

Curriculum Vitae of Francesco Miglietta

[Si rilascia l'autorizzazione al trattamento dei dati personali ai sensi del D. lgs 30 giugno 2003 n. 196 e s.m.i.]



Career synopsis

Francesco Miglietta accumulated, during his career (1982-present), relevant scientific experience in weed science, satellite remote sensing applications for agriculture and crop modelling with specific expertise in phenology. In the nineties he developed innovative approaches in impact studies of rising atmospheric CO₂ concentrations on crops and vegetation and developed the most widespread FACE technologies (Free Air Carbon Dioxide Enrichment). He also started new research in terrestrial carbon-cycle science with reference to mass and energy exchanges between vegetated surfaces and the atmosphere that led to the launch of the first Italian SERA (Small Environmental Research Aircraft). He also recently approached innovative studies on climate change mitigation strategies in the forest and agricultural sectors.

He authored so far 144 papers in JCR scientific journals and edited several scientific books (Web of Science H-Index= 40; Google H-Index=49), being currently ranked at the 74th position among the Top Italian Scientists (Via-Academy) where he occupies the second position among terrestrial plant ecologists.

He has been the coordinator of 6 major EU-Projects (including one for the ESA-Earth Explorer Programme) from 1987 to present and he participated in 21 EU-funded projects. He has also been awarded by several grants from private industries where he developed original technology transfer actions.

He has a long and documented experience in research management of complex structures since he was elected in the National CNR Committees of Agricultural and Information Science & Technology, appointed in several Scientific Committees of Research Institutes and more recently in the Scientific Committee of Agriculture and Food Department of CNR. Since 2010 he's the scientific Director of FoxLab, a joint research Initiative in collaboration between CNR and the Fondazione E.Mach in San Michele a/Adige (TN)

Personal information

First name(s) / Surname(s): **Francesco Miglietta**

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Nationality Italian

Date of birth 07/08/1954

Gender male

Education: Date & Title of qualification awarded

- 1973 - Maturità Scientifica, Liceo C.Colombo, Genova
- 1980 - Laurea in Scienze Agrarie, Università di Firenze (110 lode/110)

- 1992 - PhD in Agricultural and Environmental Sciences Agricultural University of Wageningen, The Netherlands

Work experience

- 1982-1984 Borsa addestramento ricerca ex-lege 285
- 1984-1992 Ricercatore CNR at IATA-CNR
- 1992-1996 Primo Ricercatore CNR at IBIMET-CNR
- 1996- Dirigente di Ricerca at IBIMET-CNR

Research management experience at CNR

- 1989-1999: Member elected at Consiglio Scientifico dello IATA-CNR
- 1988-1994: Member elected at Comitato Nazionale di Consulenza Scienze Agrarie CNR
- 1988-1994: Member elected at Comitato Nazionale di Consulenza Scienze e Tecno.Informazione CNR
- 1992-1994: Scientific Board of Istituto per la Propagazione delle Specie Legnose del CNR – Firenze 1992-1994: Scientific Board Istituto per l'Idrologia ed Ecologia Forestale del CNR - Castiglione Scalo, Cosenza
- 1994-1995: Commissione di Pre-fattibilità del Progetto finalizzato IPSA
- 1994-1998: Representative of Minister of Education at Comitato Nazionale di Consulenza Scienze Agrarie CNR
- 1996-1998: Regional Commission for Energy of the Regione Toscana (CNR Representative)
- 1997-2001: Member of the Italian IGBP-CNR Commission (International Geosphere-Biosphere Programme)
- 2001-2004: Vice-President of the second Italian IGBP Commission
- 2006-2012: Member of the Consiglio Scientifico del Dipartimento Agroalimentare - CNR
- 2009-present: CNR-Delegate at EPSO - European Plant Science Organisation
- 2010-2014: Member of Editorial Board of CNR (Comitato Editoriale)
- 2010-present: Scientific Director of FoxLab, joint research initiative CNR/E.Mach Foundation
- 2013-present: Member of the Agri-Food Department Task Force
- 2014-present: Member of the Centro Multitecnologico CNR, Sesto Fiorentino (FI)
- 2014-present: Member of the Commissione Accordi Internazionali CNR

Other research management experience

- 1986-1988: Consiglio Scientifico del Programma Quadro di intervento coordinato sul controllo nell'uso dei prodotti chimici in Agricoltura della Provincia di Firenze (Member)
- 1987-1989: Scientific Board of Servizio Meteorologico Regionale dell'Abruzzo (Expert)
- 1990-1992: Progetto Bilaterale di Cooperazione Scientifica British Council-MURST on biotic and abiotic stress of vegetation (Italian representative)
- 2002: European Science Foundation into the ESF-SAC, Scientific Advisory Committee of EUFAR, European Fleet for Airborne Research (Chairman)
- 2001-2008: Italian representative at IGBP (International Geosphere Biosphere Programme) of ICSU (International Council of Scientific Union)
- 1997-2003 IGBP-GCTE, Global Change and Terrestrial Ecosystems (National Focal Point)

- 2000–2007: Scientific Board of RAWAS created by Iniziative Industriali Italiane Spa, Roma (President)
- 2004-present: Scientific Board of WWF-Italia (Member)
- 2007-2009: MAG I (Mission Assessment Group) of ESA (European Space Agency) for the FLEX Mission (Earth Explorers, ESA) (Board Member)
- 2009-present: Italian Biochar Association, ICHAR (past-President)
- 2010:: US Department of Energy , Steering Committee of “Exploring the Possibilities for Next Generation Climatic Change and Elevated CO2 Experiments in Terrestrial Ecosystems for the U.S. Department of Energy” (Member of board)
- 2011–present: Osservatorio Clima Trentino, PAT-Protezione Civile (Representative of CRI-FEM)
- 2011-present: MAG II (Mission Assessment Group) of ESA (European Space Agency) for the FLEX-Sentinel Mission (Board Member)
- 2012: International Doctoral Programme Commission (First), CRI- Fondazione Mach (Member) 201: Think-Tank on European Projects strategy, CRI-Fondazione E.Mach 2
- 2012-present: GRA (Global Research Alliance), Ministero dell'Agricoltura e Foreste (Member of the Italian delegation)
- 2013- present: National Italian Focal Point ESFRI-AnaEE
- 2013-present: Sherpa at European Innovation Partnership (EIP) – EU Commission

Reviewer/Evaluator in National and International Programmes

- 1991-1995: External Reviewer for the Maricopa FACE Project, AZ (USDA (US Dept.Agriculture / DOE(Dept. of Energy)
- 1993: External Reviewer for TIGER IV del NERC (National Environmental Research Council, UK) 1994: External Reviewer for the Department of Energy of the USA (ORISE)
- 1994: FACE-Review Panel of the Project FACTS-I Duke University, North Carolina, USA (EU-observer)
- 1995: Expert Evaluator for the IV° Framework Programme of the EU (Environment and Climate) 1997: Expert Evaluator for the IV° Framework Programme of the EU (Environment and Climate) 1997: International Expert at the Final Report of the TIGER IV Project (NERC, UK)
- 1999: Expert evaluator of the Unité de Bioclimatologie-INRA, Avignon, France
- 2005: Expert evaluator (Science Advisory Committee) of ECOTRON - CNRS-CEFE Montpellier, France 2006: Reviewer for TCP, Terrestrial Carbon Programme Projects ORISE-DOE (USA)
- 2007: Reviewer for the National Geographic Society's Committee for Research and Exploration 2007: Reviewer for the Slovak Research and Development Agency (www.apvv.sk)
- 2008: Reviewer for the Netherlands Organisation for Scientific Research (NWO, the Dutch research council)
- 2012: Reviewer for ADEME R&D Reactiff, France

Editorial Board Membership

- Past member of the Editorial Advisory Board of Climate Research Past Subject-Editor of Ecology Letters
- Member of the Editorial Board of Global Change Biology
- Member of the Editorial Board of Journal of Mediterranean Ecology

Scientific Projects:

Summary Table Number of EU-Projects coordinated: 6

Number of EU-Project participated: 19

Number of EU-Subcontracts: 2 Number of ESA Projects Coordinated: 1

Number of International Projects Coordinated: 2

Number of International Project participated: 12

Number of National Project coordinated: 6

Number of National Project participated: 6

Coordination of European research projects

- 1986-1988: Coordinator of the project “Models for prediction and management fo agricultural systems” Climate and Environment EU_Commission (I°FP)
- 1997-99: Coordinator of the EU-MEDEFLU Project: The first coordinated activity aimed at establishing a flux measurement network in the Mediterranean Region. Involving partnership in Portugal, Spain, France, Italy and Greece. V°FP – EU (1.5MECU)
- 2003-2005; Coordinator of EU-MIND Project (Mediterranean Ecosystem under Increasing Drought): Creation of a Mediterranean network of ecosystem manipulation sites. Throughfall and irrigation experiments in (Portugal, Spain, France and Italy). VI°FP (2.5M€)
- 2007-2008 Coordinator of CEFLES2 – ESA (European Space Agency) Project, Preparatory action for the Earth Explorer Mission FLEX of the European Space Agency (0.3M€)
- 2011-2013: Coordinator of EuroChar: New strategies for C-sequestration in the agricultural sector. VII°FP of the EU Mitigation options for greenhouse emissions (2.9M€)
- 2012-2015: Coordinator of AIRFORS: Industry-Academy Partnership for the application of innovative technologies and approaches in forest monitoring using airborne sensors. VII°FP of the EU – IAPP-Marie Curie (1.1M€)

Participation to other European & International Projects

EU-Projects

- 1993-95: Participant UE-CROPCHANGE coordinator S.van de Geyin (AB-DLO, Wageningen, Olanda) Member of the “Coordination Team”
- 1994-96: Participant to EU-MAPLE (Micro-evolutionary adaptation of Plants to Elevated CO2) UE - IV°FP Environment
- 1996: Participant to EU-CLIVARA FACE (Free-Air CO2 Enrichment) on vineyard – IV°FP Environment and Climate
- 1997-2001: Participant to EU-POPFACE Project coordinated by G.Scarascia-Mugnozza Università della Tuscia, Viterbo. Creation of a large-scale FACE infrastructure to study the effects of rising atmospheric CO2 concentrations on a polar plantation
- 1997: Participant Project EU- MEGARICH Managing European Grasslands as a Sustainable Resource in a Changing Climate Coordinated by the University of Dublin (Prof. M.Jones). Inghilterra, Germania ed Ungheria)
- 1997: Participant EU-FAIR Project: “Novel Fructans in Crops” coordinated by a dutch industry (Van de Have, Rilland, NL). The project addresses the potential of new crops capable of accumulating fructans in storage organs

- 2000: Participant in the EU-Future VOC, Project coordinated by R.Steinbrecher of the Fraunhofer Institute di Garmish, D Interactions between rising atmospheric CO2 concentrations and VOC emission by natural vegetation
- 2000-2003: Participant EU-RECAB Project (V° FP)) which is part of the CarboEurope Cluster. Startup project of the Sky Arrow ERA flux aircraft in several regional experiments in Spain, Germany, Sweden and The Netherlands
- 2000-2005: Participant EU-Karnal Bunt Project (V° FP) coordinated by Claire Sandford – CSL di Yotk, UK. The project deals with risks associated to the development of Karnal bunt (*Tilletia indica*) disease in wheat
- 2001-2005: Participant EU-CARBO EUROFLUX Project (V°FP) creation and management of the Flux tower of Nonantola IT5, Province of Modena
- 2000-2003: Participant EU-LIFE Project Caretta caretta, coordinated by CTS - Rome. Development of a new satellite device for animal tracking and analysis of the impact of climate change on sea turtle nesting in the Mediterranean
- 2003-2006: Participant to the EU-EUROFACE (V° FP) Large-Scale Infrastructure. Design, construction and management of the EuroFACE system in Tuscania, Italy
- 2003-2009: Participant Integrated Project CarboEurope (VI° FP) Workpackage Leader in “Regional Experiment” component: Airborne Measurements in the CERES Project, Les Landes (F) 2005-2007.
- 2005-2008: Participant to the EU-OOMPH Project (VI° FP) coordinated by Max-Planck Inst. for Atmospheric Chemistry di Mainz, D. Deployment and management of a shipboard flux systems operated in two oceanic cruises in Northern and Southern Atlantic
- 2006-2011: Participant the Integrated Project NitroEurope IP (VI° FP) coordinated by CEH, Edinburgh. Component of C2 section: ecosystem manipulation sites
- 2006-2011: Participant to EU-CarboAfrica Project (VI° FP), coordinated by Università della Tuscia. Responsible for CARE (CarboAfrica Regional Experiment) in Ghana
- 2008-2011: Participant to the EU-BRIDGE Project aimed at investigating urban metabolism in European cities. Responsible for the Firenze BRIDGE Case Study
- 2009-2013: Participant to the EU-CARBO-EXTREME Project, coordinated by the Max-Planck Institute of Jena. Coordinator of WP2, dealing with manipulation sites
- 2011-2015: Participant to the Infrastructure Project EU-EXPEER, coordinated by INRA, France. Coordinator of WP5, Trans-National Access dealing with ecosystem manipulation sites
- 2012-2016: Participant to the Infrastructure Project EU-TREES FOR FUTURE, coordinated by INRA, France. Coordinator of WP8, Trans-National Access dealing with ecosystem manipulation sites
- 2012-2016: Participant to ANAEE-ESFRI, Preparatory Phase – Italian Focal Point, Coordinator A.Chabbi, INRA – Lusignan, F
- 2015-2018 ENVRI-Plus, ESFRI Integration Action, Eu-Commission

International projects

- 1998-2001: Bilateral MIUR Italy-Japan between Ibimet-Cnr and NIAES, Tsukuba (Prof. Kazuhiko Kobayashi) Assistance for the creation of a FACE infrastructure in Japan
- 1999- Collaborator at the SoyFACE-Project University of Illinois, Urbana-Champaign, USA. Design and creation of the main FACE infrastructure in the USA

- 1996: Member of the Potato-Network - Focus 3 of GCTE. Effects of Climate Change on Potato yield and quality
- 1999: Creation of a MiniFACE infrastructure for a project of the Vrije Universiteit di Amsterdam, The Netherlands - Dept. of System Ecology
- 1999: United Nations START-Programme Creation of FACE infrastructure at NPL (National Physical Laboratory) and IARI (Indian Agricultural Research Institute) in New Delhi, India.
- 2004-2010: Participant to HPGC Project of the Rangeland Unit di Ft.Collins, Colorado, (USDA-ARS) Construction and installation of the FACE facility in Cheyenne, WY, USA
- 2005-present: Participant to the CLIMAITE Project - Risoe National Research Institute, Roskilde, Denmark. Design and testing of the FACE system
- 2005-2006: Participant in a joint initiative with Max-Planck Institute fur Biogeochemistry di Jena (D), Università della Tuscia, Viterbo, Centro di Ecologia Alpina (CEALP, Trento). Monitoring CO2 fluxes in the Tatra Mountains in Slovakia after the wind throw event
- 2014-2016 European Forest Institute, Project Centre MountFor, San Michele a/Adige, Trento

Participation to National Projects

- 1982: Research Unit P.F.IPRA: Applicazione e sviluppo di modelli di simulazione integrati all'interno di un sistema informativo geografico
- 1990-95: Research Unit PF.RAISA "Effetto della temperatura sugli organi assimilanti"
- 1996: Participant to Progetto Integrato CNR-Università, coordinated by Dept. Produzione Vegetali e Tecnologie Ambientali dell'Università di Udine (Prof. G.Zerbi). Creation of a FACE infrastructure in Rapolano Terme, Siena
- 1995-2005: Progetto DEPHI Barilla Alimentare spa. Development, validation and implementation of a wheat growth simulation model for "durum wheat" for yield and quality prediction at the large scale. MIUR
- 1996: Research Unit at the Phenagri Project MIRAAF (Italian Ministry for Agriculture and Forest). Coordinator of the Sunproject nr. 2 (Simulation models)
- 2009-2011: Collaborator and Host Institution for the CASTANEA Project Coordinated by Jed Kaplan (EPFL, Lausanne, CH), funded in the frame of the FIRB-IDEAS Programme
- 1997: Participant Progetto Integrato CNR-Università coordinated by INAPA (Istituto Nazionale per l'Analisi e Protezione degli Agro-ecosistemi- CNR). Creation of a flux measurement infrastructure in Sardinia (Arca di Noè, Sassari)
- 2002-2005: Participant to the MIUR, Ricerca Industriale SINSIAF Project, coordinated by Barilla Alimentare SpA. Development and implementation of a forecasting system to prevent food risks associated to Fusarium spp infections in durum wheat.
- 2003-2006: Research Unit at Italia-USA Bilateral Governmental Programme on Climate Change, coordinated by INGV. Collaboration with NOAA-ATDD to setup and improvement of the Sky Arrow ERA aircraft
- 2004: Ministry of Research & Education: Scuole per l'Acqua Aimed at promoting student awareness of problems related o water availability and scarcity in the Mediterranean. Creation of tutorial network of weather stations in Sicilian schools.
- 2006-2009: Participant to the FISR-MIUR CarboItaly Project, Coordinated by R.Valentini, Università della Tuscia
- 2008-2009: MIPAAF contract award for a feasibility study on bioenergy from durum wheat chain

- 2010-2011: PRIN 2008, Project Coordinated by S.Castaldi (UniNa II)
- 2008-2011: Scientific Responsible of the Progetto Infrastrutturale - CEST-Centro Studi per la Sostenibilità in the frame of Sviluppo - Area progettuale n. 6, Regione Toscana / Provincia di Firenze
- 2009-2012: MIUR-FIRB-Castanea IDEAS, Participant in support of Jed Kaplan as host organization
- 2013-2016: MIUR, Progetto Premiale Infrastrutturale AnaEE, DISBA-CNR
- 2014-2016: MIUR, Progetto Bandiera Programma Nazionale di Ricerca, Progetto CVOPA-CRISIS-LAB

Organization of Major Conferences and Workshops

- International Workshop Models in Agricultural and Forest Research, IPRA, S.Miniato June 1987 · International Workshop The Effect of Climate change in Agriculture and Natural Ecosystems, Joint CNR/SEB Workshop S.Miniato Sept. 1990 ·
- International Workshop I° Field Instrumentation for Ecophysiological Research, Joint SEB/CNR - S.Miniato Spet. 1991 ·
- International Workshop Carbon Dioxide Springs and their use in biological research, IGBP-GCTE, SEB, BERS, CNR, S.Miniato October 1993 ·
- International Workshop: II° Field Instrumentation for Ecophysiological Research, Joint CNR/SEB Workshop Rapolano Terme Sept. 1994 ·
- Forum Ricerca e Sviluppo, Ministro dell'Università e Ricerca-Regione Toscana 9 Feb 1998 · International Workshop: FACE Projects relevant to GCTE: IGBP-GCTE Conference in Barcelona 2001 ·
- Workshop Nazionale: Il Progetto Pianosa Lab, Ministro dell'Ambiente e del Territorio-Accademia dei Georgofili, Firenze ·
- Conferenza Nazionale: Mediterraneo e Italia nel Cambiamento Globale: un ponte fra scienza e società – 1° Conferenza Nazionale IGBP, Paestum 14-16 Novembre ·
- Workshop Nazionale: Cambiamenti Climatici, Il Mediterraneo sotto pressione. Convegno congiunto fra WWF e Commissione Italiana IGBP, 25 Nov. ·
- International Workshop: Fluxnet: celebrating ten years since La Thuile, Convitto della Calza, Firenze 13-15 Dec ·
- International Workshop: The CARBIUS Project– Boulder Colorado, USA ·
- International Workshop: The Vulnerability of Mediterranean terrestrial Ecosystem to Climate Change, Final MIND Workshop, Roma-CNR, 27-28 April ·
- G-Scan, Towards a Global Soil Cataloguing System, An International Workshop – Osservatorio Ximeniano, Firenze, 2011 ·
- Climaticamente... Cambiando, I Conferenza Internazionale – Osservatorio Clima Trentino, Trento 2011
- ForestSat 2014 – Riva del Garda (Tn) 5-7 November 2014
- AnaEE General Assembly, Venice October 2014
- CNRxEXPO Biochar a Sustainable Solution for Agriculture and Environment 24 June 2015
- Verso un Programma Nazionale di Ricerca su Agricoltura e Cambiamenti Climatici, Firenze, Accademia dei Georgofili, 27 Aprile 2015

Main Invited lectures

- "Modélisation de la croissance des cultures en conditions défavorable" Atelier sur la Strumentation Agrometeorologique of WMO, Erice, November 1987 ·
- "Modelling Wheat Development in the Field" Crop Simulation Workshop, Gainesville, FL, USA, June 1988 ·
- "A new model for simulating leaf development in wheat" Dept. of Crop and Soil Sciences, Michigan State University, East Lansing, USA , 1989) ·
- "The effect of Climate Change on wheat development: Analysis and Modelling, International Workshop
- "The effect of Climate Change on Agriculture and Natural Ecosystems", joint CNR/SEB Workshop, S.Miniato, September 1990 ·
- "Agroclimatic modelling for research and application" International Workshop Earsel, Firenze, June 1992 ·
- "Studying the effect of elevated CO₂ on vegetation in an open naturally CO₂ enriched site in Italy" International Workshop "CO₂ and the Biosphere", Wageningen, Olanda, November 1991
- "Perspectives of a FACE using geologic CO₂" FACE Review Meeting, Sedona, AZ, USA, May 1992 · "The effect of elevated CO₂ on photosynthesis and leaf morphoanatomy of selected Mediterranean species" Workshop Internazionale "The effect of Global Change on Mediterranean Vegetation", Valencia, Spain, September 1992 ·
- "CO₂ springs, their use for experimentation" Workshop IGBP-GTCE Focus 1, Weidenberg, Germany, October 1992 ·
- "A new wheat experiment using the MiniFACE" GCTE-Wheat Network Workshop, Phoenix, AZ, July 1992 ·
- "Non traumatic response of plants to elevated CO₂" State of Science in the response of plants to elevated CO₂, ASA Annual Meeting, Cincinnati, US 15 Nov. 1993
- "The impact of Climate Change to Agriculture" International Congress on "Primary Production and Environment in the Mediterranean", Geotechnical Chamber of Greece, Athens, 21-24 March 1993
- "The effect of climate change on nitrogen balance in soils and plants European Society of Agronomy Workshop: Modeling the fate of Agrochemicals and Fertilizer in the Environment, Venezia 3-5 March 1994 ·
- "The long-term response of natural Mediterranean ecosystems to long-term elevation of atmospheric CO₂ concentrations" VII Conference on Mediterranean Type Ecosystems, Vina del Mar, Chile, October 23-29, 1994 ·
- "Genetic responses to long-term CO₂ enrichment: Observations from natural CO₂ springs" GCTE Workshop: Community, Population and Evolutionary Responses to Elevated CO₂ Concentration, Leuenberg, Switzerland, August 15-19 ·
- "The effect of Climate Change and Nitrogen availability on Agricultural Production" Workshop ESA: Modelling the fate of Agrochemicals and fertilizers in the Environment, Venezia 3-5 Marzo 1994 ·
- "Expected effects of Climate Change on wheat development" Wheat Physiology and Global Environmental Change organized by the Environmental Physiology Group della Society for Experimental Biology (SEB, St.Andrews, 3-7 Aprile 1995) ·
- "Anidride Carbonica, quale futuro sulla Terra" Invited lecture at Museo della Scienza e della Tecnica "Leonardo da Vinci", Milano il 21 November ·

- “Stato dell'arte del progetto Stime di Qualità” Seminar at Barilla Alimentare spa, Parma il 30 October 1996 · “Pros and Cons of using the MiniFACE for rice” South Asian FACE Workshop, New Delhi 23-26 June 1997 (START Visiting Lecturer Award) ·
- “New FACE technology using pure CO₂ injection” FACE 2000 Tsukuba, Japan 27-30 June 2000 · “The Medeflu project” Sub-Regional Conference on Environment, Science and Technology, Embassy of USA, Roma, April 22, 2002 ·
- “FACE: past, present and future” Nabaldiv Conference, Urbana-Champaign, Illinois, USA December 5, 2002 · FACE 2004: Managed Ecosystems and CO₂: Case Studies, Processes, and Perspectives, Ascona (CH). Organizzato da ETH, Zurich, 25 March 2004 ·
- “Durum wheat crop yield forecasting system in Italy: from research to implementation” Climatic Analysis and Mapping for Agriculture, WMO, Bologna, 14-17 June 2005 ·
- “Large-scale FACE infrastructures” Workshop ESF “FACEing the Future”, Roma, 6 December 2007 “Cropland soils - the big uncertainty” Cropand Session CarboEurope, Poznan, Polonia, September 2007 ·
- “Biochar: an environmental-friendly win-to-win option for renewable energy production from biomass residues and Carbon Capture & Storage in agricultural soils” Thematic Session at the European Parliament "Good Practices for reducing CO₂ emissions in the short term. Climate Change Commission 23 June 2008 ·
- “FLEX MAG Presentation” ESA-Earth Explorer User Consultation Meeting, Lisbon, 20-21 Jan.2009
- "Nuove prospettive combinate per il sequestro di CO₂ e la produzione di energia rinnovabile in agricoltura" A3E = Agricoltura, Alimentazione, Ambiente, Energia Convegno organizzato dall'Accademia dei Georgofili – Sezione Nord-Ovest Sala Napoleonica – Via S. Antonio 12 – Milano 25 March 2009 ·
- “Activity and results of the airborne campaigns” CEFLES-2 Project, Final Meeting ESTEC-ESA Nordwijk am Zee, The Netherlands 11-12 March 2009
- “The AnaEE Project in connection to LTER” LTER – Meeting Rome, 26.11.2013
- “Vegetation and atmospheric feedback” CRI-FEM Days, San Michele a/Adige, 11.12.2013
- “Adaptation and Mitigation” - Climaticamente... cambiando, FBK, Trento, Settembre 2011
- “Centennial time scale incorporation of biochar in alpine soils” Invited lecture at the Sino-German Workshop 15/16 April 2013
- “Plants, carbon and climate: effects, limitations and feedback” Invited lecture at EPSO-European Plant Science Organization, General Assembly, Greece 02.04.2013
- “The AnaEE-ESFRI project: the role of Italy”, Berlin, Italian Embassy 16/17.12.2014
- “Trans-National Access in the Expeer Project” Invited lecture at the Expeer Conference, Paris, (France) 24/27 June 2014
- “Agricultural Systems and Climate Change” Invited lecture at the Expo Workshop “Impacts of climate change on Ecosystem Services”, Politecnico di Milano, 23.06.2015
- “Light and plants: from an inefficient biological process to a very efficient planet” Invited Lecture at the Light & Life Symposium of the Società Italiana di Fisica, Varenna (Lecco), 21.07.2015

Training activities

- Coordinator of the MEDTRAIN Summer School, EU-Commission IVFP, Sardina 2009
- PhD Supervisor: Irene Criscuoli, Univ. Paris, Emiliano Bozzi, Univ. Paris-Versailles, Marin Tudoroiu, BOKU, Wien, Sylvie Pighini, Univ. Innsbruck, Austria, Federico Carotenuto, Univ. Innsbruck, Austria

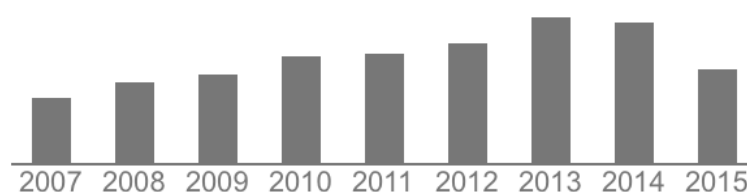
- PhD Thesis opponent, Free University of Amsterdam, The Netherlands, C.van der Tol
- Alta Scuola Politecnica, Politecnico di Milano 21.05.2013
- Alta Scuola Politecnica, Politecnico di Milano 06.05.2014
- Alta Scuola Politecnica, Politecnico di Milano 05.05.2015
- VOC-GHG PhD-School, Euregio Innsbruck-Bolzano-Trento (co-founder)

Honours & Awards

- Membro Corrispondente dell'Accademia Economico-Agraria dei Georgofili, di Firenze
- Norbert Gerbier-MUMM International Award 2012 to Chuixiang Yi, Daniel Ricciuto, Runze Li, John Wolbeck, Xiyang Xu, Mats Nilsson and 145 other contributing authors for the paper entitled "Climate control of terrestrial carbon exchange across biomes and continents" published in the Environmental Research Letters in 2010, Volume 5
- Visiting Professor at Ecole Polytechnique de Lausanne (CH) 15.03 – 15.05.2014

Citation metrics

Indici citazioni	Tutte	Dal 2010
Citazioni	9975	5748
Indice H	49	33
i10-index	129	94



Publications

Vaccari, FP, Maienza, A, Miglietta, F, Baronti, S, Di Lonardo, S, Giagnoni, L, Lagomarsino, A, Pozzi, A, Pusceddu, E & Ranieri, R. 2015. Biochar stimulates plant growth but not fruit yield of processing tomato in a fertile soil. *Agriculture, Ecosystems & Environment* 207: 163-170.

Castaldi, Simona, Alberti, Giorgio, Bertolini, Teresa, Forte, Annachiara, Miglietta, Franco, Valentini, Riccardo & Fierro, Angelo. 2015. N2O emission factors for Italian crops. *The Greenhouse Gas Balance of Italy*. Springer Berlin Heidelberg, pp. 135-144.

LeCain, Daniel, Smith, David, Morgan, Jack, Kimball, Bruce A, Pendall, Elise & Miglietta, Franco. 2015. Microclimatic Performance of a Free-Air Warming and CO2 Enrichment Experiment in Windy Wyoming, USA. *PLoS one* 10: e0116834.

Queloz, Pierre, Bertuzzo, Enrico, Carraro, Luca, Botter, Gianluca, Miglietta, Franco, Rao, PSC & Rinaldo, Andrea. 2015. Transport of fluorobenzoate tracers in a vegetated hydrologic control volume: 1. Experimental results. *Water Resources Research* 51: 2773-2792.

Frank, Dorothea, Reichstein, Markus, Bahn, Michael, Thonicke, Kirsten, Frank, David, Mahecha, Miguel D, Smith, Pete, Velde, Marijn, Vicca, Sara & Babst, Flurin. 2015. Effects of climate extremes

on the terrestrial carbon cycle: concepts, processes and potential future impacts. *Global change biology*

Sakowska, Karolina, Gianelle, Damiano, Zaldei, Alessandro, MacArthur, Alasdair, Carotenuto, Federico, Miglietta, Franco, Zampedri, Roberto, Cavagna, Mauro & Vescovo, Loris. 2015. WhiteRef: A New Tower-Based Hyperspectral System for Continuous Reflectance Measurements. *Sensors* 15: 1088-1105.

Genesio, Lorenzo, Miglietta, Franco, Baronti, Silvia & Vaccari, Francesco P. 2015. Biochar increases vineyard productivity without affecting grape quality: Results from a four years field experiment in Tuscany. *Agriculture, Ecosystems & Environment* 201: 20-25.

Baronti, S, Vaccari, FP, Miglietta, F, Calzolari, C, Lugato, E, Orlandini, S, Pini, R, Zulian, C & Genesio, L. 2014. Impact of biochar application on plant water relations in *Vitis vinifera*(L.). *European Journal of Agronomy* 53: 38-44.

Alberti, G, Vicca, S, Inghima, I, Belelli-Marchesini, L, Genesio, L, Miglietta, F, Marjanovic, H, Martinez, C, Matteucci, G & D'Andrea, E. 2014. Soil C: N stoichiometry controls carbon sink partitioning between above-ground tree biomass and soil organic matter in high fertility forests. *Forest-Biogeosciences and Forestry* 653.

Scartazza, Andrea, Vaccari, Francesco Primo, Bertolini, Teresa, Di Tommasi, Paul, Lauteri, Marco, Miglietta, Franco & Brugnoli, Enrico. 2014. Comparing integrated stable isotope and eddy covariance estimates of water-use efficiency on a Mediterranean successional sequence. *Oecologia* 176: 581-594.

Laurin, Gaia Vaglio, Chan, Jonathan Cheung-Wai, Chen, Qi, Lindsell, Jeremy A, Coomes, David A, Guerriero, Leila, Del Frate, Fabio, Miglietta, Franco & Valentini, Riccardo. 2014. Biodiversity mapping in a tropical west african forest with airborne hyperspectral data. *PLoS one* 9: e97910.

Toscano, P, Gioli, B, Genesio, L, Vaccari, FP, Miglietta, F, Zaldei, A, Crisci, A, Ferrari, E, Bertuzzi, F & La Cava, P. 2014. Durum wheat quality prediction in Mediterranean environments: From local to regional scale. *European Journal of Agronomy* 61: 1-9.

Viger, Maud, Hancock, Robert D, Miglietta, Franco & Taylor, Gail. 2014. More plant growth but less plant defence? First global gene expression data for plants grown in soil amended with biochar. *GCB Bioenergy*

Criscuoli, Irene, Alberti, Giorgio, Baronti, Silvia, Favilli, Filippo, Martinez, Cristina, Calzolari, Costanza, Pusceddu, Emanuela, Rumpel, Cornelia, Viola, Roberto & Miglietta, Franco. 2014. Carbon Sequestration and Fertility after Centennial Time Scale Incorporation of Charcoal into Soil. *PLoS one* 9: e91114.

Gioli, Beniamino, Carfora, Maria F, Magliulo, Vincenzo, Metallo, Maria C, Poli, Attilio A, Toscano, Piero & Miglietta, Franco. 2014. Aircraft mass budgeting to measure CO₂ emissions of Rome, Italy. *Environmental monitoring and assessment* 186: 2053-2066.

Rutigliano, FA, Romano, M, Marzaioli, R, Baglivo, I, Baronti, S, Miglietta, F & Castaldi, S. 2014. Effect of biochar addition on soil microbial community in a wheat crop. *European Journal of Soil Biology* 60: 9-15.

Gioli, Beniamino, Gualtieri, Giovanni, Busillo, Caterina, Calastrini, Francesca, Gozzini, Bernardo & Miglietta, Franco. 2014. Aircraft wind measurements to assess a coupled WRF - CALMET mesoscale system. *Meteorological Applications* 21: 117-128.

DALPONTE, MICHELE, CHAN, CHEUNG WAI, FRIZZERA, LORENZO, GIANELLE, DAMIANO & MIGLIETTA, FRANCO. 2013. Forest species and biomass estimation using airborne laser scanning and hyperspectral images. 5th Workshop on Hyperspectral Image and Signal Processing: Evolution in Remote Sensing, 25-28 June 2013, Gainesville, Florida, USA

MIGLIETTA, FRANCO. 2012. The effects of biochar application on water relation and soil quality in *Vitis vinifera*. 4th International congress Eurosoil 2012: soil science for the benefit of mankind and environment, Bari, 2-6 luglio 2012

Criscuoli, IRENE, Miglietta, FRANCO, Si Ammour, AZEDDINE & Bertazza, G. 2012. How biochar contributes to increase agricultural yields? A study about the link between biochar and ethylene.

Jandl, Robert, Rodeghiero, Mirco, Martinez, Cristina, Cotrufo, M Francesca, Bampa, Francesca, van Wesemael, Bas, Harrison, Robert B, Guerrini, Iraê Amaral, Rustad, Lindsey & Lorenz, Klaus. 2014. Current status, uncertainty and future needs in soil organic carbon monitoring. *Science of the Total Environment* 468: 376-383.

Lugato, E & Alberti, G. 2013. Gioli. B., Kaplan, JO, Peressotti, A., and Miglietta, F 1-10.

Smith, Andrew R, Lukac, Martin, Bambrick, Michael, Miglietta, Franco & Godbold, Douglas L. 2013. Tree species diversity interacts with elevated CO₂ to induce a greater root system. *BELOWGROUND CARBON TURNOVER IN EUROPEAN FORESTS* 37.

Gioli, Beniamino, Toscano, Piero, Zaldei, Alessandro, Fratini, Gerardo & Miglietta, Franco. 2013. CO₂, CH₄ and Particles Flux Measurements in Florence, Italy. *Energy Procedia* 40: 537-544.

Chabbi, Abad, Roy, Jacques, Beier, Claus & Miglietta, Franco. 2013. Analysis and Experimentation on Ecosystems (AnaEE): a new research distributed infrastructure to tackle ecosystem complexity.

Carotenuto, Federico, Gioli, Beniamino, Toscano, Piero, Zaldei, Alessandro & Miglietta, Franco. 2013. Point-source CO₂ emission estimation from airborne sampled CO₂ mass density: a case study for an industrial plant in Biganos, Southern France.

Simon, G De, Alberti, G, Vedove, G Delle, Peressotti, A, Zaldei, A & Miglietta, F. 2013. Short-term cropland responses to temperature extreme events during late winter. *Biogeosciences Discussions* 10: 6493-6515.

Valentini, Riccardo & Miglietta, Franco. 2012. *The Greenhouse Gas Balance of Italy: An Insight on Managed and Natural Terrestrial Ecosystems*. Springer Berlin.

- Ferrise, Roberto, Moriondo, Marco, Trombi, Giacomo, Miglietta, Franco & Bindi, Marco. 2013. Climate Change Impacts on Typical Mediterranean Crops and Evaluation of Adaptation Strategies to Cope With. Regional Assessment of Climate Change in the Mediterranean. Springer Netherlands, pp. 49-70.
- Frank, Dorothea, Reichstein, Markus, Miglietta, Franco & Pereira, Joao S. 2013. Impact of climate variability and extremes on the carbon cycle of the Mediterranean region. Regional Assessment of Climate Change in the Mediterranean. Springer Netherlands, pp. 31-47.
- Smith, Andrew R, Lukac, Martin, Hood, Robin, Healey, John R, Miglietta, Franco & Godbold, Douglas L. 2013. Elevated CO₂ enrichment induces a differential biomass response in a mixed species temperate forest plantation. *New Phytologist* 198: 156-168.
- Lugato, Emanuele, Vaccari, Francesco P, Genesio, Lorenzo, Baronti, Silvia, Pozzi, Alessandro, Rack, Mireille, Woods, Jeremy, Simonetti, Gianluca, Montanarella, Luca & Miglietta, Franco. 2013. An energy - biochar chain involving biomass gasification and rice cultivation in Northern Italy. *GCB Bioenergy* 5: 192-201.
- Smith, Andrew R, Lukac, Martin, Bambrick, Michael, Miglietta, Franco & Godbold, Douglas L. 2013. Tree species diversity interacts with elevated CO₂ to induce a greater root system response. *Global Change Biology*
- Boeck, Hans J, Kimball, Bruce A, Miglietta, Franco & Nijs, Ivan. 2012. Quantification of excess water loss in plant canopies warmed with infrared heating. *Global change biology* 18: 2860-2868.
- Di Lonardo, Sara, Vaccari, Francesco Primo, Baronti, Silvia, Capuana, Maurizio, Bacci, Laura, Sabatini, Francesco, Lambardi, Maurizio & Miglietta, Franco. 2013. Biochar successfully replaces activated charcoal for in vitro culture of two white poplar clones reducing ethylene concentration. *Plant growth regulation* 69: 43-50.
- Toscano, P, Ranieri, R, Matese, A, Vaccari, FP, Gioli, B, Zaldei, A, Silvestri, M, Ronchi, C, La Cava, P & Porter, John Roy. 2012. Durum wheat modeling: The Delphi system, 11 years of observations in Italy. *European journal of agronomy* 43: 108-118.
- BATTILANI, PAOLA, Van Der Fels Klerkx, I, Miraglia, Marina, Moretti, Antonio & Miglietta, F. 2010. Modelling, predicting and mapping the emergence of aflatoxins in cereals in the EU due to climate change. *Petria* 20: 453-454.
- De Simon, G, Alberti, G, Delle Vedove, G, Peressotti, A, Zaldei, A & Miglietta, F. 2012. Cropland responses to extreme winter temperature events: results from a manipulation experiment in north-eastern Italy.
- Calfapietra, Carlo, Ainsworth, Elizabeth A, Beier, Claus, De Angelis, Paolo, Ellsworth, David S, Godbold, Douglas L, Hendrey, George R, Hickler, Thomas, Hoosbeek, Marcel R & Karnosky, David F. 2010. Challenges in elevated CO₂ experiments on forests. *Trends in plant science* 15: 5-10.

- Genesio, LORENZO, Miglietta, FRANCO, Lugato, E, Baronti, S, Pieri, M & Vaccari, FP. 2012. Surface albedo following biochar application in durum wheat. *Environmental research letters* 7: 014025.
- Khan, Faisal N, Lukac, MARTIN, Miglietta, Franco, Khalid, M & Godbold, Douglas L. 2010. Tree exposure to elevated CO₂ increases availability of soil phosphorus. *Pakistan Journal of Botany* 42: 907-916.
- Misson, Laurent, Vargas, Rodrigo, Miglietta, Franco, Oechel, Walter, Pereira, Joao, Yakir, Dan, Pita, Gabriel & Martin, Timothy. 2010. Consequences of more extreme precipitation regimes for ecosystem fluxes in seasonally dry woodlands and forests.
- ter Maat, HW, Hutjes, RWA, Miglietta, F, Gioli, B, Vermeulen, FC Bosveld KNMI AT & Fritsch, H. 2010. Publications, presentations and other activities Simulating carbon exchange using a regional atmospheric model coupled to an advanced land-surface model 2010. *Biogeosciences* 7: 2397-2417.
- Ferlan, M, Eler, K, Alberti, G, Vodnik, D, Peressotti, A, Miglietta, F, Simončič, P, Batič, F, Schnyder, H & Isselstein, J. 2010. Change in carbon balance of a dry calcareous grassland caused by spontaneous afforestation. *Mecke Druck und Verlag*.
- Gioli, B, Toscano, P, Lugato, E, Matese, A, Miglietta, F, Zaldei, A & Vaccari, FP. 2012. Methane and carbon dioxide fluxes and source partitioning in urban areas: The case study of Florence, Italy. *Environmental pollution* 164: 125-131.
- Vaccari, FP, Lugato, E, Gioli, B, D'Acqui, L, Genesio, L, Toscano, P, Matese, A & Miglietta, F. 2012. Land use change and soil organic carbon dynamics in Mediterranean agro-ecosystems: The case study of Pianosa Island. *Geoderma* 175: 29-36.
- Chiti, Tommaso, Gardin, Lorenzo, Perugini, Lucia, Quarantino, Roberta, Vaccari, Francesco Primo, Miglietta, Franco & Valentini, Riccardo. 2012. Soil organic carbon stock assessment for the different cropland land uses in Italy. *Biology and fertility of soils* 48: 9-17.
- Gianelle, Damiano, Oechel, Walter, Miglietta, Franco, Rodeghiero, Mirco & Sottocornola, Matteo. 2010. Cataloguing soil carbon stocks. *Science* 330: 1476.
- Ferlan, M, Alberti, G, Eler, K, Batič, F, Peressotti, A, Miglietta, F, Zaldei, A, Simončič, P & Vodnik, D. 2011. Comparing carbon fluxes between different stages of secondary succession of a karst grassland. *Agriculture, ecosystems & environment* 140: 199-207.
- Baronti, Silvia, Alberti, Giorgio, Delle Vedove, Gemini, Di Gennaro, Filippo, Fellet, Guido, Genesio, Lorenzo, Miglietta, Franco, Peressotti, Alessandro & Vaccari, Francesco Primo. 2010. The biochar option to improve plant yields: first results from some field and pot experiments in Italy. *Italian Journal of Agronomy* 5: 3-12.
- Lugato, Emanuele, Zuliani, Michel, Alberti, Giorgio, Vedove, Gemini Delle, Gioli, Beniamino, Miglietta, Franco & Peressotti, Alessandro. 2010. Application of DNDC biogeochemistry model to estimate greenhouse gas emissions from Italian agricultural areas at high spatial resolution. *Agriculture, ecosystems & environment* 139: 546-556.

Maselli, Fabio, Gioli, Beniamino, Chiesi, Marta, Vaccari, Francesco, Zaldei, Alessandro, Fibbi, Luca, Bindi, Marco & Miglietta, Franco. 2010. Validating an integrated strategy to model net land carbon exchange against aircraft flux measurements. *Remote Sensing of Environment* 114: 1108-1116.

Hutjes, RWA, Vellinga, OS, Gioli, B & Miglietta, F. 2010. Dis-aggregation of airborne flux measurements using footprint analysis. *Agricultural and Forest Meteorology* 150: 966-983.

Tallis, MJ, Lin, Y, Rogers, A, Zhang, J, Street, NR, Miglietta, F, Karnosky, DF, De Angelis, P, Calfapietra, C & Taylor, G. 2010. The transcriptome of *Populus* in elevated CO₂ reveals increased anthocyanin biosynthesis during delayed autumnal senescence. *New Phytologist* 186: 415-428.

Yi, Chuixiang, Ricciuto, Daniel, Li, Runze, Wolbeck, John, Xu, Xiyan, Nilsson, Mats, Aires, Luis, Albertson, John D, Ammann, Christof & Arain, M Altaf. 2010. Climate control of terrestrial carbon exchange across biomes and continents. *Environmental Research Letters* 5: 034007.

Damm, Alexander, Elbers, JAN, Eler, Andre, Gioli, Beniamino, Hamdi, Karim, Hutjes, Ronald, Kosvancova, Martina, Meroni, Michele, Miglietta, Franco & Moersch, Andre. 2010. Remote sensing of sun - induced fluorescence to improve modeling of diurnal courses of gross primary production (GPP). *Global Change Biology* 16: 171-186.

de Arellano, Jordi Vilà - Guerau, Gioli, Beniamino, Miglietta, Franco, Jonker, Harm JJ, Baltink, Henk Klein, Hutjes, Ronald WA & Holtslag, Albert AM. 2004. Entrainment process of carbon dioxide in the atmospheric boundary layer. *Journal of Geophysical Research: Atmospheres* (1984–2012) 109:

Reichstein, Markus, Tenhunen, John, Rouspard, Olivier, Ourcival, Jean - Marc, Rambal, Serge, Miglietta, Franco, Peressotti, Alessandro, Pecchiari, Marco, Tirone, Giampiero & Valentini, Riccardo. 2003. Inverse modeling of seasonal drought effects on canopy CO₂/H₂O exchange in three Mediterranean ecosystems. *Journal of Geophysical Research: Atmospheres* (1984–2012) 108:

Criscuoli, I., Alberti, G., Baronti, S., Favilli, F., Martinez, C., Calzolari, C., Pusceddu, E., Rumpel, C., Viola, R. & Miglietta, F.. 2014. Carbon sequestration and fertility after centennial time scale incorporation of charcoal into soil. *PLoS One* 9: e91114. doi: 10.1371/journal.pone.0091114. <http://www.ncbi.nlm.nih.gov/pubmed/24614647>

Maini, HK, Tiwari, MK, Bahl, M, John, T, Chopra, P, Singh, D, Yadav, VS, Anand, JR, Poddar, HN & Mitra, AP. 2002. Free air carbon dioxide enrichment facility development for crop experiments. *INDIAN JOURNAL OF RADIO AND SPACE PHYSICS* 31: 404-409.

Sansford, C, Baker, R, Brennan, J, Ewert, F, Gioli, B, Inman, A, Kelly, P, Kinsella, A, Leth, V & Magnus, H. 2006. Deliverable Report DL 6.1. Report on the risk of entry, establishment and economic loss for *Tilletia indica* in the European Union. EC Fifth Framework Project QLKS-1999-01554 Risks Associated with *Tilletia indica*, the Newly Listed EU Quarantine Pathogen, the Cause of Karnal Bunt of Wheat [<http://karnal-public.pestrisk.net/>]

Piovano, S, Affronte, M, Balletto, E, Barone, B, Dell'Anna, L, Di Marc, S, Dominici, A, Gamba, M, Giacomina, C & Mari, F. 2001. Valutazione degli effetti di catture accidentali di *Caretta caretta* nelle Isole Pelagie. 5 Convegno Nazionale sui Cetacei e sulle Tartarughe Marine. Centro Didattico di Biologia Marina, Argentario 6-9.

Gioli, B, Miglietta, F, De Martino, B, Hutjes, RWA, Dolman, AJ, Lindroth, A, Lloyd, J, Sanz, MJ, Valentini, R & Dumas, E. 2004. Comparison between tower and aircraft-based eddy correlation fluxes in five regions of Europe. *Agricultural and Forest Meteorology* 127: 1-16.

Moreno, J, Moya, I, Miglietta, F, Rascher, U, Berger, M, Verhoef, W, Agati, G, Olioso, A, Zarco-Tejada, Pablo J & Rivalland, V. 2008. Assessing gross primary production from solar-induced chlorophyll fluorescence: field results and integration into biogeophysical models.

Paoletti, E, Miglietta, F, Raschi, A, Manes, F, Grossoni, P, Tognetti, R & van Gardingen, PR. 2008. Stomatal numbers in holm oak (*Quercus ilex* L.) leaves grown in naturally and artificially CO₂-enriched environments. *Plant responses to elevated CO₂: evidence from natural springs* 197-208.

Morgan, JA, Blumenthal, DM, Reeder, SJ, Lecain, DR, Miglietta, F, Mosier, AR, Parton, W & Schuman, GE. 2004. Co₂ Enrichment in Great Plains Grasslands: Past Findings and Future Research Direction.

Rigano, C, Rigano, V di M, Vona, V, Esposito, S, Martino, C di, Raschi, A, Miglietta, F, Tognetti, R & van Gardingen, PR. 2008. Effects of CO₂ on NH₄⁺ assimilation by *Cyanidium caldarium*, an acidophilic hot springs and hot soils unicellular alga. *Plant responses to elevated CO₂: evidence from natural springs* 209-220.

Woodward, FI, Beerling, DJ, Raschi, A, Miglietta, F, Tognetti, R & van Gardingen, PR. 2008. Plant-CO₂ responses in the long term: plants from CO₂ springs in Florida and tombs in Egypt. *Plant responses to elevated CO₂: evidence from natural springs* 103-113.

Baker, RHA, Gioli, B, Porter, JR, Miglietta, F & Sansford, CE. 2004. Mapping *Tilletia indica* establishment risk for the EU. Work Package 1:

Drusch, M, Moreno, J, Goulas, Y, Miglietta, F, North, P, Rascher, U, Svanberg, S & Verhoef, W. 2008. Candidate earth explorer core missions—Reports for assessment: Flex—Fluorescence explorer. pp.-). Noordwijk: European Space Agency

Hendrey, G & Miglietta, F. 2006. FACE technology: past, present and future. In 'Managed ecosystems and CO₂ case studies, processes, and perspectives,.(Eds J Nosberger, SE Long, RJ Norby, M Stitt, G Hendrey, H Blum) pp. 15-43. Springer-Verlag: Berlin, Heidelberg, Germany.

Morgan, JS, Pendall, E, Williams, DG, LeCain, DR, Blumenthal, DM, Dijkstra, FA, Miglietta, F & Kimball, BA. 2008. Plant production responses to rising atmospheric CO₂ and warming in native semiarid grassland in Wyoming, USA. *Proceedings of the 2008 International Grassland Congress/ International Rangeland Congress* 1:

Grimmond, CSB, Dragoni, D, Anderson, DE, Beringer, J, Coutts, A, Crawford, B, Fowler, D, Hu, F, Hom, J & Kanda, M. 2004. Urban FluxNet: CO₂ flux measurements. FLUXNET 2004 Open Workshop, Firenze, Italy

Baraldi, R, Rapparini, F, Loreto, F, Pietrini, F & Di Marco, G. 2000. Emissione di composti volatili della vegetazione della macchia mediterranea. Il progetto PianosaLab, ricerche sugli ecosistemi terrestri dell'area Mediterranea, Vaccari FP, Miglietta F., Zerbi G.(eds), Forum editrice 91-100.

Dolman, A, Noilhan, J, Durand, P, Sarrat, C, Brut, A, Butet, A, Jarosz, N, Brunet, Y, Loustau, D & Lamaud, E. 2005. CERES, the Carboeurope Regional Experiment Strategy in les Landes. South West France

Tommasi, PD, Magliulo, V, Dell'Aquila, R, Miglietta, F, Zaldei, A & Gaylor, G. 2002. Water consumption of a CO₂ enriched poplar stand. Atti del Convegno CNR-ISAFOM, Ercolano, Italy

Asdrubali, F, Castaldi, S, Costantini Scala, A, Miglietta, F, Quaratino, R, Valentini, R & Ventura, F. 2008. Ruolo del settore agro - forestale nella riduzione delle emissioni di gas serra - Rapporto finale del progetto Agricarbon. A cura di ISMEA

Valentini, R, Miglietta, F, Scarascia Mugnozza, G, Corona, P, Marchetti, M, Magnani, F, Peressotti, A, Cotrufo Maria, F, Castaldi, S & Ciccioli, P. 2007. Trasparenza e protocollo di Kyoto: risposta a Mollicone e Federici. Forest@-Journal of Silviculture and Forest Ecology 4: 153.

Vaccari, FP, Bettarini, I, Giuntoli, A, Miglietta, F & Raschi, A. 2000. Mediterranean grassland community under elevated [CO₂]: observations from a CO₂ Spring. Journal of Mediterranean Ecology 2: 41-50.

Bindi, Marco, Raschi, Antonio, Lanini, Mario, Miglietta, Francesco & Tognetti, Roberto. 2005. Physiological and yield responses of grapevine (*Vitis vinifera* L.) exposed to elevated CO₂ concentrations in a free air CO₂ enrichment (FACE). Journal of Crop Improvement 13: 345-359.

Vaccari, FP, Miglietta, F, Magliulo, V, Raschi, A & Bindi, M. 2000. Free air CO₂ enrichment of potato: leaf consumption and larval growth of Colorado potato beetle (*Leptinotarsa decemlineata* Say). Italian Journal of Agronomy 4: 37-41.

Di Vecchia, A, Genesio, L, Mazzoni, S, Miglietta, F, Vaccari, FP & Maracchi, G. 2002. Keita integrated project: an appropriate model for sustainable development. Biometeorology Institute, Florence

Miglietta, F, Peressotti, A, Vaccari, FP, Zaldei, A, Deangelis, P & Scarascia-Mugnozza, G. 2001. Free air carbon dioxide enrichment of a poplar plantation: description and performance of the POPFACE system. New Phytologist 150: 465-476.

Sansford, CE, Baker, R, Brennan, J, Ewert, F, Gioli, B, Inman, A, Kelly, P, Kinsella, A, Leth, V & Magnus, H. 2006. Pest Risk Analysis for *Tilletia indica* for the European Union. EU Karnal Bunt Risks Project. Deliverable Report 6:

- Bindi, M, Fibbi, L, Lanini, M & Miglietta, F. 2000. Effects of elevated carbon dioxide on grapevine. *Climate Change, Climatic Variability and Agriculture in Europe. An Integrated Assessment*, Research Report 71-81.
- Bindi, M, Miglietta, F, Vaccari, F, Magliulo, E & Giuntoli, A. 2006. Growth and quality responses of potato to elevated [CO₂]. *Managed Ecosystems and CO₂* 105-119.
- Bindi, M, Fibbi, L, Maselli, F & Miglietta, F. 2000. Modelling climate change impacts on grapevine in Tuscany. *Climate Change, Climatic Variability and Agriculture in Europe: An Integrated Assessment*. Environmental Change Institute, University of Oxford 119-216.
- Vaccari, FP, Miglietta, F, Giuntoli, A, Magliulo, V, Cerio, L & Bindi, M. 2001. Free air CO₂ enrichment of potato (*Solanum tuberosum* L.). Photosynthetic capacity of leaves. *Italian Journal of Agronomy* 5:
- Marchi, Susanna, Tognetti, Roberto, Vaccari, Francesco Primo, Lanini, Mario, Kaligarič, Mitja, Miglietta, Francesco & Raschi, Antonio. 2004. Physiological and morphological responses of grassland species to elevated atmospheric CO₂ concentrations in FACE-systems and natural CO₂ springs. *Functional plant biology* 31: 181-194.
- Bindi, M, Fibbi, L, Lanini, M & Miglietta, F. 2001. Free Air CO₂ Enrichment (FACE) of grapevine (*Vitis vinifera* L.): I. Development and testing of the system for CO₂ enrichment. *European journal of agronomy* 14: 135-143.
- Stylinski, CD, Oechel, WC, Gamon, JA, Tissue, DT, Miglietta, F & Raschi, A. 2000. Effects of lifelong [CO₂] enrichment on carboxylation and light utilization of *Quercus pubescens* Willd. examined with gas exchange, biochemistry and optical techniques. *Plant, Cell & Environment* 23: 1353-1362.
- Raschi, A, Miglietta, F & Tognetti, R. 2008. *Plant responses to elevated CO₂: evidence from natural springs*. Cambridge Univ Pr.
- Bindi, M, Fibbi, L & Miglietta, Francesco. 2001. Free Air CO₂ Enrichment (FACE) of grapevine (*Vitis vinifera* L.): II. Growth and quality of grape and wine in response to elevated CO₂ concentrations. *European journal of agronomy* 14: 145-155.
- Sansford, Claire, Murray, Gordon, Brennan, John, Leth, Vibeke, Porter, John R, Kelly, Paul, Miglietta, Franco, Riccioni, Luca, Magnus, Håkon & Peterson, Gary. 2006. Risks associated with *Tilletia indica*, the newly-listed EU quarantine pathogen, the cause of Karnal bunt of wheat: EC 5. framework project QLK5-1999-01554. EC.
- Pasqui, Massimiliano, Gioli, Beniamino, Gozzini, Bernardo & Miglietta, Franco. 2004. Atmospheric Regional Reanalysis simulations, based on RAMS model, as input for crop modelling. 26th Conference on Agricultural and Forest Meteorology
- Miglietta, F & Gioli, B. 2006. Airborne measurement of the regional carbon balance. *Geophysical Research Abstracts* 8: 01860.

Miglietta, F, Castaldi, S & Vaccari, FP. 2007. Biofuels and the emissions balance of greenhouse gases: the role of nitrous oxide (N₂O). *Geografica* 4: 91-99.

Alberti, G, Inghima, I, Arriga, N, Piermatteo, D, Pecchiari, M, Zaldei, A, Papale, D, Peressotti, A, Valentini, R & Cotrufo, MF. 2007. Changes in rainfall patterns in Mediterranean ecosystems: the MIND project. *Forest@*

Tuulik, J, Gioli, B, Miglietta, F, Grelle, A, Mölder, M & Lindroth, A. 2003. Up-scaling of tower and aircraft CO₂ flux measurements to regional-scale in central Sweden.

Tallis, M, Dash, J, Taylor, G & Miglietta, F. 2006. Delayed canopy senescence in elevated CO₂?-evidence from remote sensing of canopy greenness. *Comparative Biochemistry and Physiology-Part A: Molecular & Integrative Physiology* 143: S149-S150.

Ter Maat, HW & Hutjes, RWA. 2008. Simulating carbon exchange using a regional atmospheric model coupled to an advanced land-surface model. *Biogeosciences Discussions* 5: 4161-4207.

Gioli, B, Miglietta, F, Vaccari, FP, Zaldei, A & Hutjes, RWA. 2003. Regional airborne flux measurements in Europe.

Mikkelsen, Teis Nørgaard, Beier, Claus, Albert, Kristian & Ro-Poulsen, Helge. 2007. CLIMATE-a three factor climate change ecosystem manipulation experiment. *AGU Fall Meeting Abstracts* 1: 02.

Miglietta, F. 2006. Observation of water and carbon flux decoupling at the landscape scale. *Geophysical Research Abstracts* 8: 01851.

Karnosky, Davis F, Taylor, Gail, Giardina, Christian P, Tallis, Matthew J, Bernacchi, Carl J, Percy, Kevin E, DeLucia, Evan H, Miglietta, Franco, Gupta, Pooja S & Leakey, Andrew DB. 2006. Rising atmospheric CO₂ explains 26–52% of the recent delay in autumnal senescence in important forest and crop species. Post-print 18pp.

Morgan, JA, Pendall, E, Williams, DG, LeCain, DR, Blumenthal, DM, Dijkstra, FA, Miglietta, F & Kimball, BA. 2008. Plant productivity responses to rising atmospheric CO₂ and warming in semi-arid grassland in Wyoming, USA. *Multifunctional grasslands in a changing world: XXI International Grassland Congress, VIII International Rangeland Congress*/edited by Organizing Committee of 2008 IGC/IRC Conference

Lukac, M, Smith, A, Brook, RM, Turner, G, Bambrick, M, Hoosbeek, M, Miglietta, F & Godbold, DL. 2006. BangorFACE: Effects of elevated atmospheric carbon dioxide on broadleaf trees.

Di Tommasi, P, Magliulo, V, Vaccari, FP, Miglietta, F, Gioli, B, Zaldei, A, Sabatini, F & Peressotti, A. 2002. Flussi di carbonio delle superfici vegetate dell'isola di Pianosa. *Congresso Nazionale della SITE Urbino* 16-17.

Moene, AF, Meijninger, WML, Kohsiek, W, Gioli, B, Miglietta, F & Bosveld, F. 2006. Validation of fluxes of an extra large aperture scintillometer at Cabauw using sky arrow aircraft flux

measurements. Proceedings of 17th symposium on boundary layers and turbulence. American Meteorological Society, San Diego, CA 22-25.

Papale, Dario, Castaldi, Simona, Ciccioli, Paolo, Corona, Piermaria, Di Tizio, Alessandra, Masci, Alberto, Miglietta, Franco, Reichstein, Markus & Vannini, Andrea. 2005. Assessment of full carbon budget of Italy: the CarBIUS project.

Nannarelli, S, Miglietta, F, Dominici, A, Scartazza, A, Nicolini, G & Di Marco, S. 2003. Natural abundances of stable carbon isotopes as a clue to better understand the life history of loggerheads. Proceedings of the First Mediterranean Conference on Marine Turtles, Rome(Italy), 24-28 October 2001. 192-196.

Vaccari, Francesco Primo, Ranieri, Roberto, Matese, Alessandro & Miglietta, Franco. 2007. Enhanced temperature during grain filling reduces protein concentration of durum wheat. Italian Journal of Agronomy 2: 393-400.

Ewert, F, Baker, R, Porter, JR, Gioli, B, Miglietta, F & Sansford, C. 2002. Predicting potential distribution of Karnal bunt (*Tilletia indica*) of wheat. European Society for Agronomy, European Society for Agronomy: book of proceedings, 7. congress, 2002, Cordoba

Morgan, JA, Miglietta, F, Kimball, BA, Parton, WJ, LeCain, DR, Zaldei, A, Reeder, SJ, Pendall, E, Williams, DG & Blumenthal, DM. 2006. The High Plains Global Change Experiment: Semi-arid Grassland Responses to Combined Elevated CO₂ and Warming. Ecological Society of America Proceedings 60.

Dolman, H, de Martino, B, Gioli, B, Hutjes, RWA, Lindroth, A, Miglietta, F, Millan, MM, Sanz, MJ & Schumacher, M. 2002. Regional Assessment and Monitoring of the Carbon Balance Within Europe (recab): Experimental Strategy and Mesoscale Modeling Preliminary Results.

Gioli, B & Miglietta, F. 2007. Stima del bilancio del carbonio a scala regionale. Forest@-Journal of Silviculture and Forest Ecology 4: 469.

Pérez-Landa, G, Ciais, P, Gangoiti, G, Palau, JL, Carrara, A, Gioli, B, Miglietta, F, Schumacher, M, Millán, MM & Sanz, MJ. 2006. Mesoscale circulations over complex terrain in the Valencia coastal region, Spain, Part 2: linking CO₂ surface fluxes with observed concentrations. Atmospheric Chemistry and Physics Discussions 6: 2853-2895.

Dolman, A Johannes, Noilhan, Joel, Tolk, Lieselotte, Lauvaux, Thomas, van der Molen, Michiel, Gerbig, Christoph, Miglietta, Franco & Pérez-Landa, Gorka. 2008. Regional Measurements and Modelling of Carbon Exchange. The Continental-Scale Greenhouse Gas Balance of Europe. Springer New York, pp. 285-307.

Vaccari, FP, Gioli, B, Zaldei, A, Sabatini, F, Georgiadis, T, Rossi, F, Peressotti, A, Magliulo, V & Miglietta, F. 2004. Net Ecosystem Carbon Exchange (NEE) of the Island of Pianosa. Journal of Mediterranean Ecology 5: 53-60.

Sansford, C, Baker, R, Brennan, J, Ewert, F, Gioli, B, Inman, A, Kelly, P, Kinsella, A, Leth, V & Magnus, H. 2007. EC Fifth Framework Project QLK5-1999-01554: Risks associated with *Tilletia indica*, the newly-listed EU quarantine pathogen, the cause of Karnal bunt of wheat.

Marzaioli, Fabio & Rubino, Mauro. 2005. RECONSTRUCTION OF PAST CO₂ CONCENTRATION AT A NATURAL CO₂ VENTSITE USING RADIOCARBON DATING OF TREE RINGS. *Radiocarbon* 47:

Alberti, G, Inghima, I, Arriga, N, Piermatteo, D, Pecchiari, M, Zaldei, A, Papale, D, Peressotti, A, Valentini, R & Cotrufo, MF. 2007. Cambiamenti nel regime pluviometrico in ecosistemi mediterranei: il progetto MIND. *Forest@-Journal of Silviculture and Forest Ecology* 4: 460.

Vautard, R, Ciais, P, Fisher, R, Lowry, D, Breon, FM, Vogel, F, Levin, I, Miglietta, F & Nisbet, E. 2007. The dispersion of the Buncefield oil fire plume: An extreme accident without air quality consequences. *Atmospheric Environment* 41: 9506-9517.

Pérez-Landa, G, Ciais, P, Sanz, MJ, Gioli, B, Miglietta, F, Palau, JL, Gangoiti, G & Millán, MM. 2006. Mesoscale circulations over complex terrain in the Valencia coastal region, Spain, Part 1: simulation of diurnal circulation regimes. *Atmospheric Chemistry and Physics Discussions* 6: 2809-2852.

Dolman, AJ, Ronda, Reinder, Miglietta, Franco & Ciais, Philippe. 2005. Regional measurement and modeling of carbon balances. *The Carbon Balance of Forest Biomes* 93-108.

Scarascia-Mugnozza, G, De Angelis, P, Sabatti, M, Calfapietra, C, Miglietta, F, Raines, C, Godbold, D, Hoosbeek, M, Taylor, G & Polle, A. 2005. Global change and agro-forest ecosystems: adaptation and mitigation in a FACE experiment on a poplar plantation. *Plant Biosystems-An International Journal Dealing with all Aspects of Plant Biology* 139: 255-264.

Gioli, Beniamino, Miglietta, Franco, Vaccari, Francesco Primo, Zaldei, Alessandro & De Martino, Biagio. 2006. The Sky Arrow ERA, an innovative airborne platform to monitor mass, momentum and energy exchange of ecosystems.

Baker, RHA, Sansford, CE, Gioli, B, Miglietta, F, Porter, John R & Ewert, F. 2005. Combining a disease model with a crop phenology model to assess and map pest risk: Karnal bunt disease (*Tilletia indica*) of wheat in Europe. *Plant Protection and Plant Health in Europe: Introduction and Spread of Invasive Species, Symposium Proceedings* 89-94.

Miglietta, Franco, Bindi, Marco, Vaccari, Francesco P, Schapendonk, AHCM, Wolf, Justus & Butterfield, Ruth E. 2000. Crop ecosystem responses to climatic change: root and tuberous crops. *Climate Change and Global Crop Productivity*. CABI Publishing, Wallingford, UK 189-212.

Baraldi, Rita, Rapparini, Francesca, Oechel, Walter C, Hastings, Steven J, Bryant, Pablo, Cheng, Yufu & Miglietta, Franco. 2004. Monoterpene emission responses to elevated CO₂ in a Mediterranean - type ecosystem. *New Phytologist* 161: 17-21.

Scarascia-Mugnozza, G, Calfapietra, C, Ceulemans, R, Gielen, B, Cotrufo, MF, DeAngelis, P, Godbold, D, Hoosbeek, MR, Kull, O & Lukac, M. 2006. Responses to elevated [CO₂] of a short

rotation, multispecies poplar plantation: the POPFACE/EUROFACE experiment. *Managed Ecosystems and CO₂*. Springer Berlin Heidelberg, pp. 173-195.

Hendrey, GR & Miglietta, F. 2006. FACE technology: past, present, and future. *Managed ecosystems and CO₂*. Springer Berlin Heidelberg, pp. 15-43.

Miglietta, F, Gioli, B, Hutjes, RWA & Reichstein, M. 2007. Net regional ecosystem CO₂ exchange from airborne and ground - based eddy covariance, land - use maps and weather observations. *Global Change Biology* 13: 548-560.

Pérez-Landa, G, Ciais, P, Sanz, MJ, Gioli, B, Miglietta, F, Palau, JL, Gangoiti, G & Millán, MM. 2007. Mesoscale circulations over complex terrain in the Valencia coastal region, Spain—Part 1: Simulation of diurnal circulation regimes. *Atmospheric Chemistry and Physics* 7:

Scarascia-Mugnozza, G, De Angelis, P, Sabatti, M, Calfapietra, C, Ceulemans, R, Peressotti, A & Miglietta, F. 2000. A FACE experiment on short rotation, intensive poplar plantation: objective and experimental set up of POPFACE. *Terrestrial Ecosystem Research in Europe: Successes, Challenges and Policy*. Office for Official Publications of the European Communities, Luxembourg 136-140.

Pérez-Landa, G, Ciais, P, Gangoiti, G, Palau, JL, Carrara, A, Gioli, B, Miglietta, F, Schumacher, M, Millán, MM & Sanz, MJ. 2007. Mesoscale circulations over complex terrain in the Valencia coastal region, Spain—Part 2: Modeling CO₂ transport using idealized surface fluxes. *Atmospheric Chemistry and Physics* 7: 1851-1868.

Morin, Xavier, Améglio, Thierry, Ahas, Rein, Kurz-Besson, Cathy, Lanta, Vojtěch, Lebourgeois, François, Miglietta, Franco & Chuine, Isabelle. 2007. Variation in cold hardiness and carbohydrate concentration from dormancy induction to bud burst among provenances of three European oak species. *Tree Physiology* 27: 817-825.

Hovenden, MJ, Miglietta, F, Zaldei, A, Vander Schoor, JK, Wills, KE & Newton, PCD. 2006. The TasFACE climate-change impacts experiment: design and performance of combined elevated CO₂ and temperature enhancement in a native Tasmanian grassland. *Australian Journal of Botany* 54: 1-10.

Wittig, Victoria E, Bernacchi, Carl J, Zhu, Xin - Guang, Calfapietra, Carlo, Ceulemans, Reinhart, Deangelis, Paolo, Gielen, Birgit, Miglietta, Franco, Morgan, Patrick B & Long, Stephen P. 2005. Gross primary production is stimulated for three *Populus* species grown under free - air CO₂ enrichment from planting through canopy closure. *Global Change Biology* 11: 644-656.

GIELEN, Birgit, Liberloo, M, Bogaert, Jan, Calfapietra, C, De Angelis, P, Miglietta, F, SCARASCIA - MUGNOZZA, G & Ceulemans, R. 2003. Three years of free - air CO₂ enrichment (POPFACE) only slightly affect profiles of light and leaf characteristics in closed canopies of *Populus*. *Global Change Biology* 9: 1022-1037.

Calfapietra, Carlo, Gielen, Birgit, Sabatti, Maurizio, De Angelis, Paolo, Miglietta, Franco, Scarascia - Mugnozza, Giuseppe & Ceulemans, Reinhart. 2003. Do above - ground growth dynamics of poplar change with time under CO₂ enrichment?. *New Phytologist* 160: 305-318.

Gioli, Beniamino, Miglietta, Franco, De Martino, Biagio, Hutjes, Ronald WA, Dolman, Han AJ, Lindroth, Anders, Schumacher, Marcus, Sanz, Maria Josè, Manca, Giovanni & Peressotti, Alessandro. 2004. Comparison between tower and aircraft-based eddy covariance fluxes in five European regions. *Agricultural and Forest Meteorology* 127: 1-16.

Dolman, AJ, Noilhan, J, Durand, P, Sarrat, C, Brut, A, Piguet, B, Butet, A, Jarosz, N, Brunet, Y & Loustau, D. 2006. The CarboEurope regional experiment strategy.

de Arellano, Jordi Vilà - Guerau, Gioli, Beniamino, Miglietta, Franco, Jonker, Harm JJ, Baltink, Henk Klein, Hutjes, Ronald WA & Holtslag, Albert AM. 2004. Entrainment process of carbon dioxide in the atmospheric boundary layer. *Journal of Geophysical Research: Atmospheres* (1984–2012) 109:

Rapparini, F, Baraldi, R, Miglietta, F & Loreto, F. 2004. Isoprenoid emission in trees of *Quercus pubescens* and *Quercus ilex* with lifetime exposure to naturally high CO₂ environment†. *Plant, Cell & Environment* 27: 381-391.

Gielen, Birgit, Calfapietra, C, Lukac, M, Wittig, VE, De Angelis, P, Janssens, IA, Moscatelli, MC, Grego, S, Cotrufo, MF & Godbold, DL. 2005. Net carbon storage in a poplar plantation (POPFACE) after three years of free-air CO₂ enrichment. *Tree Physiology* 25: 1399-1408.

Miglietta, F, Hoosbeek, MR, Foot, J, Gigon, F, Hassinen, A, Heijmans, M, Peressotti, A, Saarinen, T, Van Breemen, N & Wallén, Bo. 2001. Spatial and temporal performance of the MiniFACE (Free Air CO₂ Enrichment) system on bog ecosystems in northern and central Europe. *Environmental Monitoring and Assessment* 66: 107-127.

Taylor, Gail, Tricker, Penny J, Zhang, Fang Z, Alston, Victoria J, Miglietta, Franco & Kuzminsky, Elena. 2003. Spatial and Temporal Effects of Free-Air CO₂ Enrichment (POPFACE) on Leaf Growth, Cell Expansion, and Cell Production in a Closed Canopy of Poplar. *Plant Physiology* 131: 177-185.

Ferris, R, Sabatti, M, Miglietta, F, Mills, RF & Taylor, G. 2001. Leaf area is stimulated in *Populus* by free air CO₂ enrichment (POPFACE), through increased cell expansion and production. *Plant, Cell & Environment* 24: 305-315.

Reichstein, Markus, Tenhunen, John, Rouspard, Olivier, Ourcival, Jean - Marc, Rambal, Serge, Miglietta, Franco, Peressotti, Alessandro, Pecchiari, Marco, Tirone, Giampiero & Valentini, Riccardo. 2003. Inverse modeling of seasonal drought effects on canopy CO₂/H₂O exchange in three Mediterranean ecosystems. *Journal of Geophysical Research: Atmospheres* (1984–2012) 108:

Godbold, Douglas L, Hoosbeek, Marcel R, Lukac, Martin, Cotrufo, M Francesca, Janssens, Ivan A, Ceulemans, Reinhart, Polle, Andrea, Velthorst, Eef J, Scarascia-Mugnozza, Giuseppe & De Angelis, Paolo. 2006. Mycorrhizal hyphal turnover as a dominant process for carbon input into soil organic matter. *Plant and Soil* 281: 15-24.

Jarvis, Paul, Rey, Ana, Petsikos, Charalampos, Wingate, Lisa, Rayment, Mark, Pereira, João, Banza, João, David, Jorge, Miglietta, Franco & Borghetti, Marco. 2007. Drying and wetting of Mediterranean soils stimulates decomposition and carbon dioxide emission: the “Birch effect”. *Tree Physiology* 27: 929-940.

Rebmann, C, Göckede, M, Foken, Th, Aubinet, Marc, Aurela, M, Berbigier, P, Bernhofer, C, Buchmann, N, Carrara, A & Cescatti, A. 2005. Quality analysis applied on eddy covariance measurements at complex forest sites using footprint modelling. *Theoretical and Applied Climatology* 80: 121-141.

Miglietta, Franco, Peressotti, Alessandro, Vaccari, Francesco Primo, Zaldei, Alessandro, DeAngelis, Paolo & Scarascia - Mugnozza, Giuseppe. 2001. Free - air CO₂ enrichment (FACE) of a poplar plantation: the POPFACE fumigation system. *New Phytologist* 150: 465-476.

Reichstein, Markus, Rey, Ana, Freibauer, Annette, Tenhunen, John, Valentini, Riccardo, Banza, Joao, Casals, Pere, Cheng, Yufu, Grünzweig, Jose M & Irvine, James. 2003. Modeling temporal and large - scale spatial variability of soil respiration from soil water availability, temperature and vegetation productivity indices. *Global Biogeochemical Cycles* 17:

Reichstein, Markus, Tenhunen, John D, Roupsard, Olivier, Ourcival, Jean - marc, Rambal, Serge, Miglietta, Franco, Peressotti, Alessandro, Pecchiari, Marco, Tirone, Giampiero & Valentini, Riccardo. 2002. Severe drought effects on ecosystem CO₂ and H₂O fluxes at three Mediterranean evergreen sites: revision of current hypotheses?. *Global Change Biology* 8: 999-1017.

Reichstein, Markus, Falge, Eva, Baldocchi, Dennis, Papale, Dario, Aubinet, Marc, Berbigier, Paul, Bernhofer, Christian, Buchmann, Nina, Gilmanov, Tagir & Granier, André. 2005. On the separation of net ecosystem exchange into assimilation and ecosystem respiration: review and improved algorithm. *Global Change Biology* 11: 1424-1439.

Faria, T, Cerasoli, S, Garcia-Plazaola, JI, Guimarães, MP, Abadia, A, Raschi, A, Miglietta, F, Pereira, JS & Chaves, MM. 1997. Photochemical Response to Summer Drought in *Quercus Ilex* Trees Growing in a Naturally CO₂ Enriched Site. *Impacts of Global Change on Tree Physiology and Forest Ecosystems*. Springer Netherlands, pp. 119-124.

Schmitt, Volker. 1999. A. Raschi F. Miglietta R. Tognetti P. R. van Gardingen Plant Responses to Elevated CO₂: Evidence from Natural Springs 1997 Cambridge University Press UK 272 pp., (ISBN 0-521-58203-2 hardback). Price: £ 40.00/US \$69.95. *Journal of Plant Physiology* 155: 440.

Kelliher, FM, Leuning, R, Raupach, MR, Schulze, ED, van Gardingen, PR, Grace, J, Harkness, DD, Miglietta, F, Raschi, A & Villalobos, FJ. 1995. Special Issue Biospheric Aspects of the Hydrological Cycle. *Agricultural and Forest Meteorology* 73: 367-368.

PORTER, JR, RASCHI, A & MIGLIETTA, F. 1992. Effects of Climatic Change on Agricultural and Natural Ecosystems. *Journal of Experimental Botany*

Rosa, M, Genesio, R, Gozzini, B, Maracchi, G & Orlandini, S. 1993. PLASMO: a computer program for grapevine downy mildew development forecasting. *Computers and electronics in agriculture* 9: 205-215.

Miglietta, F, Raschi, A, Bettarini, I, Resti, R & Selvi, F. 1993. Natural carbon dioxide spring in Italy: a resource in examining long-term response of plants to elevated CO₂. *Plant Cell Environ* 16: 801-810.

Badiani, M, Paolacci, AR, Fusari, A, Bettarini, I, Brugnoli, E, Lauteri, M, Miglietta, F & Raschi, A. 1999. Natural CO₂ enrichment and foliar antioxidants. *Ecosystem Response to CO₂*: 82-101.

Bindi, M, Miglietta, F, Gozzini, B, Orlandini, S & Seghi, LA. 1996. Simple model for simulation of growth and development in grapevine. *Vitis vinifera L.*). *Vitis* 36: 67-61.

Hättenschwiler, S, Miglietta, F, Raschi, A & Körner, C. 1997. Morphological adjustments to elevated CO₂ in mature *Q. ilex* trees growing around natural CO₂ springs. *Acta Oecologia* 18: 361-365.

Orlandini, S, Gozzini, B & Miglietta, F. 1992. Un modello per il calcolo dello sviluppo della superficie fogliare nella vite (*Vitis vinifera L.*). Un model pour calculer le developpement de la surface foliare chez la vigne (*Vitis vinifera L.*). Quaderni della Scuola di Specializzazione in Viticoltura ed Enologia Università di Torino

Miglietta, F, Raschi, A, Bacci, L, Bettarini, I, Resti, R, Zipoli, G & Badiani, M. 1993. Crescita e sviluppo di soia (*Glycine max L. Merr.*) allevata in elevate concentrazioni di anidride carbonica-e prospettive di applicazione agronomica [Lazio]. *Rivista di Agronomia*

Gozzini, B, Miglietta, F & Orlandini, S. 1992. Simulazione della velocità di apparizione delle foglie nella vite (*Vitis vinifera L.*). Simulation de la vitesse d'apparition des feuilles de vigne (*Vitis vinifera L.*). Quaderni della Scuola di Specializzazione in Viticoltura ed Enologia Università di Torino

Miglietta, F & Amthor, JS. 1996. Evapotranspiration and CO₂. *Weather* 51: 322.

Bindi, M, Fibbi, L, Gozzini, B, Orlandini, S & Miglietta, F. 1995. Mini Free Air Carbon Dioxide Enrichment (FACE) Experiments on Grapevine. *Climate Change and Agriculture in Europe: Assessment of Impacts and Adaptations*, Research Report 125-137.

Bettarini, I, Grifoni, D, Miglietta, F & Raschi, A. 1999. Local greenhouse effect in a CO₂ spring in central Italy. *Ecosystem Response to CO₂*: 13-23.

Raschi, A, Bindi, M, Longobucco, A, Miglietta, F & Moriondo, M. 1996. Water relations of *Vitis vinifera L.* plants growing under elevated atmospheric CO₂ concentrations in a FACE setup. *Proceedings congress of the European society for agronomy* 7:

Miglietta, F, Bindi, M, Castellani, M & Maracchi, G. 1993. Sviluppo ontogenetico del frumento (*Triticum spp.*): I. Influenza di temperatura, fotoperiodo e vernalizzazione. *Riv. Agron* 27: 484-489.

Maracchi, G, Bindi, M, Castellani, M & Miglietta, F. 1993. L'aumento dell'anidride carbonica nell'atmosfera e i suoi effetti sulle piante. *Inquinamento* 35: 68-77.

Maracchi, G & Miglietta, F. 1993. An information system for crop modelling [*Hordeum vulgare*].

Maracchi, G, Castellani, M, Miglietta, F & Bindi, M. 1993. Risposta delle piante ai cambiamenti climatici. *Inquinamento*

Bindi, M, Gozzini, B, Miglietta, F & Orlandini, S. 1994. Applicazioni della modellistica in agrometeorologia. ATTI DEL CONGRESSO ANNUALE-ASSOCIAZIONE ITALIANA PER L INFORMATICA ED IL CALCOLO AUTOMATICO 861-861.

Hinkson, CL, Oechel, WC & Miglietta, F. 1995. Long-term effects of elevated CO₂ on Mediterranean forest vegetation of Northern-Central Italy. Bulletin of the Ecological Society of America 76:

Miglietta, F, Castellani, M, Bindi, M & Maracchi, G. 1993. Wheat (*Triticum* spp.) ontogenesis. Simulation model [Italy]. Pt. 2. Rivista di Agronomia (Italy)

Miglietta, F, Castellani, M, Bindi, M & Maracchi, G. 1993. Wheat (*Triticum* spp.) ontogenesis. 1: Effect of temperature-photoperiod and vernalization. Rivista di Agronomia (Italy)

Bindi, M, Maracchi, G & Miglietta, F. 1992. Estimating the spatial variability of the daily solar radiation in Italy. Rivista di Agronomia (Italy)

Gozzini, B, Miglietta, F & Orlandini, S. 1993. Leaf appearance rate and leaf growth in grapevine (*Vitis vinifera* L.)[Tuscany]. Rivista di Agronomia (Italy)

MIGLIETTA, F, GOZZINI, B & ORLANDINI, S. 1994. An ontogenetic model for the simulation of leaf area development in grapevine. II: Model validation. Wein-Wissenschaft 49: 62-65.

Orlandini, S, Gozzini, B, Maracchi, G & Miglietta, F. 1994. Methods for leaf wetness estimation. Special report (New York State Agricultural Experiment Station)(USA)

Maracchi, G, Castellani, M, Miglietta, F & Bindi, M. 1993. [The plant response to climate variations]. Inquinamento (Italy)

Miglietta, Franco. 1997. Nontraumatic Responses of Natural Vegetation to Long-Term Carbon Dioxide Enrichment. Advances in Carbon Dioxide Effects Research 101-112.

Bettarini, I, Giuntoli, A, Miglietta, F & Raschi, A. 1995. Using stable carbon isotope ratio of C4 plants to monitor mean effective atmospheric CO₂ concentrations. Agric Med special 278: 281.

Palchetti, C, Gozzini, B, Miglietta, F & Orlandini, S. 1995. The effect of training system and cultivar on the rate of leaf appearance of the grapevine (*Vitis vinifera* L.). Journal International des Sciences de la Vigne et du Vin (France)

Miglietta, F, Gozzini, B & Orlandini, S. 1993. An ontogenetic model for the simulation of leaf area development in grapevine. I Model development. Vitic Enol Sci 48: 51-54.

Porter, JR & Miglietta, F. 1992. Modelling the effects of CO₂-induced climatic change on cereal crops. Impacts of Global Climatic Changes on Photosynthesis and Plant Productivity, Oxford and IBH, New Delhi

Miglietta, F, Gozzini, B & Orlandini, S. 1992. Simulation of leaf appearance in grapevine. Vitic Enol Sci 47: 41-45.

Badiani, M, Paolacci, AR, Fusari, A, Bettarini, I, Brugnoli, E, Lauteri, M, Miglietta, F & Raschi, A. 1998. The foliar antioxidant status of plants from high-CO₂ natural sites. *Physiologia Plantarum* 104: 765-771.

Vaccari, FP, Raschi, A & Miglietta, F. 1999. Ecosystem Response to CO₂: The Maple Project Results. Office for Official Publications of the European Communities.

Bindi, M, Fibbi, L, Gozzini, B, Orlandini, S, Miglietta, F, Harrison, PA, Butterfield, RE & Downing, RE. 1995. Experiments on the effects of increased temperature and/or elevated concentrations of carbon dioxide on crops. Mini Free Air Carbon dioxide Enrichment (FACE) experiment on grapevine. *Climate change and agriculture in Europe: assessment of impacts and adaptations*. Eds. PA Harrison, RE Butterfield and TE Downing (Research Report No. 9, Environmental Change Institute, University of Oxford: Oxford) pp 125-137.

Bindi, M, Maracchi, G & Miglietta, F. 1993. Effects of climate change on the ontomorphogenic development of winter wheat in Italy. The effects of climate change on agricultural and horticultural potential in Europe. Environmental Change Unit. University of Oxford. Oxford

Bindi, M, Castellani, M, Maracchi, G & Miglietta, F. 1993. The ontogenesis of wheat under scenarios of increased air temperature in Italy: a simulation study. *European Journal of Agronomy (France)*

Miglietta, Francesco. 1992. Simulation of wheat ontogenesis. Landbouwniversiteit te Wageningen.

Badiani, M, Paolacci, AR, D'Annibale, A, Miglietta, F, Raschi, A, Tognetti, R & Van Gardingen, PR. 1997. Plant response to elevated carbon dioxide. Evidence from natural springs. Cambridge University Press, Cambridge 221-241.

Magliulo, V, Miglietta, F, Cerio, L & Giuntoli, A. 1996. Effetti di elevate concentrazioni di anidride carbonica sul tasso di fotosintesi e sulla temperatura radiativa della patata. *S. IT. E. Atti* 17: 23-26.

Bindi, M, Miglietta, F & Zipoli, G. 1992. Different methods for separating diffuse and direct components of solar radiation and their application in crop growth models. *Climate Research* 2: 47-54.

Miglietta, F & Peressotti, A. 1999. MEDEFU Summer drought reduces carbon fluxes in Mediterranean forest. *Glob. Change NewsLetter* 39: 15-16.

Miglietta, F. 1991. Simulation of wheat ontogenesis. 111. Effect of variety, nitrogen fertilization and water stress on leaf appearance and final leaf number in the field. *Climate Research* 1: 233-242.

Miglietta, F & Porter, JR. 1992. The effects of climatic change on development in wheat: analysis and modelling. *Journal of experimental botany* 43: 1147-1157.

- Miglietta, F, Tanasescu, M & Marica, A. 1995. The expected effects of climate change on wheat development. *Global Change Biology* 1: 407-415.
- Miglietta, F, Raschi, A, Bettarini, I, van Gardingen, P, Schulze, ED & Mooney, HA. 1993. Carbon dioxide springs and their use for experimentation. Design and execution of experiments on CO₂ enrichment 393-403.
- Bindi, M, Ferrini, F & Miglietta, F. 1992. Climatic change and the shift in the cultivated area of olive trees. *Journal of Agricultura Mediterranea* 22: 41-44.
- Orlandini, S, Gozzini, B, Rosa, M, Egger, E, Storchi, P, Maracchi, G & Miglietta, F. 1993. PLASMO: a simulation model for control of *Plasmopara viticola* on grapevine. *EPPA Bulletin* 23: 619-626.
- Bindi, M, Porter, JR & Miglietta, F. 1995. Comparison of models to simulate leaf appearance in wheat. *European journal of agronomy* 4: 15-25.
- Bindi, M, Miglietta, F, Gozzini, B, Orlandini, S & Seghi, L. 1997. A simple model for simulation of growth and development in grapevine (*Vitis vinifera* L.). II. Model validation. *VITIS-GEILWEILERHOF* 36: 73-76.
- Miglietta, F, Raschi, A, Körner, C & Vaccari, FP. 1998. Isotope discrimination and photosynthesis of vegetation growing in the Bossoleto CO₂ spring. *Chemosphere* 36: 771-776.
- Miglietta, F. 1991. Simulation of wheat ontogenesis. 11. Predicting dates of ear emergence and main stem final leaf number. *Climate Research* 1: 151-160.
- Bindi, M & Miglietta, F. 1991. Estimating daily global radiation from air temperature and rainfall measurements. *Climate Research* 1: 117-124.
- Chaves, MM, Pereira, JS, Cerasoli, S, Clifton-Brown, J, Miglietta, F & Raschi, A. 1995. Leaf metabolism during summer drought in *Quercus ilex* trees with lifetime exposure to elevated CO₂. *Journal of Biogeography* 255-259.
- Miglietta, F. 1991. Simulation of wheat ontogenesis. I. Appearance of main stem leaves in the field. *Climate Research* 1: 145-150.
- Miglietta, F, Lanini, M, Bindi, M & Magliulo, V. 1997. Free Air CO₂ Enrichment of potato (*Solanum tuberosum*, L.): design and performance of the CO₂ - fumigation system. *Global Change Biology* 3: 417-427.
- Miglietta, F, Giuntoli, A & Bindi, M. 1996. The effect of free air carbon dioxide enrichment (FACE) and soil nitrogen availability on the photosynthetic capacity of wheat. *Photosynthesis Research* 47: 281-290.
- Jones, MB, Brown, J Clifton, Raschi, A & Miglietta, F. 1995. The effects on *Arbutus unedo* L. of long - term exposure to elevated CO₂. *Global Change Biology* 1: 295-302.

Miglietta, F & Raschi, A. 1993. Studying the effect of elevated CO₂ in the open in a naturally enriched environment in Central Italy. *Plant Ecology* 104: 391-400.

Bindi, M, Fibbi, L, Gozzini, B, Orlandini, S & Miglietta, F. 1996. Modelling the impact of future climate scenarios on yield and yield variability of grapevine. *Climate Research* 7: 213-224.

Miglietta, F, Magliulo, V, Bindi, M, Cerio, L, Vaccari, FP, Loduca, V & Peressotti, A. 1998. Free air CO₂ enrichment of potato (*Solanum tuberosum* L.): development, growth and yield. *Global Change Biology* 4: 163-172.

Körner, Christian & Miglietta, Francesco. 1994. Long term effects of naturally elevated CO₂ on mediterranean grassland and forest trees. *Oecologia* 99: 343-351.

Bettarini, I, Miglietta, F, Raschi, A, Calderoni, G & Ehleringer, J. 1993. Long term CO₂ response of *Erica arborea* grown at a CO₂ spring in Italy. *Agricoltura Ricerca (Italy)*

Raschi, A, Miglietta, F & Bettarini, I. 1993. Techniques and instruments for exposing plants to elevated carbon dioxide concentrations [Latium, Tuscany]. *Rivista di Agronomia (Italy)*

Miglietta, F, Raschi, A, Bettarini, I & Selvi, F. 1992. Vegetazione di aree arricchite da emissioni naturali di anidride carbonica dell'Italia centrale. *ACQUA ARIA* 869-869.

Bettarini, I, Miglietta, F & Raschi, A. 1993. Occurrence and conditions of CO₂ enrichment around CO₂ springs in Italy. A case study on *Quercus pubescens*. *Agricoltura Ricerca (Italy)*

MIGLIETTA, F, RASCHI, A & BETTARINI, I. 1997. Long-term effects of enhanced CCh concentrations on leaf gas exchange: research opportunities using CO₂ springs. *Plant responses to elevated CO₂: evidence from natural springs* 69.

Badiani, M, Paolacci, AR, Fusari, A, Bettarini, I, Brugnoli, E, Lauteri, M, Miglietta, F & Raschi, A. 1998. Proceedings of the Third International Conference on Oxygen, Free Radicals and Environmental Stress in Plants-Foliar antioxidant status of plants from naturally high-CO₂ sites. *Physiologia Plantarum* 104: 765-771.

Miglietta, Franco & Bindi, Marco. 1993. Crop growth simulation models for research, farm management and agrometeorology. *Earsel Adv. Rem. Sens* 2: 148-157.

Fiorini, G, Miglietta, F, Raschi, A & Selvi, F. 1992. Analisi cariologica di alcune popolazioni di *Agrostis canina* L. (Gramineae) dell'Italia Centro-Occidentale. (Caryological investigation of some populations of *Agrostis canina* L. (Gramineae) growing in central western Italy.) *Inform. Bot. Ital* 24: 32-38.

Ferlan, M, Alberti, G, Eler, K, Batič, F, Peressotti, A, Miglietta, F, Zaldei, A, Simončič, P & Vodnik, D. 2011. Comparing carbon fluxes between different stages of secondary succession of a karst grassland. *Agriculture, ecosystems & environment* 140: 199-207.

- Raschi, A, Miglietta, F, Tognetti, R, Gardingen, PR van & Hattenschwiler, S. 1998. Plant responses to elevated carbon dioxide: evidence from natural springs. *Trends in Ecology and Evolution* 13: 375-375.
- Badiani, M, Paolacci, AR, Miglietta, F, Kimball, BA, Pinter, PJ, Garcia, RL, Hunsaker, DJ, Lamorte, RL & Wall, GW. 1996. Seasonal variations of antioxidants in wheat (*Triticum aestivum*) leaves grown under field conditions. *Functional Plant Biology* 23: 687-698.
- Hoosbeek, MR, Breemen, N van, Wallén, B, Rydin, H, Lee, JA, Silvolda, J, Vasander, H, Berendse, F, Kuiper, PJC & Heijden, E. 1995. BERI: Bog ecosystem research initiative-objectives, hypotheses and research methods.
- Porter, JR, Leigh, RA, Semenov, MA & Miglietta, F. 1995. Modelling the effects of climatic change and genetic modification on nitrogen use by wheat. *European journal of agronomy* 4: 419-429.
- Bettarini, I, Miglietta, F & Raschi, A. 1997. Studying morpho-physiological responses of *Scirpus lacustris* from naturally CO₂-enriched environments. *Plant responses to elevated CO₂*: 134-147.
- Badiani, Maurizio, Raschi, Antonio, Paolacci, Anna Rita & Miglietta, Franco. 1999. Plants responses to elevated CO₂; a perspective from natural CO₂ springs. *Environmental pollution and plant response* 45-81.
- Miglietta, F, Raschi, A, Resti, R & Badiani, M. 1993. Growth and onto - morphogenesis of soybean (*Glycine max* Merrill) in an open, naturally CO₂ - enriched environment. *Plant, Cell & Environment* 16: 909-918.
- Miglietta, F, Badiani, M, Bettarini, I, Van Gardingen, P, Selvi, F & Raschi, A. 1995. Preliminary studies of the long-term CO₂ response of Mediterranean vegetation around natural CO₂ vents. *Global Change and Mediterranean-Type Ecosystems*. Springer New York, pp. 102-120.
- Bettarini, I, Calderoni, G, Miglietta, F, Raschi, A & Ehleringer, J. 1995. Isotopic carbon discrimination and leaf nitrogen content of *Erica arborea* L. along a CO₂ concentration gradient in a CO₂ spring in Italy. *Tree Physiology* 15: 327-332.
- Tognetti, Roberto, Longobucco, Anna, Raschi, Antonio, Miglietta, Franco & Fumagalli, Ivano. 1999. Responses of two *Populus* clones to elevated atmospheric CO₂ concentration in the field. *Annals of Forest Science* 56: 493-500.
- van Gardingen, Paul R, Grace, John, Harkness, Douglas D, Miglietta, Franco & Raschi, Antonio. 1995. Carbon dioxide emissions at an Italian mineral spring: measurements of average CO₂ concentration and air temperature. *Agricultural and forest meteorology* 73: 17-27.
- Tognetti, R, Giovannelli, A, Longobucco, A, Miglietta, F & Raschi, A. 1996. Water relations of oak species growing in the natural CO₂ spring of Rapolano (central Italy). *Annales des sciences forestières* 53: 475-485.

- Barnes, JD, Bettarini, I, Polle, A, Slee, N, Raines, C, Miglietta, F, Raschi, A & Fordham, M. 1997. The impact of elevated CO₂ on growth and photosynthesis in *Agrostis canina* L. ssp. *monteluccii* adapted to contrasting atmospheric CO₂ concentrations. *Oecologia* 110: 169-178.
- Tognetti, Roberto, Longobucco, Anna, Miglietta, Franco & Raschi, Antonio. 1999. Water relations, stomatal response and transpiration of *Quercus pubescens* trees during summer in a Mediterranean carbon dioxide spring. *Tree Physiology* 19: 261-270.
- Badiani, M, D'annibale, A, Paolacci, AR, Miglietta, F & Raschi, A. 1993. The antioxidant status of soybean (*Glycine max*) leaves grown under natural CO₂ enrichment in the field. *Functional Plant Biology* 20: 275-284.
- Bettarini, Isabella, Vaccari, Francesco P & Miglietta, Franco. 1998. Elevated CO₂ concentrations and stomatal density: observations from 17 plant species growing in a CO₂ spring in central Italy. *Global Change Biology* 4: 17-22.
- Tognetti, R, Longobucco, A, Miglietta, F & Raschi, A. 1998. Transpiration and stomatal behaviour of *Quercus ilex* plants during the summer in a Mediterranean carbon dioxide spring. *Plant, Cell & Environment* 21: 613-622.
- Miglietta, F, Raschi, A, Bettarini, I, Resti, R & Selvi, F. 1993. Natural CO₂ springs in Italy: a resource for examining long - term response of vegetation to rising atmospheric CO₂ concentrations. *Plant, Cell & Environment* 16: 873-878.
- HÄTTENSCHWILER, STEPHAN, Miglietta, Franco, Raschi, Antonio & KÖRNER, CHRISTIAN. 1997. Thirty years of in situ tree growth under elevated CO₂: a model for future forest responses?. *Global Change Biology* 3: 463-471.
- Cervo, R, Maracchi, G & Miglietta, F. 1988. Diagnosis of diseases and pests in olives. Knowledge based systems in agriculture: prospects for application: Frankfurt a. M., Bad Soden, June 19-22, 1988/editor: Deutsche Landwirtschafts-Gesellschaft, Frankfurt am Main
- Maracchi, G & Miglietta, F. 1985. Agroclimatic classification of central Italy. *Current Issues in Climate Research*. Springer Netherlands, pp. 309-322.
- Brambilla, C, Vecchio, V, Miglietta, F & Vazzana, C. 1981. Studio dell'effetto di alcuni erbicidi [su associazioni infestanti] basato su metodi di ordinamento e di classificazione dei dati. *Informatore Fitopatologico*
- Vecchio, V, Miglietta, F, Vazzana, C & Crosta, G. 1980. Diserbo del frumento: epoche di intervento e prodotti per la pianura di Prato-Firenze [Italia]. *Informatore Agrario*
- Miglietta, F, Vazzana, C & Porceddu, E. 1987. Agroecological models and wheat ideotypes for semi-arid lands. Chapter 2.
- Bacci, L, Conese, C, Maracchi, G & Miglietta, F. 1985. Analisi territoriale delle temperature minime nell'arco di un cinquantennio [in Italia]. *Rivista di Frutticoltura e di Ortofloricoltura*

Vecchio, V & Miglietta, F. 1981. Perché combattere le malerbe. Terra e Vita

Maracchi, GP, Conese, C & Miglietta, F. 1983. Primi risultati e prospettive di un nuovo metodo per la classificazione digitale di immagini da satellite. Atti dell'Accademia dei Georgofili

Vecchio, V, Vazzana, C & Miglietta, F. 1981. Desherbage du maïs de deuxième récolte en Calabre, Italie du Sud [atrazine, atrazine+ simazine, atrazine+ metolachlore, alachlore, sarclage].

Conese, C, Miglietta, F, Maracchi, G & Tagliaferri, G. 1983. Compilazione di carte della radiazione mediante un metodo automatico di acquisizione e digitalizzazione delle immagini. Rivista di Agronomia

Cervo, R, Maracchi, G & Miglietta, F. 1988. Diagnose und Massnahmen im Pflanzenschutz. Diagnose von Krankheits- und Schädlingbefall bei Oliven.

Santilocchi, Rodolfo, Bullitta, Pietro, Cavallero, Andrea, Cereti, Carlo Fausto, Miglietta, Francesco, Talamucci, Paolo & Ziliotto, Umberto. 1987. Aspetti qualitativi e valore nutritivo della produzione foraggera di pascoli e prati-pascoli artificiali. Rivista di agronomia 21: 119-133.

Vecchio, V, Miglietta, F, Vazzana, C & Crosta, G. 1980. Weeds of wheat: application times and products for the Prato-Florence plateau. Informatore Agrario 36: 12159-12163.

Conese, C, Miglietta, F, Maracchi, G & Tagliaferri, G. 1983. [Radiation map compilation by means of an automatic image acquisition and digitalization system]. Rivista di Agronomia (Italy)

MIGLIETTA, F, VAZZANA, C & PORCEDDU, E. 1987. Drought Tolerance in Winter Cereals Edited by JP Srivastava, E. Porceddu, E. Acevedo, and S. Varma © 1987 ICARDA Published by John Wiley & Sons Ltd. Drought tolerance in winter cereals: proceedings of an international workshop, 27-31 October 1985, Capri, Italy 15.

CONESE, C, MARACCHI, G, MIGLIETTA, F, CAPPELLINI, V, CARLA, R & SACCO, V. 1986. An integrated system to assess agricultural productivity ((satellite imagery)). ESA Proceedings of an International Satellite Land-Surface Climatology Project (ISLSCP) Conference p 523-530 (SEE N 87-15544 07-46)

Cavallero, Andrea, Miglietta, Francesco, Bullitta, Pietro, Cereti, Carlo Fausto, Talamucci, Paolo & Ziliotto, Umberto. 1987. Individuazione di sistemi foraggeri mediante le curve di produttività di pascoli e prati-pascoli artificiali ottenute in cinque ambienti marginali. Rivista di agronomia 21: 111-118.

Vecchio, V, Miglietta, F, Vazzana, C & Crosta, G. 1980. [Wheat weeding: intervention period and products for the Prato-Florence plan [Italy]]. Informatore Agrario (Italy)

Vecchio, V, Vazzana, C & Miglietta, F. 1981. [Herbicide use in second cultivation maize in Calabria, South Italy [atrazin, atrazin+ simazin, atrazin+ metolachlor, alachlor, weeding]].

CAPPELLINI, V, CARLA, R, CONESE, C, MARACCHI, GP & MIGLIETTA, F. 1984. Digital comparison and correlation techniques of remote sensing images with differing spatial resolutions. ESA EARSeL/ESA Symp. on Integrative Approaches in Remote Sensing p 23-29 (SEE N 85-14202 05-43)

Conese, C, Maracchi, G, Miglietta, F & Zipoli, G. 1985. Natural resources data bank for irrigation scheduling. IV International Symposium on Water Supply and Irrigation in the Open and under Protected Cultivation 228 35-44.

Bacci, L, Conese, C, Maracchi, G & Miglietta, F. 1985. [Territorial analysis of minimum temperatures during a period of fifty years [Italy]]. *Rivista di Frutticoltura e di Ortofloricoltura* (Italy)

Ziliotto, Umberto, Bullitta, Pietro, Cavallero, Andrea, Cereti, Carlo Fausto, Grignani, Carlo, Miglietta, Francesco, Santilocchi, Rodolfo & Talamucci, Paolo. 1987. Analisi dell'accrescimento e produzione di pascoli e prati-pascoli artificiali di diversa precocità in sei ambienti italiani. *Rivista di agronomia* 21: 91-102.

Maracchi, GP, Conese, C & Miglietta, F. 1983. [First results and future developments of a new method for the digital classification of images of LANDSAT]. *Atti dell'Accademia dei Georgofili* (Italy)

Cervo, R, Maracchi, G & Miglietta, F. 1988. [Diagnosis and measures in plant protection. Disease and pest diagnosis for olives].

Cappellini, V, Conese, C, Maracchi, GP, Miglietta, F & Pampaloni, P. 1982. Agroecological classification by remote sensing techniques. *ESA Satellite Remote Sensing for Developing Countries* p 111-129(SEE N 83-14608 05-43)

Maracchi, G, Conese, C, Miglietta, F & Bacci, L. 1988. An information system for agricultural productivity. *Sustainable Development of Agriculture*. Springer Netherlands, pp. 59-97.

Maracchi, Giampiero & Miglietta, F. 1987. Agrometeorological models of agriculture productivity for land planning. *Agrometeorology: 2nd International Cesena Agricoltura Conference, Cesena, 8-9 October 1987*/edited by Franco Prodi, Federica Rossi, Graziella Cristoferi

Conese, C, Maracchi, G, Maselli, F, Miglietta, F & Romani, M. 1989. ISM: Integrated system for the evaluation of agriculture productivity: A case study in the Mugello Region. *Proceedings of the Conference on the Application of Remote Sensing to Agricultural Statistics* 269-278.

Maracchi, G, Miglietta, F, Raschi, A, Vazzana, C & Bacci, L. 1985. A crop model based on simple meteorological inputs for large scale agricultural productivity simulation. *Proceedings of the IASTED International Symposium on Modeling and Simulation* 24-26.

Conese, C, Maracchi, G, Maselli, F & Miglietta, F. 1987. Statistical variance decomposition for the classification of TM scenes. *Proceedings of Digital Signal Processing*, Elsevier Science Publisher 922-931.

Cereti, Carlo Fausto, Miglietta, Francesco, Bullitta, Pietro, Cavallero, Andrea, Santilocchi, Rodolfo, Talamucci, Paolo & Ziliotto, Umberto. 1987. Modello empirico semplificato della produzione di pascoli e prati-pascoli artificiali e possibilità di previsione dell'andamento produttivo. *Rivista di agronomia* 21: 103-110.

Frere, M, Maracchi, G, Miglietta, F & Conese, C. 1987. Agroclimatological classification of the Mediterranean and South West Asian areas. Drought tolerance in winter cereals. Chichester: Wiley 3-14.

Conese, C, Maracchi, G, Miglietta, F, Maselli, F & Sacco, VM. 1988. Forest classification by principal component analyses of TM data. *International Journal of Remote Sensing* 9: 1597-1612.

Miglietta, F. 1989. Effect of photoperiod and temperature on leaf initiation rates in wheat (*Triticum* spp.). *Field Crops Research* 21: 121-130.