



## **Prof. Dr. Marco Bindi**

### Curriculum vitae

M Bindi has a PhD in crop simulation modelling of forage crops and currently is full professor at the University of Florence. Since the 1988 he carried out research in the fields of the crop simulation model and the effect of climate change on natural and agricultural ecosystems. He has lead several national interdisciplinary projects on agrometeorology, integrated wheat production, application of remote sensing and GIS and development of simulation models. In the last 4 years he was involved in several EU funded projects (ICONE, ENSEMBLES, ADAM, PICCMAT, CIRCE, AG2020, MEDIATION) on climate change impact on natural and agricultural ecosystems. He was nominated lead author of the IPCC 4<sup>th</sup> and 5<sup>th</sup> assessment reports. He was Director of the Dept. of Agronomy and

Land Management of the University of Florence (2007-2009). He is author of more than 50 papers on refereed international journals dealing with agrometeorology, crop modelling, climate change, environmental physiology (H-index = 18). He coordinated the Master on Applied Meteorology of the University of Florence (2002-2005). He is member of European Society of Agronomy and Italian Society of Agronomy. He was the chairman of Div. 2 of the European Society of Agronomy (2005-2008). He is referee of the several National and International Journals (European Journal of agronomy, Climate Research, Climatic Change, Journal of Experimental Botany, Regional Environmental Change, Italian Journal of Agronomy, Rivista di Agrometeorologia, etc.).

### List of publications (up to 2011)

2011

1. MORIONDO M., M. BINDI, C. FAGARAZZI, R. FERRISE, G. TROMBI (2011) Framework for high-resolution climate change impact assessment on grapevines at a regional scale. REG. ENVIRON CHANGE. DOI 10.1007/s10113-010-0171-z
2. PALOSUO, T., KERSEBAUM, K.C., ANGULO, C., HLAVINKA, P., MORIONDO, M., OLESEN, J.E., PATIL, R.H., RUGET, F., RUMBAUR, C., TAKÁČ, J., TRNKA, M., BINDI, M., ÇALDA, B., EWERT, F., FERRISE, R., MIRSCHEL, W., ŞAYLAN, L., ŠIŠKA, B., RÖTTER, R. (2011) Simulation of winter wheat yield and its variability in different climates of Europe: A comparison of eight crop growth models. European Journal of Agronomy doi:10.1016/j.eja.2011.05.001
3. DALLA MARTA A., NATALI F., MANCINI M., FERRISE R., BINDI M., ORLANDINI S. (2011) The Energy-Water Nexus: Managing the Links between Energy and Water for a Sustainable Future. ECOLOGY AND SOCIETY 16(2): 2. [online] URL: <http://www.ecologyandsociety.org/vol16/iss2/art2/>
4. FERRISE, R., MORIONDO, M., BINDI, M. (2011) Probabilistic assessments of climate change impacts on durum wheat in the Mediterranean region. NATURAL HAZARDS AND EARTH SYSTEM SCIENCE 11: 1293-1302
5. MASELLI F., MORIONDO M., ANGELI L., FIBBI L., Bindi M. (2011) Estimation of wheat production by the integration of MODIS and ground data. INTERNATIONAL JOURNAL OF REMOTE SENSING, 32 1105-1123
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7. MORIONDO, M., GIANNAKOPOULOS, C., BINDI, M. (2011) Climate change impact assessment: the role of climate extremes in crop yield simulation. *CLIMATIC CHANGE*, 104: 679-701
8. BINDI M. and J.E. OLESEN (2011) The responses of agriculture in Europe to climate change. *REG. ENVIRON CHANGE*, 11: 151-158

2010

1. M. CHIESI, M. MORIONDO, F. MASELLI, L. GARDIN, L. FIBBI, BINDI M., S. RUNNING (2010) Simulation of Mediterranean forest carbon pools under expected environmental scenarios. *CANADIAN JOURNAL OF FOREST RESEARCH*, 40: 850-860
2. SCHELHAAS, M.-J., HENGEVELD, G., MORIONDO, M., REINDS, G.J., KUNDZEWICZ, Z.W., TER MAAT, H., BINDI, M. (2010) Assessing risk and adaptation options to fires and windstorms in European forestry. *MITIGATION AND ADAPTATION STRATEGIES FOR GLOBAL CHANGE*, 15: 681-701.
3. MORIONDO, M., BINDI, M., KUNDZEWICZ, Z.W., SZWED, M., CHORYNSKI, A., MATCZAK, P., RADZIEJEWSKI, M., MCEVOY, D., WREFORD, A. (2010) Impact and adaptation opportunities for European agriculture in response to climatic change and variability. *MITIGATION AND ADAPTATION STRATEGIES FOR GLOBAL CHANGE*, 15: 657-679
4. DALLA MARTA A., MANCINI M., FERRISE R., BINDI M., ORLANDINI S. (2010) Energy Crops For Biofuel Production: Analysis Of The Potential In Tuscany. *Journal of Biomass and Bioenergy*, 34: 1041-1052
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11. MASELLI F, CHIESI M, MORIONDO M, FIBBI L, BINDI M, RUNNING SW (2009) Modelling the forest carbon budget of a Mediterranean region through the integration of ground and satellite data. *ECOLOGICAL MODELING*, 220: 330-342
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  29. TOGNETTI R, RASCHI A, LONGOBUCCO A, LANINI M, BINDI M. (2005). Hydraulic Properties and Water Relations of *Vitis Vinifera* L. exposed to elevated CO<sub>2</sub> Concentrations in a Free Air CO<sub>2</sub> Enrichment (FACE). PHYTON-INTERNATIONAL JOURNAL OF EXPERIMENTAL BOTANY. vol. 45, pp. 243-256
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  31. BINDI M., MIGLIETTA F., VACCAI F., MAGLIULO E., GIUNTOLI A. (2005) Chapter 6. Growth and quality responses of potato to elevated. In : Managed ecosystems and CO<sub>2</sub>: Case studies, processes and perspectives (Ed. Josef Nösberger), Ecological Studies of Springer, 105-120

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