., Simpraga, M., Heinesch, B., Aubinet, M., Amelynck, C., & Muller, J. F. (2010). History effect of light and temperature on monoterpenoid emissions from Fagus sylvatica L. *Atmospheric Environment, 44*(27), 3261-3268.
50. Eugster, W., Moffat, A. M., Ceschia, E., Aubinet, M., Ammann, C., Osborne, B., Davis, P. A., Smith, P., Jacobs, C., Moors, E., Le Dantec, V., Béziat, P., Saunders, M., Jans, W., Grünwald, T., Rebmann, C., Kutsch, W. L., Czerny, R., Janous, D., Moureaux, C., Dufranne, D., Carrara, A., Magliulo, V., Di Tommasi, P., Olesen, J. E., Schelde, K., Olioso, A., Bernhofer, C., Cellier, P., Larmanou, E., Loubet, B., Wattenbach, M., Marloie, O., Sanz, M.-J., Soegaard, H., & Buchmann, N. (2010). Management effects on European cropland respiration. *Agriculture, Ecosystems & Environment, 139*, 346-362.
51. Kutsch, W. L., Aubinet, M., Buchmann, N., Smith, P., Osborne, B., Eugster, W., Wattenbach, M., Schrumpf, M., Schulze, E. D., Tomelleri, E., Ceschia, E., Bernhofer, C., Béziat, P., Carrara, A., Di Tommasi, P., Grünwald, T., Jones, M., Magliulo, V., Marloie, O., Moureaux, C., Olioso, O., Sanz, M. J., Saunders, M., Soegaard, H., & Ziegler, W. (2010). The net biome production of full crop rotations in Europe. *Agriculture, Ecosystems & Environment, 139*, 336-345.
52. Yi, C., Ricciuto, D., Li, R., Wolbeck, J., Xu, X., Nilsson, M., Aires, L., Albertson, J. D., Ammann, C., Arain, M. A., de Araujo, A. C., Aubinet, M., Aurela, M., Barcza, Z., Barr, A., Berbigier, P., Beringer, J., Bernhofer, C., Black, A. T., Bolstad, P. V., Bosveld, F. C., Broadmeadow, M. S. J., Buchmann, N., Burns, S. P., Cellier, P., Chen, J., Chen, J., Ciais, P., Clement, R., Cook, B. D., Curtis, P. S., Dail, D. B., Dellwik, E., Delpierre, N., Desai, A. R., Dore, S., Dragoni, D., Drake, B. G., Dufrene, E., Dunn, A., Elbers, J., Eugster, W., Falk, M., Feigenwinter, C., Flanagan, L. B., Foken, T., Frank, J., Fuhrer, J., Gianelle, D., Goldstein, A., Goulden, M., Granier, A., Gruenwald, T., Gu, L., Guo, H., Hammerle, A., Han, S., Hanan, N. P., Haszpra, L., Heinesch, B., Helfter, C., Hendriks, D., Hutley, L. B., Ibrom, A., Jacobs, C., Johansson, T., Jongen, M., Katul, G., Kiely, G., Klumpp, K., Knohl, A., Kolb, T., Kutsch, W. L., Lafleur, P., Laurila, T., Leuning, R., Lindroth, A., Liu, H., Loubet, B., Manca, G., Marek, M., Margolis, H. A., Martin, T. A., Massman, W. J., Matamala, R., Matteucci, G., McCaughey, H., Merbold, L., Meyers, T., Migliavacca, M., Miglietta, F., Misson, L., Moelder, M., Moncrieff, J., Monson, R. K., Montagnani, L., Montes-Helu, M., Moors, E., Moureaux, C., Mukelabai, M. M., Munger, J. W., Myklebust, M., Nagy, Z., Noormets, A., Oechel, W., Oren, R., Pallardy, S. G., Kyaw, T. P. U., Pereira, J. S., Pilegaard, K., Pinter, K., Pio, C., Pita, G., Powell, T. L., Rambal, S., Randerson, J. T., von Randow, C., Rebmann, C., Rinne, J., Rossi, F., Roulet, N., Ryel, R. J., Sagerfors, J., Saigusa, N., Sanz, M. J., Mugnozza, G.-S., Schmid, H. P., Seufert, G., Siqueira, M., Soussana, J.-F., Starr, G., Sutton, M. A., Tenhunen, J., Tuba, Z., Tuovinen, J.-P., Valentini, R., Vogel, C. S., Wang, J., Wang, S., Wang, W., Welp, L. R., Wen, X., Wharton, S., Wilkinson, M., Williams, C. A., Wohlfahrt, G., Yamamoto, S., Yu, G., Zampedri, R., Zhao, B., & Zhao, X. (2010). Climate control of terrestrial carbon exchange across biomes and continents. *Environmental Research Letters, 5*(3), 034007.
53. Aubinet, M., Moureaux, C., Bodson, B., Dufranne, D., Heinesch, B., Suleau, M., Vancutsem, F., & Vilret, A. (2009). Carbon sequestration by a crop during a four year rotational cycle. *Agricultural and Forest Meteorology, 149*, 407-418.
54. Delpierre, N., Soudani, K., Kostner, B., Pontailler, J.-Y., Nikinmaa, E., Misson, L., Aubinet, M., Bernhofer, C., Granier, A., Grunwald, T., Heinesch, B., Longdoz, B., Ourcival, J., Rambal, S., Vesala, T., Dufrene, E., & François, C. (2009). Exceptional Carbon Uptake In European Forests During The Warm Spring Of 2007: A Data-Model Analysis. *Global Change Biology, 15*(6), 1455-1474.
55. Moderow, U., Aubinet, M., Feigenwinter, C., Kolle, O., Lindroth, A., Mölder, M., Montagnani, L., Rebmann, C., & Bernhofer, C. (2009). Available energy and energy balance closure at four coniferous forest sites across Europe. *Theoretical & Applied Climatology, 98*(3-4), 397-412.
56. Suleau, M., Debacq, A., Dehaes, V., & Aubinet, M. (2009). Wind velocity perturbation of soil respiration measurements using closed dynamic chambers. *European Journal of Soil Science, 60*(4), 515-524.
57. van Gorsel, E., Delpierre, N., Leuning, R., Black, A., Munger, J. W., Wofsy, S., Aubinet, M., Feigenwinter, C., Beringer, J., Bonal, D., Chen, B., Chen, J., Clement, R., Davis, K. J., Desai, A. R., Dragoni, D., Etzold, S., Gruenwald, T., Gu, L., Heinesch, B., Hutyra, L. R., Jans, W. W. P., Kutsch, W., Law, B. E., Leclerc, M. Y., Mammarella, I., Montagnani, L., Noormets, A., Rebmann, C., & Wharton, S. (2009). Estimating nocturnal ecosystem respiration from the vertical turbulent flux and change in storage of CO2. *Agricultural and Forest Meteorology, 149*(11), 1919-1930.
58. Yuan, W., Luo, Y., Richardson, A. D., Oren, R., Luyssaert, S., Janssens, I. A., Ceulemans, R., Zhou, X., Gruenwald, T., Aubinet, M., Berhofer, C., Baldocchi, D. D., Chen, J., Dunn, A. L., Deforest, J. L., Dragoni, D., Goldstein, A. H., Moors, E., Munger, J. W., Monson, R. K., Suyker, A. E., Star, G., Scott, R. L., Tenhunen, J., Verma, S. B., Vesala, T., & Wofsy, S. C. (2009). Latitudinal patterns of magnitude and interannual variability in net ecosystem exchange regulated by biological and environmental variables. *Global Change Biology, 15*(12), 2905-2920.
59. Aubinet, M. (2008). Eddy Covariance Co2 Flux Measurements In Nocturnal Conditions: An Analysis Of The Problem. *Ecological Applications, 18*(6), 1368-1378 .
60. Feigenwinter, C., Bernhofer, C., Eichelmann, U., Heinesch, B., Hertel, M., Janous, D., Kolle, O., Lagergren, F., Lindroth, A., Minerbi, S., Moderow, U., Molder, M., Montagnani, L., Queck, R., Rebmann, C., Vestin, P., Yernaux, M., Zeri, M., Ziegler, W., & Aubinet, M. (2008). Comparison of horizontal and vertical advective CO2 fluxes at three forest sites. *Agricultural and Forest Meteorology, 148*(1), 12-24.
61. Gockede, M., Foken, T., Aubinet, M., Aurela, M., Banza, J., Bernhofer, C., Bonnefond, J.-M., Brunet, Y., Carrara, A., Clement, R., Dellwik, E., Elbers, J., Eugster, W., Fuhrer, J., Granier, A., Grunwald, T., Heinesch, B., Janssens, I., Knohl, A., Koeble, R., Laurila, T., Longdoz, B., Manca, G., Marek, M., Markkanen, T., Mateus, J., Matteucci, G., Mauder, M., Migliavacca, M., Minerbi, S., Moncrieff, J., Montagnani, L., Moors, E., Ourcival, J., Papale, D., Pereira, J., Pilegaard, K., Pita, G., Rambal, S., Rebmann, C., Rodrigues, A., Rotenberg, E., Sanz, M., Sedlak, P., Seufert, G., Siebicke, L., Soussana, J., Valentini, R., Vesala, T., Verbeeck, H., & Yakir, D. (2008). Quality Control Of Carboeurope Flux Data - Part 1: Coupling Footprint Analyses With Flux Data Quality Assessment To Evaluate Sites In Forest Ecosystems. *Biogeosciences, 5*(2), 433-450.
62. Heinesch, B., Yernaux, M., & Aubinet, M. (2008). Dependence of CO2 advection patterns on wind direction on a gentle forested slope. *Biogeosciences, 5*(3), 657-668.
63. Hoyaux, J., Moureaux, C., Tourneur, D., Bodson, B., & Aubinet, M. (2008). Extrapolating the gross primary productivity from leaf to canopy scale in a winter wheat crop. *Agricultural and Forest Meteorology, 148*(4), 668-679.
64. Moureaux, C., Bodson, B., & Aubinet, M. (2008). Mesure des flux de CO2 et bilan carboné de grandes cultures : Etat de la question et méthodologie. *Biotechnology, Agronomy, Society and Environment [=BASE], 12*(3), 303-315.
65. Moureaux, C., Debacq, A., Hoyaux, J., Suleau, M., Tourneur, D., Vancutsem, F., Bodson, B., & Aubinet, M. (2008). Carbon balance assessment of a Belgian winter wheat crop. *Global Change Biology, 14*(6), 1353-1366.
66. Schimel, D., Aubinet, M., & Finnigan, J. (2008). Eddy flux measurements in difficult conditions. *Ecological applications : a publication of the Ecological Society of America, 18*(6) 1338-1339.
67. Granier, A., Reichstein, M., Breda, N., Janssens, I., Falge, E., Ciais, P., Grunwald, T., Aubinet, M., Berbigier, P., Bernhofer, C., Buchmann, N., Facini, O., Grassi, G., Heinesch, B., Ilvesniemi, H., Keronen, P., Knohl, A., Kostner, B., Lagergren, F., Lindroth, A., Longdoz, B., Loustau, D., Mateus, J., Montagnani, L., Nys, C., Moors, E., Papale, D., Peiffer, M., Pilegaard, K., Pita, G., Pumpanen, J., Rambal, S., Rebmann, C., Rodrigues, A., Seufert, G., Tenhunen, J., Vesala, I., & Wang, Q. (2007). Evidence For Soil Water Control On Carbon And Water Dynamics In European Forests During The Extremely Dry Year: 2003. *Agricultural and Forest Meteorology, 143*(1-2), 123-145.
68. Heinesch, B., Aubinet, M., & Yernaux, M. (2007). Some Methodological Questions Concerning Advection Measurements: A Case Study. *Boundary-Layer Meteorology, 122*(2), 457-478.
69. Luyssaert, S., Inglima, I., Jung, M., Richardson, A. D., Reichsteins, M., Papale, D., Piao, S. L., Schulzes, E. D., Wingate, L., Matteucci, G., Aragao, L., Aubinet, M., Beers, C., Bernhoffer, C., Black, K. G., Bonal, D., Bonnefond, J.-M., Chambers, J., Ciais, P., Cook, B., Davis, K. J., Dolman, A. J., Gielen, B., Goulden, M., Grace, J., Granier, A., Grelle, A., Griffis, T., Gruenwald, T., Guidolotti, G., Hanson, P. J., Harding, R., Hollinger, D. Y., Hutyra, L. R., Kolar, P., Kruijt, B., Kutsch, W., Lagergren, F., Laurila, T., Law, B. E., Lindroth, A., Loustau, D., Malhi, Y., Mateus, J., Migliavacca, M., Misson, L., Montagnani, L., Moncrieff, J., Moors, E., Munger, J. W., Nikinmaa, E., Ollinger, S. V., Pita, G., Rebmann, C., Roupsard, O., Saigusa, N., Sanz, M. J., Seufert, G., Sierra, C., Smith, M.-L., Tang, J., Valentini, R., Vesala, T., & Janssens, I. A. (2007). CO2 balance of boreal, temperate, and tropical forests derived from a global database. *Global Change Biology, 13*(12), 2509-2537.
70. Owen, K., Tenhunen, J., Reichstein, M., Wang, Q., Falge, E., Geyer, R., Xiao, X., Stoy, P., Ammann, C., Arain, A., Aubinet, M., Aurela, M., Bernhofer, C., Chojnicki, B., Granier, A., Gruenwald, T., Hadley, J., Heinesch, B., Hollinger, D., Knohl, A., Kutsch, W., Lohila, A., Meyers, T., Moors, E., Moureaux, C., Pilegaard, K., Saigusa, N., Verma, S., Vesala, T., & Vogel, C. (2007). Linking flux network measurements to continental scale simulations: Ecosystem carbon dioxide exchange capacity under non-water-stressed conditions. *Global Change Biology, 13*, 734-760.
71. Reichstein, M., Ciais, P., Papale, D., Valentini, R., Running, S., Viovy, N., Cramer, W., Granier, A., Ogee, J., Allard, V., Aubinet, M., Bernhofer, C., Buchmann, N., Carrara, A., Grunwald, T., Heimann, M., Heinesch, B., Knohl, A., Kutsch, W., Loustau, D., Manca, G., Matteucci, G., Miglietta, F., Ourcival, J., Pilegaard, K., Pumpanen, J., Rambal, S., Schaphoff, S., Seufert, G., Soussana, J., Sanz, M., Vesala, T., & Zhao, M. (2007). Reduction Of Ecosystem Productivity And Respiration During The European Summer 2003 Climate Anomaly: A Joint Flux Tower, Remote Sensing And Modelling Analysis. *Global Change Biology, 13*(3), 634-651.
72. Moureaux, C., Debacq, A., Bodson, B., Heinesch, B., & Aubinet, M. (2006). Annual net ecosystem carbon exchange by a sugar beet crop. *Agricultural and Forest Meteorology, 139*(1-2), 25-39.
73. Ngao, J., Longdoz, B., Perrin, D., Vincent, G., Epron, D., Le Dantec, V., Soudani, K., Aubinet, M., Willm, F., & Granier, A. (2006). Cross-calibration functions for soil CO2 efflux measurement systems. *Annals of Forest Science, 477-484.*
74. Papale, D., Reichstein, M., Aubinet, M., Canfora, E., Bernhofer, C., Kutsch, W., Longdoz, B., Rambal, S., Valentini, R., Vesala, T., & Yakir, D. (2006). Towards A Standardized Processing Of Net Ecosystem Exchange Measured With Eddy Covariance Technique: Algorithms And Uncertainty Estimation. *Biogeosciences, 3*(4), 961-992.
75. Aubinet, M., Berbigier, P., Bernhofer, C. H., Cescatti, A., Feigenwinter, C., Granier, A., Grunwald, T. H., Havrankova, K., Heinesch, B., Longdoz, B., Marcolla, B., Montagnani, L., & Sedlak, P. (2005). Comparing CO2 storage and advection conditions at night at different carboeuroflux sites. *Boundary-Layer Meteorology, 116*(1), 63-94.
76. Aubinet, M., Heinesch, B., Perrin, D., & Moureaux, C. (2005). Discriminating net ecosystem exchange between different vegetation plots in a heterogeneous forest. *Agricultural and Forest Meteorology, 132*(3-4), 315-328.
77. Ciais, P., Reichstein, M., Viovy, N., Granier, A., Ogee, J., Allard, V., Aubinet, M., Buchmann, N., Bernhofer, C., Carrara, A., Chevallier, F., De Noblet, N., Friend, A., Friedlingstein, P., Grunwald, T., Heinesch, B., Keronen, P., Knohl, A., Krinner, G., Loustau, D., Manca, G., Matteucci, G., Miglietta, F., Ourcival, J., Papale, D., Pilegaard, K., Rambal, S., Seufert, G., Soussana, J., Sanz, M., Schulze, E., Vesala, T., & Valentini, R. (2005). Europe-Wide Reduction In Primary Productivity Caused By The Heat And Drought In 2003. *Nature, 437*(7058), 529-533.
78. Hibbard, K. A., Law, B. E., Reichstein, M., Sulzman, J., Aubinet, M., Baldocchi, D., Bernhofer, C., Bolstad, B., Bosc, A., Campbell, J., Cheng, Y., Curiel Yuste, J., Curtis, P., Davidson, E. A., Epron, D., Garnier, A., Grünwald, T., Hollinger, D., Janssens, I. A., Longdoz, B., Loustau, D., Martin, J., Monson, R., Oechel, W., Pippen, J., Ryel, R., Savage, K., Scott-Denton, L., Subke, J.-A., Tang, J., Tenhunen, J., Turcu, V., & Vogel, C. S. (2005). An Analysis of Soil Respiration across Northern Hemisphere Temperate Ecosystems. *Biogeochemistry, 73*(1), 29-70.
79. Rebmann, C., Gockede, M., Foken, T., Aubinet, M., Aurela, M., Berbigier, P., Bernhofer, C., Buchmann, N., Carrara, A., Cescatti, A., Ceulemans, R., Clement, R., Elbers, J., Granier, A., Grunwald, T., Guyon, D., Havrankova, K., Heinesch, B., Knohl, A., Laurila, T., Longdoz, B., Marcolla, B., Markkanen, T., Miglietta, F., Moncrieff, J., Montagnani, L., Moors, E., Nardino, M., Ourcival, J., Rambal, S., Rannik, U., Rotenberg, E., Sedlak, P., Unterhuber, G., Vesala, T., & Yakir, D. (2005). Quality Analysis Applied On Eddy Covariance Measurements At Complex Forest Sites Using Footprint Modelling. *Theoretical and Applied Climatology, 80*(2-4), 121-141.
80. Reichstein, M., Falge, E., Baldocchi, D., Papale, D., Aubinet, M., Berbigier, P., Bernhofer, C., Buchmann, N., Gilmanov, T., Granier, A., Grunwald, T., Havrankova, K., Ilvesniemi, H., Janous, D., Knohl, A., Laurila, T., Lohila, A., Loustau, D., Matteucci, G., Meyers, T., Miglietta, F., Ourcival, J.-M., Pumpanen, J., Rambal, S., Rotenberg, E., Sanz, A., Tenhunen, J., Seufert, G., Vaccari, F., Vesala, T., Yakir, D., & Valentini, R. (2005). On the separation of net ecosystem exchange into assimilation and ecosystem respiration: review and improved algorithm. *Global Change Biology, 11*(9), 1424-1439.
81. Perrin, D., Laitat, E., Aubinet, M., & Yernaux, M. (2004). Modelisation de la reponse des flux de respiration d’un sol forestier selon les principales variables climatiques. *Biotechnology, Agronomy, Society and Environment [=BASE], 8*(1), 15-26.
82. Aubinet, M., Heinesch, B., & Yernaux, M. (2003). Horizontal And Vertical Co2 Advection In A Sloping Forest. *Boundary-Layer Meteorology, 108*(3), 397-417.
83. Wilson, K., Baldocchi, D., Falge, E., Aubinet, M., Berbigier, P., Bernhofer, C., Dolman, H., Field, C., Goldstein, A., Granier, A., Hollinger, D., Katul, G., Law, B., Meyers, T., Moncrieff, J., Monson, R., Tenhunen, J., Valentini, R., Verma, S., & Wofsy, S. (2003). Diurnal Centroid Of Ecosystem Energy And Carbon Fluxes At Fluxnet Sites. *Journal of Geophysical Research. Atmospheres, 108*(D21).
84. Aubinet, M., Heinesch, B., & Longdoz, B. (2002). Estimation Of The Carbon Sequestration By A Heterogeneous Forest: Night Flux Corrections, Heterogeneity Of The Site And Inter-Annual Variability. *Global Change Biology, 8*(11), 1053-1071.
85. Falge, E., Baldocchi, D., Tenhunen, J., Aubinet, M., Bakwin, P., Berbigier, P., Bernhofer, C., Burba, G., Clement, R., Davis, K., Elbers, J., Goldstein, A., Grelle, A., Granier, A., Guomundsson, J., Hollinger, D., Kowalski, A., Katul, G., Law, B., Malhi, Y., Meyers, T., Monson, R., Munger, J., Oechel, W., Paw, K., Pilegaard, K., Rannik, U., Rebmann, C., Suyker, A., Valentini, R., Wilson, K., & Wofsy, S. (2002). Seasonality Of Ecosystem Respiration And Gross Primary Production As Derived From Fluxnet Measurements. *Agricultural and Forest Meteorology, 113*(1-4), 53-74.
86. Falge, E., Tenhunen, J., Baldocchi, D., Aubinet, M., Bakwin, P., Berbigier, P., Bernhofer, C., Bonnefond, J.-M., Burba, G., Clement, R., Davis, K. J., Elbers, J. A., Falk, M., Goldstein, A. H., Grelle, A., Granier, A., Grünwald, T., Gudmundsson, J., Hollinger, D., Janssens, I. A., Keronen, P., Kowalski, A. S., Katul, G., Law, B. E., Malhi, Y., Meyers, T., Monson, R. K., Moors, E., Munger, J. W., Oechel, W., U, K. T. P., Pilegaard, K., Rannik, Ü., Rebmann, C., Suyker, A., Thorgeirsson, H., Tirone, G., Turnipseed, A., Wilson, K., & Wofsy, S. (2002). Phase And Amplitude Of Ecosystem Carbon Release And Uptake Potentials As Derived From Fluxnet Measurements. *Agricultural and Forest Meteorology, 113*(1-4), 75-95.
87. Misson, L., Rasse, D., Vincke, C., Aubinet, M., & François, L. (2002). Predicting transpiration from forest stands in Belgium for the 21st century. *Agricultural and Forest Meteorology, 111*(4), 265-282.
88. Wilson, K., Goldstein, A., Falge, E., Aubinet, M., Baldocchi, D., Berbigier, P., Bernhofer, C., Ceulemans, R., Dolman, H., Field, C., Grelle, A., Ibrom, A., Law, B., Kowalski, A., Meyers, T., Moncrieff, J., Monson, R., Oechel, W., Tenhunen, J., Valentini, R., & Verma, S. (2002). Energy Balance Closure At Fluxnet Sites. *Agricultural and Forest Meteorology, 113*(1-4), 223-243.
89. Wilson, K. B., Baldocchi, D. D., Aubinet, M., Berbigier, P., Bernhofer, C., Dolman, H., Falge, E., Field, C., Goldstein, A., Granier, A., Grelle, A., Halldor, T., Hollinger, D., Katul, G., Law, B. E., Lindroth, A., Meyers, T., Moncrieff, J., Monson, R., Oechel, W., Tenhunen, J., Valentini, R., Verma, S., Vesala, T., & Wofsy, S. (2002). Energy Partitioning Between Latent And Sensible Heat Flux During The Warm Season At Fluxnet Sites. *Water Resources Research, 38*(12), .
90. Aubinet, M., Chermanne, B., Vandenhaute, M., Longdoz, B., Laitat, E., & Yernaux, M. (2001). Long Term Carbon Dioxide Exchange Above A Mixed Forest In The Belgian Ardennes. *Agricultural and Forest Meteorology, 108*(4), 293-315.
91. Falge, E., Baldocchi, D., Olson, R., Anthoni, P., Aubinet, M., Bernhofer, C., Burba, G., Ceulemans, G., Clement, R., Dolman, H., Granier, A., Gross, P., Grunwald, T., Hollinger, D., Jensen, N., Katul, G., Keronen, P., Kowalski, A., Lai, C., Law, B., Meyers, T., Moncrieff, J., Moors, E., Munger, J., Pilegaard, K., Rannik, U., Rebmann, C., Suyker, A., Tenhunen, J., Tu, K., Verma, S., Vesala, T., Wilson, K., & Wofsy, S. (2001). Gap Filling Strategies For Long Term Energy Flux Data Sets. *Agricultural and Forest Meteorology, 107*(1), 71-77.
92. Falge, E., Baldocchi, D., Olson, R., Anthoni, P., Aubinet, M., Bernhofer, C., Burba, G., Ceulemans, R., Clement, R., Dolman, H., Granier, A., Gross, P., Grunwald, T., Hollinger, D., Jensen, N., Katul, G., Keronen, P., Kowalski, A., Lai, C., Law, B., Meyers, T., Moncrieff, H., Moors, E., Munger, J., Pilegaard, K., Rannik, U., Rebmann, C., Suyker, A., Tenhunen, J., Tu, K., Verma, S., Vesala, T., Wilson, K., & Wofsy, S. (2001). Gap Filling Strategies For Defensible Annual Sums Of Net Ecosystem Exchange. *Agricultural and Forest Meteorology, 107*(1), 43-69.
93. Janssens, I., Lankreijer, H., Matteucci, G., Kowalski, A., Buchmann, N., Epron, D., Pilegaard, K., Kutsch, W., Longdoz, B., Grunwald, T., Montagnani, L., Dore, S., Rebmann, C., Moors, E., Grelle, A., Rannik, U., Morgenstern, K., Oltchev, S., Clement, R., Gudmundsson, J., Minerbi, S., Berbigier, P., Ibrom, A., Moncrieff, J., Aubinet, M., Bernhofer, C., Jensen, N., Vesala, T., Granier, A., Schulze, E., Lindroth, A., Dolman, A., Jarvis, P., Ceulemans, R., & Valentini, R. (2001). Productivity Overshadows Temperature In Determining Soil And Ecosystem Respiration Across European Forests. *Global Change Biology, 7*(3), 269-278.
94. Jarvis, P. G., Dolman, A. J., Schulze, E. D., Matteucci, G., Kowalski, A. S., Ceulemans, R., Rebmann, C., Moors, E. J., Granier, A., Gross, P., Jensen, N. O., Pilegaard, K., Lindroth, A., Grelle, A., Bernhofer, C., Grunwald, T., Aubinet, M., Vesala, T., Rannik, U., Berbigier, P., Loustau, D., Guomundson, J., Ibrom, A., Morgenstern, K., Clement, R., Moncrieff, J., Montagnani, L., Minerbi, S., & Valentini, R. (2001). Carbon balance gradient in European forests: should we doubt ‘surprising’ results? A reply to Piovesan & Adams. *Journal of Vegetation Science, 12*(1), 145-150.
95. Martin, P., Nabuurs, G. J., Aubinet, M., Karjalainen, T., Vine, E. L., Kinsman, J., & Heath, L. S. (2001). Carbon sinks in temperate forests. *Annual Review of Energy & the Environment, 26*, 435-465.
96. Rasse, D. P., François, L., Aubinet, M., Kowalski, A. S., Vande Walle, I., Laitat, E., & Gérard, J.-C. (2001). Modelling short-term CO2 fluxes and long-term tree growth in temperate forests with ASPECTS. *Ecological Modelling, 141*(1-3), 35-52.
97. Longdoz, B., Yernaux, M., & Aubinet, M. (2000). Soil Co2 Efflux Measurements In A Mixed Forest: Impact Of Chamber Disturbances, Spatial Variability And Seasonal Evolution. *Global Change Biology, 6*(8), 907-917.
98. Rannik, U., Aubinet, M., Kurbanmuradov, O., Sabelfeld, K., Markkanen, T., & Vesala, T. (2000). Footprint Analysis For Measurements Over A Heterogeneous Forest. *Boundary-Layer Meteorology, 97*(1), 137-166.
99. Valentini, R., Matteucci, G., Dolman, A., Schulze, E., Rebmann, C., Moors, E., Granier, A., Gross, P., Jensen, N., Pilegaard, K., Lindroth, A., Grelle, A., Bernhofer, C., Grunwald, T., Aubinet, M., Ceulemans, R., Kowalski, A., Vesala, T., Rannik, U., Berbigier, P., Loustau, D., Guomundsson, J., Thorgeirsson, H., Ibrom, A., Morgenstern, K., Clement, R., Moncrieff, J., Montagnani, L., Minerbi, S., & Jarvis, P. (2000). Respiration As The Main Determinant Of Carbon Balance In European Forests. *Nature, 404*(6780), 861-865.
100. Aubinet, M., Grelle, A., Ibrom, A., Rannik, U., Moncrieff, J., Foken, T., Kowalski, A. S., Martin, P., Berbigier, P., Bernhofer, C., Clement, R., Elbers, J., Granier, A., Grunwald, T., Morgenstern, K., Pilegaard, K., Rebmann, C., Snijders, W., Valentini, R., & Vesala, T. (1999). Estimates of the annual net carbon and water exchange of forests: the EUROFLUX methodology. *Advances in Ecological Research, 30*, 113-175.
101. Martin, P., Valentini, R., Jacques, M., Fabbri, K., Galati, D., Quaratino, R., Moncrieff, J. B., Jarvis, P., Jensen, N. O., Lindroth, A., Grelle, A., Aubinet, M., Ceulemans, R., Kowalski, A. S., Vesala, T., Keronen, P., Matteucci, G., Grainer, A., Berbingier, P., Loustau, D., Grelle, A., Schulze, E. D., Tenhunen, J., Rebman, C., Dolman, A. J., Elbers, J. E., Bernhofer, C., Grunwald, T., Thorgeirsson, H., Kennedy, P., & Folving, S. (1998). New estimate of the carbon sink strength of EU forests integrating flux measurements, field surveys, and space observations: 0.17-0.35 Gt(C). *AMBIO : A Journal of the Human Environment, 27*(7), 582-584.
102. Aubinet, M. (1997). Comparison between different methods of measurement of momentum and sensible heat fluxes over canopies. *Biotechnology, Agronomy, Society and Environment, 1*(1), 17-25.
103. Laitat, E., Boussard, H., Aubinet, M., & Csintalan, Z. (1995). La mesure des echanges gazeux foliaires en ecophysiologie vegetale. Note technique sur la mise au point d’un systeme portable integre de mesure differentielle. *Bull. des Rech. Agron. de Gembloux*, (3).
104. Aubinet, M. (1994). Longwave Sky Radiation Parametrizations. *Solar Energy, 53*(2), 147-154.
105. Aubinet, M., & Deltour, J. (1994). Natural-Convection Above Line Heat-Sources In Greenhouse Canopies. *International Journal of Heat and Mass Transfer, 37*(12), 1795-1806.
106. Aubinet, M. (1993). Une nouvelle approche des echanges gazeux entre couverts vegetaux et atmosphere. La correlation de turbulences. *Bull. des Rech.s Agron. de Gembloux, 28*(4).
107. Aubinet, M., Yernaux, M., & Deltour, J. (1992). Mesure et calibration d’anémomètres à thermistors pour la mesure de faibles vitesses d’écoulements d’air. *Journal de Physique Iii, 2*(12).
108. Aubinet, M., Deltour, J., & Nijskens, J. (1991). Modélisation des mouvements aérodynamiques générés par le chauffage en culture protégée. *Bull. des Rech. Agron. de Gembloux, 26*(1), 39-58.
109. Aubinet, M., Deltour, J., De Halleux, D., & Nijskens, J. (1989). Stomatal regulation in greenhouse crops. *Acta Horticulturae, 248*, 361-364.
110. Aubinet, M., Deltour, J., Dehalleux, D., & Nijskens, J. (1989). Stomatal Regulation In Greenhouse Crops - Analysis And Simulation. *Agricultural and Forest Meteorology, 48*(1-2), 21-44.
111. Deltour J., de Halleux, D., Aubinet, M., Nijskens, J., Coutisse, S., & Nisen, A. (1987). Influence des parametres de croissance de la vegetation sur le bilan energetique d’une serre. . *Bull. des Rech. Agron. de Gembloux, 22*(3).

Books and book chapters

1. Aubinet, M., Vesala, T., & Papale, D. (2012). *Eddy Covariance: A Practical Guide to Measurement and Data Analysis*. Springer.
2. Aubinet, M., Feigenwinter, C., Heinesch, B., Laffineur, Q., Papale, D., Reichstein, M., Rinne, J., & Van Gorsel, E. (2012). Chapter 5: Night time Flux correction. In M., Aubinet, T., Vesala, & D., Papale (Eds.), *Eddy Covariance: A Practical Guide to Measurement and Data Analysis*. Springer.
3. Foken, T., Aubinet, M., & Leuning, R. (2012). Chapter 1: The eddy covariance method. In M., Aubinet, T., Vesala, & D., Papale (Eds.), *Eddy covariance: A Practical Guide to Measurement and Data Analysis*. Springer.
4. Foken, T., Leuning, R., Oncley, S. R., Mauder, M., & Aubinet, M. (2012). Chapter 4: Corrections and data quality control. In M., Aubinet, T., Vesala, & D., Papale (Eds.), *Eddy Covariance: A Practical Guide to Measurement and Data Analysis*. Springer.
5. Rebmann, C., Kolle, O., Heinesch, B., Queck, R., Ibrom, A., & Aubinet, M. (2012). Chapter 3: Data Acquisition and Flux Calculations. In M., Aubinet, T., Vesala, & D., Papale (Eds.), *Eddy Covariance: A Practical Guide to Measurement and Data Analysis*. Springer.
6. Richardson, A. D., Aubinet, M., Barr, A. G., Hollinger, D. Y., Ibrom, A., Lasslop, G., & Reichstein, M. (2012). Chapter 7: Uncertainty quantification. In M., Aubinet, T., Vesala, & D., Papale (Eds.), *Eddy Covariance: A Practical Guide to Measurement and Data Analysis*. Springer.
7. Aubinet, M., Clément, R., Elbers, J. A., Foken, T., Grelle, A., Ibrom, A., Moncrieff, J., Pilegaard, K., Rannik, Ü., & Rebmann, C. (2003). Methodology for data acquisition, storage and treatment. In R., Valentini (Ed.), *Fluxes of Carbon, Water and Energy of European Forests* (pp. 9-36). Berlin, Allemagne: Springer-Verlag.
8. Bernhofer, C., Aubinet, M., Clément, R., Grelle, A., Grünwald, T., Ibrom, A., Jarvis, P., Rebmann, C., Schulze, E.-D., & Tenhunen, J. (2003). Spruce forests (Norway and Sitka spruce, including Douglas fir): Carbon and water fluxes, Balances, Ecological and ecophysiological determinants. In R., Valentini (Ed.), *Fluxes of Carbon, Water and Energy of European Forests* (pp. 99-124). Berlin, Allemagne: Springer-Verlag.
9. Falge, E., Tenhunen, J., Aubinet, M., Bernhofer, C., Clément, R., Granier, A., Kowalski, A., Moors, E., Pilegaard, K., Rannik, Ü., & Rebmann, C. (2003). A Model Based Study of Carbon Fluxes at Ten European Forest Sites. In R., Valentini (Ed.), *Fluxes of Carbon, Water and Energy of European Forests* (pp. 151-178). Berlin, Allemagne: Springer-Verlag.
10. Granier, A., Aubinet, M., Epron, D., Falge, E., Gumundsson, J., Jensen, N.-O., Köstner, B., Matteucci, G., Pilegaard, K., Schmidt, M., & Tenhunen, J. (2003). Deciduous forests: carbon and water fluxes balances, ecological and ecophysiological determinants. In R., Valentini (Ed.), *Fluxes of Carbon, Water and Energy of European Forests* (pp. 55-70). Berlin, Allemagne: Springer-Verlag.