Fernando E. Moyano

Bioclimatology – University of Göttingen, Büsgenweg 2, 37077 Göttingen, Germany
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WORK EXPERIENCE

2014-08-15 – present **Bioklimatology Department, Universität Göttingen** (Göttingen, Germany)

2013-12-01 – 2014-04-30 **Institute für Umwelts Physic, Universität Heidelberg** (Heidelberg, Germany)

2013-01-28 – 2013-09-30 **Laboratoire des Sciences du Climat et de l'Environement, LSCE** (France)

2010-02-01 – 2012-09-30 **UMR BIOEMCO / CNRS** (France)

2008-01-01 – 2008-06-30 and 2009-07-01 – 2009-11-30 **Max-Planck-Institute for Biogeochemistry** (Jena, Germany)

EDUCATION

2004-05-01 – 2007-12-31
Ph.D. Max Planck Institute for Biogeochemistry (Jena, Germany)

- Thesis title: Soil respiration fluxes and controlling factors in temperate forest and cropland ecosystems

1996-03-01 – 2002-12-01
Biology Diploma. National University of Cordoba (Cordoba, Argentina)

PUBLICATIONS

Book Chapters

Moyano F.E., Atkin O.K., Bahn M., Bruhn D., Burton A.J, Heinemeyer A., Kutsch W.L., Wieser G. Respiration from Roots and the Mycorrhizosphere. In: Bahn, M., Heinemeyer, A.,Kutsch, W.L. (Eds.), Integrated Methodology on Soil Carbon Flux Measurements. Cambridge University Press, Cambridge. In Press, available January 2010

Journal Articles

Guenet, B., **Moyano, F.E**., Peylin, P., Ciais, P., Janssens, I.A., 2015. Towards a representation of priming on soil carbon decomposition in the global land biosphere model ORCHIDEE (version 1.9.5.2). Geoscientific Model Development, in press.

Manzoni, S., **Moyano, F**., Kätterer, T., Schimel, J., 2016. Modeling coupled enzymatic and solute transport controls on decomposition in drying soils. Soil Biology and Biochemistry 95, 275–287. doi:10.1016/j.soilbio.2016.01.006

Romain Lefèvre, Pierre Barré, **Fernando E. Moyano**, Bent T. Christensen, Gérard Bardoux, Thomas Eglin, Cyril Girardin, Sabine Houot, Thomas Kätterer, Folkert van Oort, Claire Chenu. Higher temperature sensitivity for stable than for labile soil organic carbon– Evidence from incubations of long-term bare fallow soils. *Global Change Biology*, doi: 10.1111/gcb.12402

Guenet B., **Moyano F.E.**, Vuichard N., Kirk G.J.D., Bellamy P.H., Zaehle S., Ciais P. Can we model observed soil carbon changes from a dense inventory? A case study over England and Wales using three version of ORCHIDEE ecosystem model (AR5, AR5-PRIM and O-CN). *Geoscientific Model Development Discussions* 07/2013; 6:3655-3680.

Moyano F.E., S. Manzoni, C. Chenu. Responses of soil heterotrophic respiration to moisture availability: An exploration of processes and models. *Soil Biology and Biochemistry* 59 (April 2013): 72–85.

Hamdi, S., **Moyano F.E.**, Sall S., Bernoux M., and Chevallier T. Synthesis Analysis of the Temperature Sensitivity of Soil Respiration from Laboratory Studies in Relation to Incubation Methods and Soil Conditions. *Soil Biology and Biochemistry* 58 (March 2013): 115–126.

Moyano F. E., N. Vasilyeva, L. Bouckaert, F. Cook, J. Craine, J. Curiel Yuste, A. Don, D. Epron, P. Formanek, A. Franzluebbers, U. Ilstedt, T. Katterer, V. Orchard, M. Reichstein, A. Rey, L. Ruamps, J.-A. Subke, I. K. Thomsen, C. Chenu. The moisture response of soil heterotrophic respiration: interaction with soil properties. *Biogeosciences*, 9, 1173–1182, (2012).

W. Kutsch, T. Persson, M. Schrumpf, **F. E. Moyano**, Martina Mund, Susanna Andersson, Ernst-Detlef Schulze. Heterotrophic soil respiration and soil carbon dynamics in the deciduous Hainich forest obtained by three approaches. *Biogeochemistry*, v.100, 167-183 (2010).

Moyano F.E., Kutsch W.L., Rebmann C. Soil Respiration Fluxes in Relation to Photosynthetic Activity in Broad-Leaf and Needle-Leaf Forest Stands. *Agricultural and Forest Meteorology*. 148 (1): 135-143, 2008

Moyano F.E., Kutsch W.L., Schulze E-D. Response of Mycorrhizal, Rhizosphere and Soil Basal Respiration to Temperature and Photosynthesis in a Barley Field. *Soil Biology and Biochemistry*, 39 (4): 843-853, 2007

Moyano F., Cocucci A.A., Sérsic A.N. Accessory pollen adhesive from glandular trichomes on the anthers of Leonurus sibiricus L. (Lamiaceae). *Plant Biology* 5 (4): 411-418, 2003

Miscellaneous Reviewed

Moyano F. E., Soil Respiration Fluxes and Controlling Factors in Temperate Forest and Cropland Ecosystems, Dissertation, University of Tuebingen, Germany, 2008

OTHER

Organized Meetings

2011/07 Sharing and Integrative Analysis of Soil Incubation Data. Paris, France.

Grants and Proposals

Co-authored: EC2CO, Ecosphère Continentale et Côtière. Vulnérabilité du carbone stable des sols aux changements climatiques. (PI Claire Chenu).

Supervision Work

Stefan Lukas. Co-advised masters thesis: Acclimation of soil respiration to changes in temperature.

Romain Lefevre. Co-advised doctoral thesis: Temperature response and long term dynamics of labile and recalcitrant soil organic matter pools.

Rijan Tamrakar, Co-advising doctoral thesis: Effects of forest structure on the response to anomalous climate events.